The Regulation of Household Debt Levels in the EU and Three of its Member States: Evaluating the Legal Preconditions for Effectiveness

De regulering van schuld van huishoudens in de EU en drie van haar lidstaten:
een juridische analyse van de randvoorwaarden voor effectiviteit

Proefschrift

ter verkrijging van de graad van doctor aan de
Erasmus Universiteit Rotterdam
op gezag van de
rector magnificus

Prof.dr. H.A.P. Pols

en volgens besluit van het College voor Promoties.
De openbare verdediging zal plaatsvinden op

donderdag 22 februari 2018 om 13:30 uur

by

Arie van 't Hof

geboren te Maartensdijk

Erasmus University Rotterdam

Promotiecommissie

Promotoren:

Prof. dr. F. Amtenbrink

Prof. dr. J. de Haan

Overige leden:

Prof. mr. dr. K.W.H. Broekhuizen

Prof. dr. A.M. Pacces

Prof. mr. dr. F. de Vries

Preface

I owe you… These words reveal that the term debt has both an economic and moral connotation. These meanings are often intertwined – for instance, if people feel uncomfortable with being indebted or feel dependent on their creditor. While borrowing creates opportunities, it also creates dependencies and reduces the borrower's freedom. With worldwide debt levels growing to record heights, dependencies increase, and it remains of vital importance to consider how to manage debt levels.

When starting with the process of writing a PhD thesis, I did not realise all the heights and depths, which would come with it. Looking back, I am thankful of the opportunity to do in-depth research into an interesting topic, to work in an environment in which new and existing ideas are further developed, and to learn on a personal level from the process of being engaged in such a long-term project. Looking back, I also realise that you never write a PhD thesis alone. I am indebted to many people, without whom this project would not have come to this point. First of all, I would like to thank Fabian Amtenbrink, for the opportunity to conduct research at the department of International and European Union Law of the Erasmus School of Law, and Jakob de Haan, who joined as a promotor. It is inspiring to build on the work of accomplished academics. Your ideas and fair comments have brought this study further, and have motivated me to go on. I would like to thank Helena Raulus, for her help as a daily supervisor during part of the project. Klaus Heine, René van Swaaningen and Flora Goudappel, you provided input at several moments in the process. Thank you for that. Elaine Mak and Karin van Wingerde, thank you for your help as coordinators for the ESL PhD researchers.

Working at the department of International and European Union law was a pleasure. Thank you Anastasia, Anna, Carina, Daria, Ellen, Flora, Florin, Fredo, Jeroen, Jonathan, Helena, Ingrid, Kees, Kim, Margaux, Marjolein, Masuma, Micheala, Nathanael, René, Ryan, Suzanne, Vicky, Urszula and the others for all the nice moments together, the chats, the discussions, the feedback, and the sharing of the experience of writing a PhD thesis. I also have enjoyed the good moments with our EGSL-year. Thank you Anna, Bo, Eelco, Erlis, Jing, Piotr, Randolf, Renate, Stefan, Thomas, Qianyun and Yixin.

Family and friends always supported me and stayed interested in the process of writing a PhD thesis. My parents, brothers, sisters, parents-in-law, brothers and sisters-in-law, my grandparents, other family members, Karel, Jack, David, Gerrit-Jan, Wietze, members of the *wijkkring,* and too many other friends to mention all: thank you for all your support, questions, interest, and please forgive me the moments that I reduced social activities in order to work on this book. Anke, above all, thank you for your tremendous support during those years. Hearing my stories, sharing the ups and downs, motivating me in difficult moments, missing time together when I had to finish something. Without your love, this would be a much harder process.

Finally, I believe that life is a gift, and that capabilities and opportunities are not your own, but also a gift, meant to do good. I am thankful for everything that has been given to me during this process. I hope that this study will somehow contribute to a better world. Ultimately, not for own sake or glory.

.

Table of Contents

List of Acronyms and Abbreviations

AFM	*Autoriteit Financiële Markten* (Authority for the Financial Markets)
AMvB	*Algemene maatregel van bestuur* (general administrative order)
Awb	*Algemene wet bestuursrecht* (General administrative law act)
AWR	*Algemene wet inzake rijksbelastingen* (General act on state taxes)
BaFin	*Bundesanstalt für Finanzdienstleistungsaufsicht* (Federal Financial Supervisory Authority)
BauSparkG	*Bausparkassengesetz* (Act on building and loan associations)
BausparkV	*Bausparkassen-Verordnung* (Regulation on building and loan associations)
BelWertV	*Beleihungswertermittlungsverordnung* (Regulation on the determination of the mortgage lending value)
BGB	*Bürgerliches Gesetzbuch* (Civil Code)
Bgfo	*Besluit Gedragstoezicht financiële ondernemingen Wft* (Decree on Conduct of Business Supervision of Financial Undertakings under the Wft)
BGEP	broad guidelines of the economic policies
BMF	*Bundesministerium der Finanzen* (Federal Ministry of Finance)
CBb	*College van Beroep voor het bedrijfsleven* (Trade and Industry Appeals Tribunal)
CBI	Central Bank of Ireland
CCB	countercyclical capital buffer
CCD	Consumer Credit Directive (Directive 2008/48)
CJEU	Court of Justice of the European Union
CPC 2012	Consumer Protection Code 2012
CPCLM	Consumer Protection Code for Licensed Moneylenders
CRD IV	Capital Requirements Directive IV (Directive 2013/36)
CRR	Capital Requirements Regulation (Regulation 575/2013)
DNB	*De Nederlandsche Bank* (Dutch central bank)
DSTI	debt-service-to-income
DTI	debt-to-income
EBA	European Banking Authority
ECB	European Central Bank
EDP	Excessive Deficit Procedure
EIOPA	European Insurance and Occupational Pensions Authority
ESMA	European Securities and Markets Authority
ESRB	European Systemic Risk Board
EU	European Union
EMU	Economic and Monetary Union
FinDAG	*Gesetz über die Bundesanstalt für Finanzdienstleistungsaufsicht* (Act Establishing the Federal Financial Supervisory Authority)

FinStabG	*Finanzstabilitätsgesetz* (Financial Stability Act)
IMF	International Monetary Fund
KWG	*Gesetz über das Kreditwesen* (Banking Act)
LTI	loan-to-income
LTV	loan-to-value
KAGB	*Kapitalanlagegesetzbuch* (Capital Investment Act)
MBS	mortgage-backed securities
MCD	Mortgage Credit Directive (Directive 2014/17)
MID	mortgage interest deductibility
MIP	Macroeconomic Imbalance Procedure
MIR	mortgage interest relief
MSP	Multilateral Surveillance Procedure
Nibud	*Nationaal Instituut voor Budgetvoorlichting* (National Institute for Family Finance Information
NHG	*Nationale Hypotheek Guarantie* (national mortgage guarantee)
NVB	*Nederlandse Vereniging van Banken* (Dutch Banking Association)
NTO	*Nederlandse Thuiswinkel Organisatie* (Dutch Homeshop Organisation)
OWiG	*Gesetz über Ordnungswidrigkeiten* (Act on Regulatory Offences)
PfandBG	*Pfandbriefgesetz*
Protocol AAFD	*Protocol aanmelding en afdoening van fiscale delicten en delicten op het gebied van douane en toeslagen*
SGP	Stability and Growt Pact
S.I.	Statutory Instrument
SSM	Single Supervisory Mechanism
TCA 1997	Taxes Consolidation Act 1997
Trhk	*Tijdelijke regeling hypothecair krediet* (Temporary regulation of mortgage credit)
TEU	Treaty on European Union
TFEU	Treaty on the Functioning of the European Union
UklaG	*Unterlassungsklagengesetzes* (Injunctions Act)
VAG	*Versicherungsaufsichtsgesetzes* (VAG) (Act on the Supervision of Insurance Undertakings)
VFN	*Vereniging van Financieringsondernemingen in Nederland* (Union of Finance Companies)
WED	*Wet op de Economische Delicten* (Act on Economic Offences)
Wet IB 2001	*Wet inkomstenbelasting 2001* (Act on income tax 2001)
Wft	*Wet op het financieel toezicht* (Act on Financial Supervision)

1. Setting the scene

1.1. High levels of household debt: so, what?

High levels of public and private indebtedness in Europe have created many problems in the past decade, and have resulted in arrears, dependencies on financial support, and vulnerability to adverse economic developments.[1] Europe namely faced multiple, interrelated, crises with a crucial role for debt in general and household debt in particular: the global financial crisis as well as the European sovereign debt crisis.[2] Debt has become a problem.

1.1.1. The problems of rising household debt levels in the EU

In many EU member states household debt increased considerably in the years preceding the global financial and the EU crises, as shown in graphs 1.1 and 1.2.[3] For a sample of 17 advanced economies, of which 13 are EU member states, Jordà et al. (2016) showed that credit growth since the 1970s is almost entirely a result of increased mortgage lending, especially to households.[4]

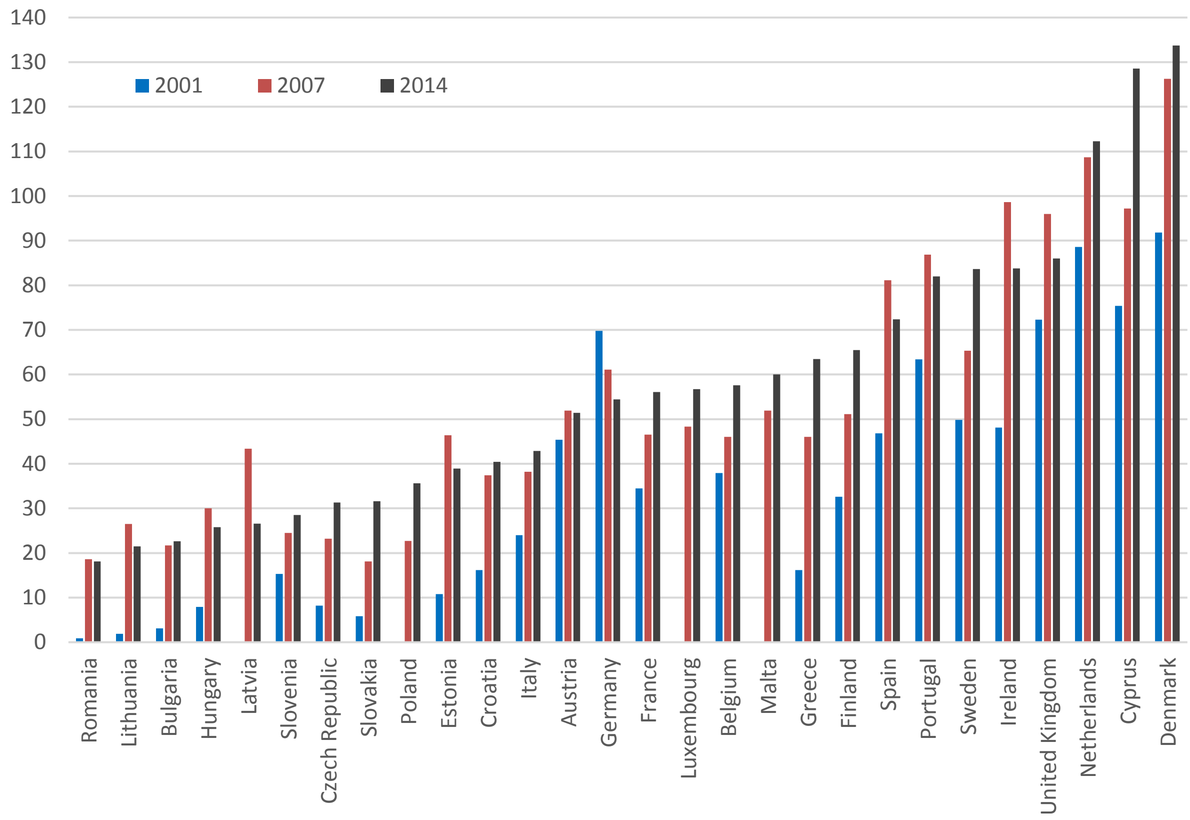
Studies discovered that strong credit growth is a robust predictor of a crisis.[5] Indeed, the rapid credit expansion in various countries, combined with highly levered financial institutions and households, created credit-financed housing booms, especially in Ireland and Spain, and unstable economic

---

[1] This research has been finalised in September 2017. Later developments have not been taken into account.
[2] The term financial crisis commonly refers to the worldwide crisis that began in 2007 and which origin is located in the financial sector, whereas the term sovereign debt crisis usually describes the rapid increase of government debt of many EU member states, which resulted in severe economic problems and financial support for several countries. For literature discussing the global financial crisis and its roots, see e.g. Crotty (2009), European Commission (2009b), European Economic Advisory Group (2009) and Taylor (2009), Roubini & Mihm (2010). For a discussion of the sovereign debt crisis and its roots, see e.g. Goddard et al. (2009), p. 368; European Commission (2009a), pp. 145-147; Krugman (2011); European Commission (2008), pp. 5-7; European Commission (2010a), p. 19; Lane (2012), p. 54; Manganelli & Wolswijk (2009), p. 197; Issing (2011), pp. 739-743; Burda & Gerlach (2010), pp. 65-66; Zemanek (2010); Shambaugh (2012).
[3] Source data graph 1.1: Financial balance sheets in Eurostat: http://ec.europa.eu/eurostat/data/database (retrieved 5 July 2016) (search in tree: nasa_10_f_bs). Due to lack of available data, graph 1.1 contains no information for Greece, Luxembourg and Malta. Graph 1.2 only concerns euro area member states. Source data graph 1.2: Annual sectoral accounts in Eurostat: http://ec.europa.eu/eurostat/data/database (retrieved 5 July 2016) (search in tree: tec00104). Due to lack of available data, graph 1.2 contains no information for Greece, Luxembourg and Malta.
[4] Jordà et al. (2016), pp. 115-120.
[5] *Infra,* footnote 250.

systems vulnerable to falling house prices.[6] High debt levels also lead to vulnerability to rising interest rates and declining income, for instance, due to an adverse shock like becoming unemployed, and thus increase the likelihood of defaults.[7]

Graph 1.1: Household debt as % of GDP



When bubbles imploded in the respective EU member states, many banks were confronted with non-performing loans.[8] Meanwhile, after a bust, the collateral value of the house is diminishing, and perhaps worth less than the value of outstanding loans.[9] Non-performing loans lead to a contraction of credit supply, if banks' capital buffers erode. This hurts economic growth.[10] The more leveraged banks are, the stronger credit supply will shrink, since losses will have larger effects on the banks. Concluding, high levels of household debt could undermine financial stability and create, in terms of

[6] Cf. Allen & Carletti (2010), pp. 5-6; Wyplosz (2010), p. 5; European Commission (2010c), p. 8; Krugman (2011); Gros (2012), p. 1.
[7] Debelle (2004), p. 21; Dynan & Kohn (2007), p. 20; European Central Bank (2012a), p. 87. Cf. European Commission (2012a), p. 18. Hallissey et al. (2014) also show a strong correlation between high debt levels (compared to income and the value of the house) and default rates in Ireland, using loan-level data.
[8] Wyplosz (2010), p. 5; Goddard et al. (2009), p. 368.
[9] Liu & Rosenberg, (2013), p. 5.
[10] International Monetary Fund (2012), p. 1010; Liu & Rosenberg, (2013), p. 5.

Buiter & Rahbari (2012), systemic fragility.[11] Borio (2013) even states that the most promising indicators of financial crises are based on the extent to which bank lending to the private sector and asset prices are simultaneously above historical patterns.[12] This may eventually result in government bailouts of banks.[13] Therefore, household debt crises could turn into public debt crises.

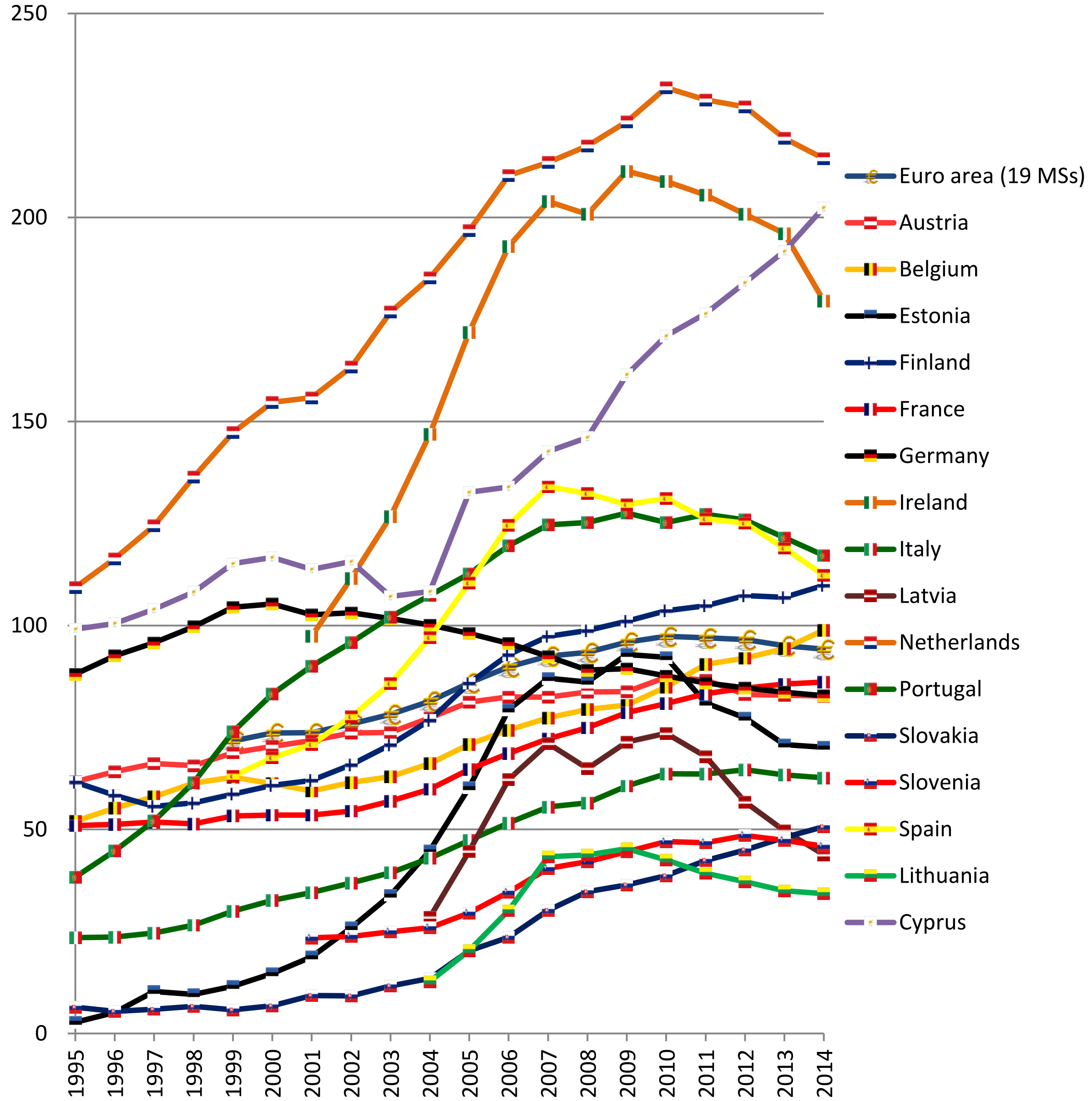
High levels of household debt can also lead to other difficulties for the financial sector, by creating funding risks. If the amount of outstanding loans on their balance sheets is larger than the amount of deposits, banks have to find additional funding on the market.[14] Often, this additional market funding is more expensive and risky than funding with deposits, while its short-term nature provides mismatches with the long-term maturity of mortgage loans.[15] Therefore, high loan-to-deposits (LTD) ratios signal potential liquidity risks for banks.

Furthermore, high household debt levels can affect economic growth by inducing deleveraging, after house values or income drop. This may happen if maximum loan-to-value (LTV) or debt-to-income (DTI) ratios exist or if households feel uncomfortable with their high debt levels.[16] Then, households must spend a considerable part of their income on servicing or reducing debt, which decreases consumption (and possibly investment).[17] This may lead to lower or negative economic growth.[18] Research has discovered that large increases in household debt are often followed by big declines in spending, and that indebted households cut spending more.[19] On top of this, several economists state that the pre-crisis household debt growth was an important driver of economic growth.[20] When debt

[11] Tudela & Young (2005), p. 7; Buiter & Rahbari (2012), p. 11; Van Nieuwenhuyze (2013), p. 134.
[12] Borio (2013), p. 5. Cf. Taylor (2012), pp. 21-23; Buiter & Rahbari (2012), pp. 11-12; Mian & Sufi (2015), pp. 3-9. Note that the deviation of the credit-to-GDP ratio from historical trend is called the credit gap.
[13] Knedlik and Von Schweinitz (2012), p. 729.
[14] See e.g. De Nederlandsche Bank (2014b), pp. 17-18.
[15] *Ibidem.*
[16] Cf. Dynan (2012), p. 306.
[17] Cuerpo et al. (2013), p. 2; Liu & Rosenberg, (2013), p. 5. Cf. Bezemer (2011), p. 10; Sutherland & Hoeller (2012), p. 7.
[18] See e.g. De Nederlandsche Bank (2014b), p. 10. Cf. International Monetary Fund (2012), p. 91. However, some researchers found empirical evidence that debt deleveraging is most likely not that harmful for economic growth (Tang & Upper (2010), pp. 33-34; Takáts & Upper (2013), pp. 2, 18).
[19] Mian et al. (2013), Mian & Sufi (2015), pp. 5-9, 35-45. Cf. McCarthy & McQuinn (2015), who found a small, but significant negative effect of deleveraging on consumption for Irish households (pp. 20-22). Cf. Andersen et al. (2016), who found that the increase of debt in preceding years – but not the level of leverage – explains reduced consumption (pp. 107-108, 114).
[20] Keen (2009b), p. 350; Guttman & Philon (2010), p. 272; Bezemer (2011), pp. 10-11.

levels have to be reduced, this driver disappears, among other things because construction activities take a plunge.[21] So, high levels of household debt contributed in different ways to the crisis in Europe.[22]

Graph 1.2: Gross debt-to-income households in %



[21] Cf. Hartmann (2015), p. 70.

[22] Adverse shocks and/or falling asset prices combined with high levels of debt could also negatively affect labour mobility, since it is more difficult to sell houses (Debelle (2004), p. 21). This could hamper economic growth too. Note that this study uses the singular (economic) crisis, since the various crises in the EU are interrelated. High levels of household debt also contributed to the sovereign debt crisis, since public debt increased due to the rescue measures that saved banks and measures that addressed the recession (cf. footnotes 2 and 13).

1.1.2. Diversity in member states' household debt levels

While household debt levels since 2000 have grown – often considerably – in all but one EU member state (Germany), the actual level of household debt varies a lot among member states, as evidenced by graphs 1.1 and 1.2 above. They show that especially Cyprus, Denmark, Ireland, the Netherlands, Portugal, Spain, Sweden and the United Kingdom have high levels of household debt, while debt-to-GDP levels are much lower in large euro area member states like Germany, France and Italy.[23] The European Commission concludes from an analysis that 'Ireland, Spain, Estonia, the Netherlands, Latvia, Denmark, the United Kingdom and, to some extent, Cyprus are amongst those that experienced a rapid increase in household indebtedness before the crisis'[24], and those countries, as well as Portugal, Slovakia and Sweden are prone to face deleveraging pressures from the household side.[25]

The upward trend in household debt can be explained by common factors to which member states – to a greater or lesser extent – are exposed. The decline in interest rates in developed countries in the last decades enabled higher debt levels, without causing higher debt-service costs.[26] Interest rates were low in the pre-crisis years.[27] Due to *inter alia* macroeconomic stability households' risk aversion decreased, and their optimism about their future income and rising house prices increased, contributing to higher debt demand.[28] Several developments in the financial sector stimulated and enabled an expansion of credit supply. Deregulation of the banking sector removed many restrictions for lending to households, and created room for rising leverage of banks' balance sheets, thereby increasing vulnerability to negative shocks.[29] Securitisation allowed banks to remove risks from their balance sheets (or so they thought) and thus to originate more loans.[30] The removal of risks led banks to control and ration borrowers less, and to reduce discounting of risks in the charged interest rates.[31] In addition, (risky) credit supply was stimulated through huge fees and bonuses.[32] Competitive

---

[23] Graph 1.2 only includes member states that have adopted the euro, but also in Denmark, Sweden and the United Kingdom household debt increased strongly as a percentage of household income. Yet, low household debt levels does not mean an absence of problems or risks. For instance, in Italy the ratio of non-performing loans has increasingly risen in the crisis-years (European Commission (2014g), p. 20), whereas the Commission warned that rising unemployment, among other things, in France can threaten household indebtedness (European Commission (2014e), pp. 16, 44).
[24] Cuerpo et al. (2013), p. 11.
[25] *Ibidem,* pp. 13-14.
[26] Cecchetti et al. (2011), pp. 7-8.
[27] Cf. Jordà et al. (2015), S16-S17.
[28] Keen (2009b), pp. 350-352; Cecchetti et al. (2011), p. 8; Chmelar (2013), pp. 5-6. Cf. Wolswijk (2010), p. 159.
[29] Crowe et al. (2013), pp. 300-305; Cecchetti et al. (2011), pp. 7-8; Kent et al. (2007), pp. 123, 127. Cf. Debelle (2004), pp. 4, 16; Ebner (2013), p. 350.
[30] Schwartz & Seabrooke (2008), p. 249.
[31] *Ibidem,* p. 253.
[32] See e.g. Crotty (2009), p. 565.

pressure led to easing of lending standards and stimulated product innovation, which both contributed to higher debt levels.[33] According to Chmelar (2013), the development of the single market in financial services in the EU facilitated amplified competition.[34]

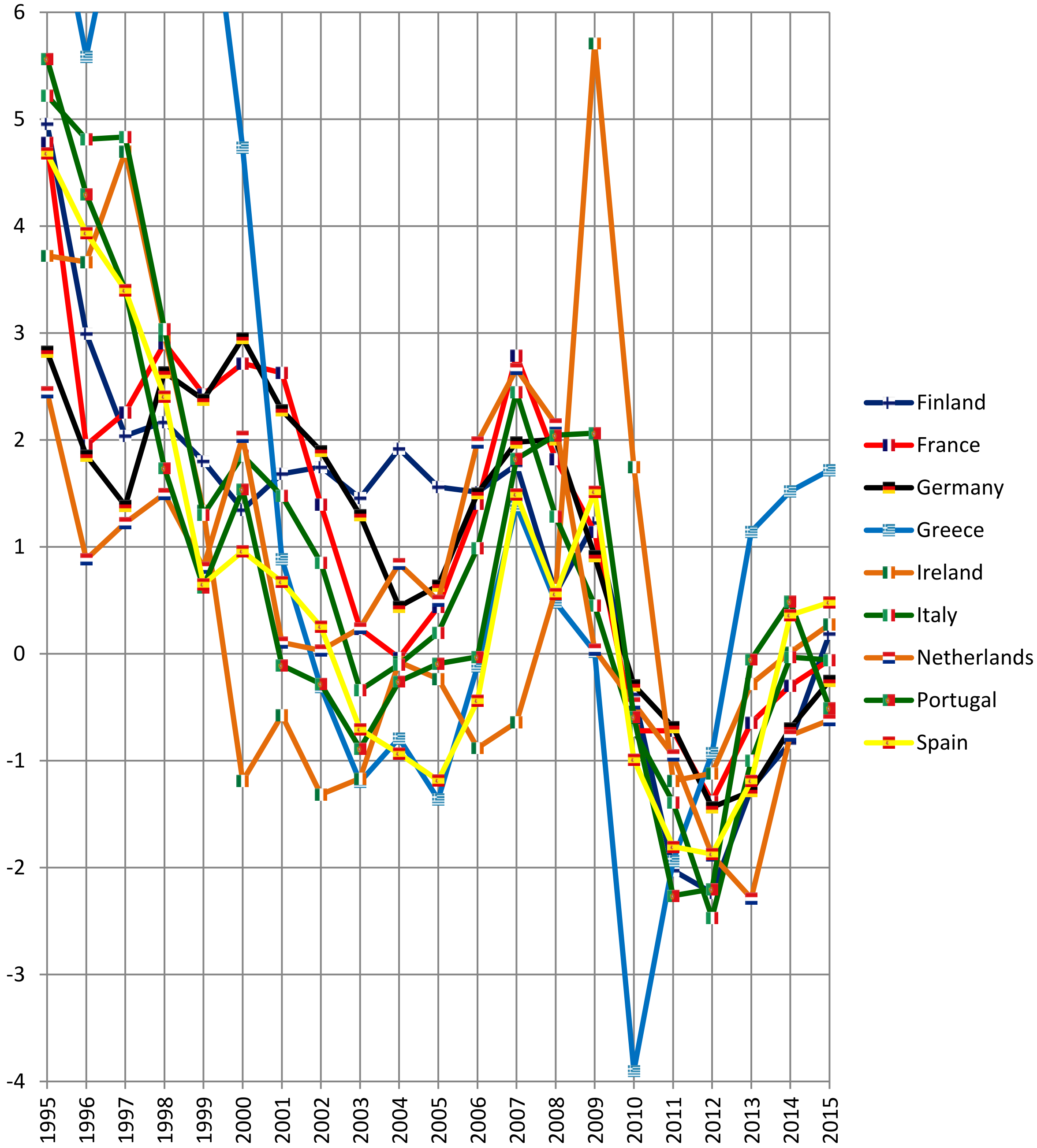
Apart from the fact that not all member states are equally exposed to these developments, differences in household debt levels are the result of the dissimilar impact of economic and country-specific regulatory factors. In "Southern" EU member states interest rates decreased much more than in other member states, because of joining the EMU.[35] Graph 1.3 reveals that Ireland, Portugal, Spain and Greece experienced negative real interest rates during several years after the adoption of the euro.[36] Together with capital inflows from "Northern" European states, this fuelled a housing and construction boom, especially in Ireland and Spain, and created debt overhang.[37] In some member states, credit demand was also stimulated by falling unemployment.[38]

Country-specific regulatory factors provide incentives to households for holding and structuring their debt and assets. Thereby they interact with relevant economic variables, such as interest rates and real estate prices.[39] For explaining diverging household debt levels, especially regulatory characteristics of the financial and tax system are relevant, such as prevailing rules in financial markets, loan-to-value ratios, tax regimes, market structures, mechanisms to enforce debt obligations, type of interest rates (fixed/variable), amortisation duration, and the development of the credit market.[40] For instance, income tax deductibility of mortgage interest payments differs across member states of the EU: in some countries mortgage interest payments are not deductible, whereas in others they are, but under

[33] Kent et al. (2007), p. 127. Cf. International Monetary Fund (2011b), p. 114.
[34] Chmelar (2013), p. 5.
[35] Chmelar (2013), p. 5. Cf. Zemanek (2010), p. 44-45; Gros (2012), p. 1; Girouard et al. (2006), p. 8; Ebner (2013), pp. 349-351. The ECB sets common interest rates for the whole euro area, but because inflation was higher than average for some "Southern" EU countries, their real interest rates were historically low.
[36] Graph 1.3 shows data for nine of the twelve member states using the euro since 2001 (other countries were left out to ensure visibility). Data comes from the OECD.Stat (see 'Monthly Monetary and Financial Statistics' and 'Prices and Purchasing Power Parities') (retrieved 4 July 2016). To calculate the real interest rates, the annual short-term interest rates are used, as well as the annual inflation in consumer prices. After the outbreak of the crisis, many member states experienced negative real interest rates, but this is the result of central bank policies to lower nominal interest rates.
[37] Zemanek (2010), p. 44-45. Cf. Gros (2012). For a specific analysis of the so-called GIPS countries, see Ebner (2013).
[38] Cf. Kent et al. (2007), p. 128.
[39] Bertola & Hochguertel (2007), p. 120.
[40] Debelle (2004), pp. 3-5; Bertola & Hochguertel (2007), pp. 118-120, 130; European Central Bank (2012a), p. 102; Cuerpo et al. (2013), p. 5; Van Nieuwenhuyze (2013), p. 132; Muellbauer & Murphy (2008), pp. 2-3, 16. Cf. Guttmann & Plihon (2010), p. 272; International Monetary Fund (2011), table 3.2; Calza et al. (2013), table 1.

different conditions.[41] The possibility to deduct mortgage interest payments from the income tax reduces debt-service costs, and thus incentivises households to take on more debt.[42]

Graph 1.3: Real interest rates in %



[41] See European Central Bank (2009), Annex 4 for a description of the main features of mortgage interest payment deductibility in euro area member states in 2008.
[42] Cf. Schwartz & Seabrooke (2008); Chlemar (2013), p. 14.

1.1.3. The national and EU response

Both member states and European institutions are aiming at addressing high household debt levels, and bringing them back to sustainable levels.[43] At national level the responses range from reforms of tax systems, to changes in financial regulation and insolvency laws. For instance, the Netherlands started with reducing the mortgage interest deductibility in phases, and restricting its eligibility to mortgages fully amortising in thirty years on an annuity basis.[44] Also, maximum LTV ratios were introduced.[45] Finland started too with gradually phasing out the deductibility of mortgage interest payments.[46] In Spain, the regime of mortgage interest deductibility has been eliminated in 2013.[47] Ireland created, among other things, mortgage resolution schemes, reformed the Personal Insolvency Act and introduced LTV and LTI caps.[48] Portugal reformed its Insolvency Law as well, easing out-of-court debt restructuring.[49]

Similarly, the reaction of the EU to the economic crisis in general, and household debt developments in particular, was manifold. The financial supervisory system has been overhauled with the creation of the European Systemic Risk Board (ESRB) and the European System of Financial Supervisors in 2010 and the Single Supervisory Mechanism (SSM) in 2013.[50] In addition, the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CDR) IV have been adopted.[51] This package implements the Basel III accord, which intends to create a more robust financial system by increasing its ability to absorb shocks.[52] It includes new rules on assigning risk-weights to mortgage and other

[43] Regarding the EU institutions, see e.g. European Central Bank (2012a) and Cuerpo et al. (2013).
[44] For a short summary of these reforms, see Financial Stability Board (2014), box 2.
[45] *Ibidem.*
[46] European Commission (2014d), p. 52.
[47] European Commission (2014c), p. 60.
[48] About the first two policy responses, see Waldron & Redmond (2014), pp. 158-160, while Central Bank of Ireland (2014e) provides information about the maximum LTV and LTI caps.
[49] European Commission (2011e), p. 23; European Commission (2011f), pp. 51, 73; European Commission (2012c), p. 90; European Commission (2012e), pp. 15, 25; European Commission (2014a), p. 35.
[50] ESRB: Regulation 1092/2010 of the European Parliament and of the Council of 24 November 2010, OJ 2010, L 331/1. European System of Financial Supervisors: Directive 2010/78/EU of the European Parliament and of the Council of 24 November 2010, OJ 2010, L 331/120; European Insurance and Occupational Pensions Authority: Regulation 1094/2010 of the European Parliament and of the Council of 24 November 2010, OJ 2010, L 331/48; European Securities and Markets Authority: Regulation 1095/2010 of the European Parliament and of the Council of 24 November 2010, OJ 2010, L 331/84; European Banking Authority (EBA): Regulation 1093/2010 of the European Parliament and of the Council of 24 November 2010, OJ 2010, L 331/12. SSM: Council Regulation 1024/2013 of 15 October 2013, OJ 2013, L287/63. The tasks of the EBA were also amended after the conferral of these supervisory tasks to the ECB: Regulation 1022/2013 of the European Parliament and of the Council of 22 October 2013, OJ 2013, L287/5.
[51] Directive 2013/36 of the European Parliament and of the Council of 26 June 2013, OJ 2013, L176/338; Regulation 575/2013 of the European Parliament and of the Council of 26 June 2013, OJ 2013, L176/1.
[52] Allen et al. (2013), pp. 247-251.

household loans.[53] This can affect the supply side of household debt. Furthermore, several legal acts in the field of consumer law have been adopted during the crisis, with a view of increasing and equalising the level of consumer protection in EU member states.[54] These are in particular the Consumer Credit Directive (CCD) in 2008 and the Mortgage Credit Directive (MCD) in 2014, which *inter alia* contain rules on the provision of information to consumers and the assessment of creditworthiness of consumers.[55] Moreover, household debt is monitored in the newly adopted macroeconomic imbalance procedure (MIP), a procedure that can be employed to influence member states' fiscal policies affecting household debt.[56]

1.2. High levels of household debt: what now?

1.2.1. Effectiveness and EU involvement: the important issues

These responses to the high levels of household debt induce several questions. A first one is whether these responses are or can be made effective in addressing household debt levels.[57] Effectiveness means the capacity to produce the intended result.[58] The legal design of each instrument is crucial for this capacity, as will be further explained in the analytical framework.

A second question is to what extent and how the EU should be involved in addressing household indebtedness. Questioning this is not without reason. Firstly, the huge diversity in household debt levels among member states suggests that their origins are mainly national. Furthermore, the risks of high household debt levels – such as defaulting households, deteriorating economic growth and systemic fragility – hit national economies in the first place. This raises the question of whether member states are the most designated to act. At the same time, it cannot simply be assumed that

[53] For the Basel III accord, see https://www.bis.org/bcbs/basel3.htm (last visited 31 August 2016).
[54] Note that national regimes for protecting consumers and treating over-indebted individuals differ substantially within the EU, as shown by, among others, Ramsay (2010, 2012a, 2012b, 2012d) and Viimsula (2010).
[55] CCD: Directive 2008/48 of the European Parliament and of the Council of 23 April 2008, OJ 2008, L 133/66. MCD: Directive 2014/17 of the European Parliament and of the Council of 4 February 2014, OJ 2014, L 60/34. For an introduction to these Directives, see e.g. Chlemar (2013) and Hofmann (2012), pp. 449-454.
[56] MIP: Regulation 1176/2011 (supra footnote 1).
[57] Cf. Claessens (2015), who considers the question how macroprudential policies can be made more effective as the main question here in the context of ensuring financial stability.
[58] See Sarat (1985), p. 23; Neyer (2004), p. 22; Moschella (2014), p. 1274. See also http://www.merriam-webster.com/thesaurus/effective (last visited 31 August 2016).

"more EU" contributes to solving the problems with household debt.[59] Moreover, EU law provides constitutional and institutional limits to EU involvement in national policies.

The issue is not whether the EU should be involved *at all* in reducing high levels of household debt. The Union is already involved in many areas influencing household debt developments, such as financial regulation and consumer law. Moreover, the recent crisis in the EU proved, unfortunately, that national economic problems can easily have European consequences, which is an important *raison d'être* for the obligation of member states to coordinate their economic policies.[60] Economies are interlinked; primarily through the financial system, which is interwoven at both global and European level. Consequently, when high household debt levels lead to declining credit supply or financial instability, other EU member states can be affected too. This might also affect public debt, due to the linkages between the financial sector and sovereigns, and between private and public debt.[61] Other spillover effects of household debt problems from one member state to another can ensue from negative sentiment on the markets, which affects the market assessment of other member states as well, as the crisis has clearly shown.[62] Member states generally do not take cross-border effects of their policies into account. Furthermore, high household debt levels can have adverse consequences for the conduct of monetary policy by the ECB: if they result in lower or negative economic growth in a member state, through their negative impact on consumption, this might easily lead to asynchronous business cycles between EU member states.[63] This hampers the conduct of monetary policy, which then will have asymmetric consequences: if the ECB, for instance, increases the interest rate to slow down on average booming credit supply, member states experiencing an economic downturn will suffer.

[59] Note that Van Gestel & Micklitz (2014) signal that much research in EU law simply assumes that more EU involvement is good (they specifically mention "more harmonisation"), instead of asking how much involvement is needed (pp. 305-307).
[60] For this obligation, see art. 5 & 121 TFEU.
[61] Cf. sub-section 1.1.1. The dangerous loop between sovereign debt and banking crises is discussed in, among others, Mody & Sandri (2012) and International Monetary Fund (2012), pp. 56-57.
[62] See e.g. De Grauwe (2012) and De Grauwe & Ji (2013) about the risk of market panic related to sovereign debt in the EMU.
[63] If one country experiences a recession, while the economy in another member state flourishes, their business cycles are asynchronous. De Haan et al. (2008, p. 266) already concluded years ago that the business cycles of many euro area member states are substantially out of sync, so the risk of asynchronous business cycles is surely not purely hypothetical. Further on the role of the housing market in the transmission of monetary policy, see e.g. Milcheva & Sebastian (2016).

1.2.2. Effectiveness and EU involvement: interrelated issues

In fact, the questions about effectiveness and EU involvement are interrelated, due to the nature of EU law. The involvement of the EU in policy areas is governed by a division of competences between the Union and its member states and by several EU principles. Starting point is the competences catalogue, since room for EU action is limited by the competences conferred upon the Union, as enshrined in art. 2-6 of the TFEU.[64] The use of the non-exclusive competences of the EU is governed by the principles of subsidiarity and proportionality.[65] The subsidiarity principle means that the EU 'shall act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States, (…) but can rather, by reason of the scale or effects of the proposed action, be better achieved at Union level'.[66] The principle of proportionality entails that 'the content and form of Union action shall not exceed what is necessary to achieve the objectives of the Treaties.'[67] Hence, these two principles are concerned with respectively the objectives of the proposed action and the objectives of the EU treaties. Owing to the principle of conferral, when EU institutions exercise the competences of the Union, a measure adopted by them must have a specific legal basis, which confers a specific task to the EU institution involved.[68]

Especially the subsidiarity principle is relevant for this study: it requires an analysis whether instruments at the level of the member states are sufficiently able to achieve the goal of lowering household debt levels – which is the objective of the proposed action – or whether the EU can realise better results.[69]

Therefore, the effectiveness of the instruments determines to a large extent whether the objective of lower household debt levels can be achieved better at national or EU level.[70] Meanwhile, legal limits

---

[64] The principle of conferral is enshrined in art. 4(1) and 5(1)-(2) TEU.
[65] Art. 5(1) TEU.
[66] Art. 5(3) TEU.
[67] Art. 5(4) TEU.
[68] Van Ooik (1999), p. 65-68; Amtenbrink & Vedder (2017), p. 165-169. The CJEU ruled that the choice for a legal basis must be in particular founded on the aim and purpose of the measure (Case C-233/94 *Germany v Parliament and Council* [1997] ECR I-2405, para. 12). Moreover, the measure shall genuinely pursue the objectives stated in the legal basis (Case C-376/98 *Germany v European Parliament and Council [Tobacco Advertising]* [2000] ECR I-8419, para. 84-85).
[69] Instead, the application of the proportionality principle leads to an examination whether EU actions to influence household debt levels are necessary and suitable to achieve objectives of the EU treaties.
[70] Nevertheless, it shall be clear that it is not only effectiveness which determines the subsidiarity of the instruments used to influence household debt determinants. Although EU law is rather goal-oriented – which is visible in the wording of the subsidiarity and proportionality principles, and is shown by the importance of teleological interpretation – law is not only meant to serve economic or other policy aims. The division of competences between the EU and the member states and the principles governing this, are cornerstones of

imposed by EU law in general, and the aforementioned principles in particular, can influence the possible effectiveness of the instruments. Therefore, the assessment of the preconditions for effectiveness of the instruments for influencing household debt levels, and the application of the principle of subsidiarity are interrelated.

However, apart from issues related to the effectiveness of instruments, the subsidiarity principle may be fulfilled, if the high levels of household debt are caused by factors at EU level. On the contrary, if causes are located at national level and differ between member states, the instruments need to be either exercised at national level, or differentiated between member states.[71] The mere fact that the consequences of high household debt levels in one member state spill over to other member states or the EU as a whole is insufficient for meeting the subsidiarity principle: if national instruments can effectively prevent or address this, there is no need for EU action. The subsidiarity principle might also be met, if differences between national instruments exert a significant negative impact on the internal market, and harmonisation can solve this, without hurting the effectiveness of the instruments.[72] Then, the next question is whether the proportionality principle is fulfilled as well.

1.2.3. Research question and sub questions

The issues concerning the effectiveness of policies to address household indebtedness and EU involvement in these policies underlie the research question and sub questions. In fact, these two issues are interconnected, since the effectiveness of instruments partly depends on the level – national or European – at which rules are enacted and vice versa. This will be further substantiated in the analytical framework.

Hence, the research question is:

> To what extent are instruments at both EU and national level able to effectively influence household debt levels?

---

the EU constitutional and institutional legal order, which possess more than instrumental value (Van Gestel & Micklitz (2014) warn that law is increasingly instrumentalised and legal researchers often tend to overlook legal issues (p. 297, 300-301, 303-305)). So, it is also a question of whether constitutional and institutional limits exclude some instruments that could be useful to influence household debt levels.

[71] Member states need to have enough instruments to tackle problems in their countries (cf. Jeanne & Korinek (2014), p. 167).

[72] Cf. High-Level Group on Financial Supervision in the EU (2009), para. 101.

The sub questions are:

a) Which instruments are available to influence household debt levels, and how do they influence household debt levels?
b) How does the design of these instruments affect their ability to effectively influence household debt levels?
c) To what extent are these instruments governed by national and EU law, and how does this affect their ability to effectively influence household debt level?
d) How do these instruments complement, substitute or conflict with each other, and how does this affect their ability to effectively influence household debt levels?

The analytical framework will elucidate how these sub questions are answered, especially how the potential effectiveness of the instruments is affected by their design, which includes the created possibilities to enforce them and the actors empowered to apply them. Due to the relationship between the issues about the effectiveness of the instruments and the degree of EU involvement, the latter issue will be integrated into the analysis. Therefore, in the course of the analysis of the preconditions for effectiveness, simultaneously most aspects of the question of whether the subsidiarity principle is met, are answered. Questions related to the internal market are an exception to this integrated approach. Since maintaining the integrity of the internal market is not a function of effectiveness, this issue is not directly related to the research question, and only receives briefly attention in later chapters, insofar as conflicts between creating effective instruments and advancing the internal market need to be discussed.[73]

This research will focus on instruments that are directly targeted at affecting the *amount* of debt that consumers can borrow or lenders can supply. These are several macroprudential instruments – LTV, DSTI, LTI and DTI limits, sectoral risk-weighted capital requirements and the counter-cyclical capital buffer – as well as the regime for mortgage interest deductibility (MID) and provisions in consumer law prohibiting credit supply to consumers which are judged unable to meet their repayment obligations. The reasons for this choice are elaborated in chapter 2, where it will become clear that their effectiveness in influencing lending to household is promising, and that legal research into those instruments is highly necessary.

[73] This issue is particularly discussed in sub-sections 7.1.1.2 and 7.1.3.2, and also in section 3.3.2.2.

1.3. Approach and methodology

1.3.1. An interdisciplinary approach

Policymakers seek to influence household debt developments by means of instruments, which are legal or at least operate within a certain legal framework. Therefore, the topic of this study is located at the intersection of two disciplines: law and economics. Indeed, this research is conducted using both a legal and an economic point of view, and can be characterised as interdisciplinary. However, interdisciplinary research is a container concept, as Taekema and Van Klink (2011) rightly argue, encompassing all kinds of combination of two or more disciplines.[74] To facilitate the analysis of the types of interdisciplinary research that can be distinguished, Taekema and Van Klink (2011) identify five elements that determine the perspective of a particular discipline.[75] These are (1) the concepts, (2) the methods to acquire knowledge, (3) the object, (4) the problem awareness and (5) the research goals of the discipline.[76] While most of these elements are clear without further explanation, the last two deserve some clarification. The term "problem awareness" stands for the type of problems that receive attention from a discipline, and the term "research goals" for the kind of aims researchers within a discipline generally pursue: e.g. describing, explaining or evaluating.[77] Building upon these elements, Taekema and Van Klink (2011) distinguish various types of interdisciplinary legal research, differing in the degree to which the interdisciplinary research moves beyond a single discipline.

This study is a form of "integrated" interdisciplinary research, using the terminology of Taekema and Van Klink (2011), meaning that 'the research process itself contains elements from both disciplines and the researcher welds together the concepts and methods from each or applies a more general methodological approach to both.'[78] This can be clarified by means of the aforementioned elements. The object of this research are legal instruments with economic goals. Economic theories, concepts, literature and findings are used to understand the causes of household debt. The analysis of the selected instruments is based on an analytical framework built upon legal literature, findings and concepts, but also informed by economic literature, findings and concepts. Therefore, insights from various disciplines are integrated in a single analytical framework, which guides the research. The methods are predominantly legal: literal, teleological and systemic interpretation of texts. However, economic reasoning supports the comprehension of the instruments, and guides the understanding of

[74] Taekema & Van Klink (2011), p. 7.
[75] *Ibidem,* pp. 7-8.
[76] *Ibidem,* p. 8.
[77] *Ibidem.*
[78] *Ibidem,* p. 11.

the transmission mechanisms through which the instruments affect household debt. In turn, the analysis of EU involvement is mainly based upon legal principles.

From an economic perspective, the most relevant question is the suitability of the instruments for influencing household debt determinants. From a legal viewpoint, it is most relevant to know whether the created framework of instruments respects the legal system, values and principles in place, i.e. whether the rule of law is upheld. This research examines both. Finally, the goals of this research – describing, explaining and evaluating – fit better in a legal than an economic discipline, especially since the dominant economic method for explaining, i.e. quantitative empirical research, is not used in this study.

A combination of several disciplines is relatively new in European law, since, until recently, most legal research was doctrinal and reluctant to integrate various disciplines, according to Van Gestel and Micklitz (2011).[79] However, the present research calls for this integrated multidisciplinary approach for several reasons. Firstly, the causes of household debt developments must be understood in order to know whether instruments would be able to influence them effectively. Moreover, ideally the instruments are analysed from both an economic and legal perspective, which are concerned with respectively issues related to effectiveness and the rule of law. It namely lacks sense to examine only whether instruments fit into the legal system and respect legal principles, whilst not knowing whether they can be effective. However, neglecting these legal issues, and solely focussing on the potential effectiveness is undesirable too, since the EU and its member states are based upon respect for the rule of law. Moreover, it is highly questionable whether economic research into the effectiveness of legal instruments could successfully be accomplished without legally assessing and interpreting these rules, using appropriate hermeneutic methods, such as literal, teleological and systemic interpretation. Furthermore, since a considerable amount of these instruments has been created recently, it is necessary to clarify and systemise them legally, in order to grasp the entirety of applicable legislation. Above all, legal and economic issues are intertwined. On the one hand, the possible effectiveness of an instrument depends on its legal status, for instance its enforceability. On the other hand, the potential effectiveness of an instrument determines whether it should – according to the principle of subsidiarity – be exercised at national or EU level, and thus partly determines its legal status. Concluding, a multidisciplinary approach is necessary and contributes to the existing literature.

[79] Van Gestel & Micklitz (2011), p. 18.

1.3.2. Literature review

Knowing which factors determine household debt levels is a precondition for answering the research question and sub questions. Consequently, this research will start with identifying the factors that affect household debt levels in the member states of the European Union, based on economic theory and reviews of several streams of literature explaining household debt. Special attention will be paid to factors related to the financial system and the housing market, because of their role in the European crisis. Based upon the acquired knowledge, an overview of the different determinants will be provided, indicating whether they influence the level of household debt through demand or supply channels. Empirical data, from various sources, is used to illustrate differences in household debt levels, as well as in economic and regulatory characteristics between member states.

1.3.3. Doctrinal legal research and supporting interviews

Having established the impact of the economic and regulatory factors on household debt, an analysis of the instruments addressing these factors is the next step needed to answer the research question. The backbone for doing this is formed by legal research, because the design and working of the instruments, which are created by legislation, have to be explained and understood. Only then, the state of the preconditions for effectiveness can be assessed.

Because a range of EU and national instruments exists or is being created, systemisation – i.e. grasping the entire picture – is necessary. The first step is mapping these instruments. After selecting the instruments which will be investigated in this study, their position within the legal order of the EU and its member states is examined. Thereafter, the substantial content and design of and decision-making processes on these instruments, as well as their scope with respect to influencing household debt levels will be investigated. This entails doctrinal research into primary and secondary Union law, as well as national law. Many of the EU instruments consist of secondary EU law, namely regulations or directives. For instance, the macroeconomic imbalance procedure and the financial supervisory authorities have been created by means of regulations, while the capital requirements package consists of a regulation and a directive, and the CCD and MCD are both directives. This secondary law is based on primary law: the EU treaties. Those treaties, interpreted and supplemented with case law of the Court of Justice of the European Union (CJEU), also provide limits to the use of the EU instruments. Examples are the competences catalogue and the principles of subsidiarity and proportionality. Consequently, the research includes an investigation of how EU treaties, principles and case law enable and constrain the use of the instruments which can influence household debt levels. Whenever necessary other relevant legal sources, such as soft law, have to be examined, since it is a general trend in EU law that hard and soft law are increasingly combined in EU governance[80] (the core of the distinction between hard and soft law is that the former is binding, contrary to the latter).[81] Directives have to be implemented in national law and leave room for national peculiarities, particularly if they are not subject to maximum harmonisation. Consequently, the national implementation of the aforementioned directives will be examined too. Insofar as relevant, other national legislation and case law will be investigated as well.

All these EU and national legal sources can be typified as the data for this research.[82] Text analysis is the common legal approach to such "data".[83] This approach will be used in this thesis as well. The hermeneutic methods that are used are literal, teleological and systemic interpretation. The two latter are the most applied interpretational principles in European law, as pointed out by, among others, Hahn-Lorber (2010).[84] Whenever necessary, this is complemented by applying case law. Case law can be described as authoritative interpretation.[85]

The process described thus far can be characterised as doctrinal legal research. To verify the findings of this legal research, and to obtain additional insights, a number of interviews have been conducted, with officials of authorities involved in applying the instruments. These are officials from financial supervisors in each member state examined in this study, as well as an official of the Dutch Ministry of Finance.[86] The interviews are only conducted to support the main research, and are not the core of the study. They were semi-structured, meaning that each respondent was asked more or less similar questions, which were drafted in advance, while digressing from the questions was possible. Each interview covered various themes and was conducted using a so-called tree model: it contained main questions, sub-questions, and follow-up questions.[87] Sometimes, the information obtained through

[80] Van Gestel and Micklitz (2011), pp. 14-15 and 27.
[81] See e.g. Boyle (2010), p. 122. Nevertheless, the exact meaning of "soft law" is debated among academics, as nicely summarised by Terpan (2015), pp. 68-72. He distinguishes two criteria for defining hard and soft law: obligation and enforcement. If both are hard, law is hard (pp. 72-77). The softness of an obligation derives from the softness of the source and/or the content of the rule. 'Soft enforcement is about procedures aimed at ensuring compliance without necessarily resorting to coercion or constraint.' (p. 74).
[82] Cf. Van Hoecke (2011), p. 11.
[83] *Ibidem,* p. 6.
[84] Hahn-Lorber (2010), pp. 765-766; 773-776. The CJEU generally uses teleological and systemic interpretation (Maduro (2008), p. 3; Itzcovich (2011), pp. 552-553, 555-557; Dawson (2014), pp. 424, 426-427). Of course, these two interpretational principles are often intertwined with each other, as acknowledged by Maduro (2008), p.3 and Hahn-Lorber (2010), p. 774.
[85] Bankowski et al. (1991), pp. 13-16; Van Hoecke (2011), p. 11.
[86] The next sub-section explains which member states will be examined in this study.
[87] Evers & De Boer (2007), pp. 55-60.

the interview helped to understand other information better; other times the information provided new insights. If so, it is used with explicit reference.

1.3.4. Comparative legal research and country selection

1.3.4.1. Comparative legal research

The present research goes beyond classical doctrinal legal research in another respect too, since it has comparative aspects. National laws and regulations regarding household debt levels in several member states are compared, in particular the regulatory framework establishing LTV, LTI, DSTI and DTI ratios, the fiscal treatment of debt, and other law which affects the effectiveness of the instruments to address household indebtedness, such as law on enforcement and regulatory and supervisory independence.[88]

Traditionally, comparative legal research compares law of some selected countries, based upon a common methodology: it starts, after an explanation of the research design, with a description of the different legal orders to provide the necessary context. Thereafter, in the actual comparison, differences and similarities are mapped. Finally, those differences and similarities are explained.[89] This study will respect these main elements of comparative legal research. It needs to be noted that this study describes both the European and the national legal orders, insofar as relevant for understanding the instruments that are created to address household debt levels.

1.3.4.2. Country selection

In this study, member states are selected based upon two criteria. Firstly, given the subject-matter of the research, it is relevant to examine countries with and without high levels of household debt. It is important to signal which (regulatory) factors can possibly explain differences between those types of member states. However, since not the causes of, but the instruments addressing high levels of household debt are central in this research, the member states with high debt levels will receive more attention. These countries will most likely employ most effort to create instruments to reduce household debt levels. As became clear in section 1.1, relevant member states with high household debt levels include the Netherlands, Ireland and Spain, while large member states with relatively low levels of household debt are Germany, France and Italy. A second criterion is variation between member states regarding the instruments employed to address household debt levels. For instance,

[88] See section 1.4 on these issues.
[89] See e.g. Adams (2011) and Lemmens (2012).

some countries use LTV limits, contrary to others. The Netherlands and Ireland are the member states with the highest gross levels of household debt before and during the crisis, even substantially higher than Spain, which, like Ireland, faced a pronounced housing bust with severe consequences. Unlike Ireland and Spain, the Netherlands did not face increasing arrears on mortgages, which especially Ireland did. Because of these differences, Ireland and the Netherlands will be further examined, also since they have been both active after the crisis in enacting rules for addressing household debt levels, but with considerable differences, for instance regarding instruments as LTV and LTI ratios and mortgage interest deductibility.[90] Germany, with its low levels of household debt, differs from other countries with respect to the instruments for influencing household debt levels, such as LTV caps and mortgage interest deductibility. For this reason, Germany is also selected for further study, from the group of member states without problems with household indebtedness. To provide the necessary context, a brief introduction to the legal order and economic situation of each of these three countries is called for.

1.4. The analytical framework

Using classical doctrinal and comparative legal research, issues related to the effectiveness of the instruments in reducing household debt levels will be examined. This research is not concerned with effective judicial protection or the implementation and application of EU law in the national legal orders per se, issues that are governed by various EU legal principles.[91] In addition, this study does not test the actual effectiveness – the capacity to produce the intended result – of the legal instruments.[92] Instead, this study complements empirical, quantitative approaches by examining how the legal design of the instruments affects their potential effectiveness.

---

[90] This will become clear in chapters 4 & 6.

[91] An EU principle of effectiveness exists, which is normally understood as aiming at effective judicial protection by requiring 'that national remedies and procedural rules must not, in practice, render their beneficiaries' enjoyment of Community rights excessively difficult.' (Herlin-Karnell (2012), pp. 46). Cf. Ross (2006), p. 479; Klamert (2014), p. 125). Consequently, an important goal of this principle is to ensure compliance of member states with EU law (Nebbia (2008), p. 292; Klamert (2014), pp. 125, 131; Rott (2013), p. 181). Some scholars consider ensuring (1) effective judicial protection and (2) compliance of member states with EU law as different roles of the EU principle of effectiveness (Nebbia (2008), p. 302; Klamert (2014), p. 131)). The EU principle of effectiveness is closely related to the principles of *effet utile* and direct effect (Klamert (2014), pp. 261-262), which govern the implementation and application of EU law in the national legal orders (for these principles, see e.g. Hartley (2010), chapter 7; Vlaicu (2011), pp. 166-167). Nonetheless, scholars point out that the term effectiveness is used in variety of meanings in the case law of the CJEU and in EU law (Ross (2006), p. 479; Herlin-Karnell (2012), pp. 46, 50; Klamert (2014), p. 125. Cf. Snyder (1993), pp. 25-26). It is, for instance, also used as a principle for deciding whether EU action is justified at all, namely in the context of the proportionality principle (Herlin-Karnell (2012), p. 46).

[92] For an example of a quantitative analysis of the effectiveness of law, see Pistor et al. (2000), pp. 341-348.

1.4.1. The preconditions for effectiveness as the yardstick

The present research will focus on the legal preconditions which must ensure that instruments can be effective in influencing household debt levels. Law can either create the right preconditions for effectiveness, or constrain effective action.[93] These preconditions determine to what extent the instruments are able and suitable to produce the intended effect of lower household debt levels.[94] Legal research is indispensable for examining to what extent these preconditions are fulfilled, since the instruments have to be interpreted and understood within the broader legal framework.[95]

The analytical framework operationalises the preconditions for effectiveness in order to have criteria for guiding the assessment of the instruments which are created to influence household debt levels. The preconditions and their operationalisation are mainly derived from legal, but also from non-legal, strands of literature. Three preconditions are related to the individual instruments, whereas another concerns the interaction between all instruments. In view of the literature, as will be discussed in the sub-sections below, three important criteria for guiding the assessment of individual instruments can be distinguished, and are thus used in this study.[96] It is required for each instrument that:

1. Its rules are determinate and complete;
2. Its rules are enforceable with proportionate and dissuasive sanctions;
3. Its rules can and are likely to be applied, enforced and amended independently.

The potential effectiveness of instruments addressing household debt levels not only depends on aspects related to a single instrument. In addition, the interaction between various instruments is relevant for the effect which they will have on behaviour. So, an overarching criterion for evaluating the functioning of various instruments in the context of the whole system is whether the relationship between these instruments is non-conflicting and, whenever necessary for achieving the aim of influencing household indebtedness, complementary or substitutive.[97] An instrument is complementary to another instrument if it addresses different aspects of the same goal or problem.

---

[93] Cf. Aelen & Van den Broek (2014). Also, the field of institutional economics delivers the insight that instruments both constrain and incentivise/enable, as further discussed in box 2.1. Cf. International Monetary Fund (2015), which concludes with respect to macroprudential tools that their 'careful design (…) will also be important to maximizing their efficacy.' (p. 22).

[94] Cf. McCrudden (1993), who considers effectiveness in his article as 'fit for achieving the objectives…' (p. 325).

[95] The hermeneutic methods necessary for conducting such research have been discussed in sub-section 1.3.3. Note that the fulfilment of the criteria is a matter of degree, and not binary (Cf. Harding (1997), p. 22).

[96] The first and third criteria are partly based upon Van 't Hof (2016).

[97] Cf. Voigt (2013), p. 11; Marmor (2010), pp. 145-146. Note that Chambers (2004) states too that interlinkages with other legal instruments should be taken into account for understanding legal effectiveness, as well as non-binding, but supportive provisions of binding law. (pp. 527-529, 531-532).

An instrument is a substitute for another instrument if it can achieve the same aim with a similar degree of effectiveness. Therefore, it will be analysed whether and to what extent these relationships exist among and between national and EU instruments. If conflicts occur between instruments at the national level on the one hand, and the EU level on the other hand, the subsidiarity principle might be fulfilled for EU action that will solve this.[98] Then, it might be necessary to shift some instruments to another level in order to align them with each other.

The next sub-sections explain and operationalise the preconditions for effectiveness related to the individual instruments. Table 1.1 already provides an overview of their operationalisation.[99]

Table 1.1: Operationalising the preconditions for effectiveness

<table>
<tr><th>Determinacy and completeness</th><th>Possibility proportionate and dissuasive enforcement</th><th>Room for independent application, enforcement and amendment</th></tr>
<tr><td>Determinacy:
• no vague, ambiguous, or unclear general phrases: reading them in accordance with their plain meaning, in light context and aims, suffices to understand the instrument

Completeness:
• scope includes all relevant types of debt, borrowers, and lenders
• no gaps due to inconsistency or silence
• exceptions are subject to clear and protective conditions</td><td>Proportionate enforcement:
• availability whole range of sanctions, from light to severe

Dissuasive enforcement:
• availability high of administrative fines
• mandatory publication of sanctions, apart from specific exceptions
• possibility to sanction individuals
• availability threatening sanctions, like withdrawal licence
• possibility criminal conviction</td><td>• ability and willingness to act: instrument has clear legal basis, well-defined policy objectives, corresponding to clear mandate decision-maker, and framework provides room for action
• decision-maker is operationally independent: no interference by executive or industry
• decision-making procedure is based on guided discretion
• presence of accountability mechanism</td></tr>
<tr><th colspan="3">Interaction between instruments</th></tr>
<tr><td colspan="3">Relationship is non-conflicting and, if necessary, complementary or substitutive</td></tr>
</table>

[98] Although member states are only allowed to exercise a shared competence to the extent that the EU has not exercised its competence (art. 2(2) TFEU), different types of instruments can address the same problem, and might thus conflict with each other. Problems related to this issue are regarding consumer protection will be discussed in (sub-)sections 5.4 and 7.1.1.2.

[99] For a few parts of chapter 5 and 6, some of the preconditions will be operationalised slightly differently, because the instruments and actors discussed in these chapters require so.

1.4.2. Determinacy and completeness

The determinacy and completeness of law matter for its effectiveness, as well as for the degree of legal certainty.[100] The concept of determinacy 'refers to the existence of such legal regulation as can be intelligibly identified and applied to the underlying facts.'[101] This affects its effectiveness, since the regulatees are otherwise unaware of what is expected from them, or can purposely abuse indeterminacy to their own advantage.[102] Completeness of law means that the established rules 'cover the subject-matter of their regulation in its entirety.'[103] This is a prerequisite for effective law, since gaps and loopholes can trigger circumvention or undo results obtained elsewhere in the law.[104] The importance of complete law is confirmed by an economic body of literature on financial regulation and supervision, which highlights the need to take the risks of leakage and circumvention into account when designing the regulatory framework.[105] If gaps and resulting loopholes are a consequence of different rules between member states, regulatory arbitrage is facilitated. The resulting ineffective rules might pose a reason for harmonisation. Determinacy and completeness of law are related: indeterminate provisions might create a loophole, whereas a legal gap can result in difficulties of identifying and applying law to the underlying facts.[106] Hence, further specifications are necessary to distinguish between both concepts and operationalise them.

1.4.2.1. Operationalising the assessment of the determinacy of law

It is first necessary to zoom in on the causes of indeterminacy of law. According to Hart (1961), this is the result of the open texture of rules, whose meaning and application can never be completely defined and delineated.[107] More specifically, Poscher (2012) distinguishes three main causes of

---

[100] On the latter: cf. Brown et al. (2006), pp. 61, 66. Cf. Stern (2012), pp. 244-245.
[101] Orakhelashvili (2008), p. 22.
[102] On the effcts of determinacy on the effectiveness of law, see e.g. Allott (1981), p. 236; Brown et al. (2006), p. 61; Orakhelashvili (2008), pp. 22-24.
[103] Orakhelashvili (2008), p. 20.
[104] *Ibidem,* pp. 20-21. Cf. Pistor & Xu (2002), p. 932;
[105] These concepts will be explained and discussed in more detail in section 2.3. See e.g. Lim et al. (2011), p. 31; Aiyar et al. (2014b), pp. 209-210; Aiyar et al. (2014a); Kim (2014), p. 126; Jeanne & Korinek (2014), pp. 166-167.
[106] It is also possible to see indeterminacy as a subcategory of incompleteness (see e.g. Pistor & Xu (2002), especially pp. 945, 959-961) or vice versa. However, in this research both concepts are operationalised as two different, albeit highly interrelated, issues, since their focus is slightly different.
[107] Hart (1961), pp. 123-124. According to Hart, rules are not only subject to the open texture of language as such, but also to a specific form of open texture of rules, namely that their application might be subject to indeterminacy (Schauer, 2011, pp. 7-10). Indeed, indeterminacy in the application of rules can be distinguished from indeterminacy in the language of the rules, since the application does not only depend on the wording of the individual rules, but also on the question of whether new, unforeseen, cases fall under the same rules and on the interpretation by judges, who even might interpret a rule *contra legem* (cf. Bix, 1993, p. 181).

indeterminacy, namely vagueness, ambiguity and generality.[108] Ambiguous phrases have multiple meanings.[109] Vagueness concerns the presence of borderlines cases, for which it is unclear whether rules apply or not.[110] This can be the result of difficulties with delineating or classifying the matter governed by the rules, for instance because the application of the rules to that matter is unforeseen.[111] Imprecise language might also cause vagueness.[112] Finally, generality refers to the use of general terms – which are not necessarily vague, but can rather be characterised as (intentionally) underspecified, although it is sometimes difficult to disentangle vagueness and generality from each other.[113] Moreover, causes of indeterminacy can coincide: for instance, open-ended norms are often both general and vague.[114]

Therefore, an instrument is determinate if the rules governing its use are not unclear due to (1) vague phrases, (2) ambiguous phrases, or (3) general phrases that raise doubt about the classification of specific situations under the rules. Assessing the indeterminacy of a phrase requires further operationalisation, especially in case of detecting vagueness: a phrase is determinate if its addressees can straightforwardly derive its meaning and apply it.[115] This is the case if reading the phrase in accordance with its plain meaning, in light of the context and aims of the instrument, suffices to understand it.[116] In this respect, the instrument's aims shall be clearly stated in the preamble or an attached explanatory memorandum: there should be no need to guess what they are.[117] In addition, it is hard to consider a phrase as determinate if consulting the instrument itself, the provisions on which it is based and the general legal framework in the respective member state, as well as laws and

[108] Poscher (2012), pp. 128-131.
[109] *Ibidem,* p. 129. This is rarely an issue in legal interpretation, since the context often clarifies the meaning of expressions *(ibidem).* Cf. Waldron (1994), p. 512.
[110] Poscher (2012), p. 129. Cf. Waldron (1994), p. 513; Marmor (2010), pp. 146-150.
[111] Poscher (2012), pp. 121-134.
[112] *Ibidem,* p. 133. Cf. Torpman & Jorgensen (2005), who state that the 'language of the law is frequently so vague that determination of the exact behaviour prescribed or forbidden must be extracted by using a certain method of interpretation.' (p. 148).
[113] Poscher (2012), p. 130; Sorensen (2001), pp. 404-408. Poscher give the example of 'living being', a concept which is more general than 'tree'. Generality can be functional to encompass many situations under one rule.
[114] An open norm leaves room for subjective judgment and disagreement (Orakhelashvili (2008), p. 26).
[115] Note that this is comparable with the doctrine of *acte clair* in EU law, where the defining criterion for allowing not lodging a preliminary reference is that 'the correct application of Community law may be so obvious as to leave no scope for any reasonable doubt as to the manner in which the question raised is to be resolved.' (Case 283/81, *CILFIT,* [1982], ECR 3415, para. 16).
[116] Cf. Bix (1993, p. 67), who states that the 'clarity of the language in a legal rule, that is straightforward relative to the fact to which the rule will be applied, is not sufficient (…) for the application of that rule to be a clear case'. A literal reading may namely be either inconsistent with the purpose of the rule or lead to absurd or unjust results. Leaving aside the last option – since it is less relevant for regulatory rules as at stake in this study – the first option can be tackled by reading the phrase in the light of the context and aims of the instrument, as stated in the main text.
[117] Cf. Bix (1993), pp. 65-71.

legislation to which the instrument refers, are not sufficient for understanding its meaning.[118] On the contrary, the presence of a borderline case, rather than a plain case, can be identified by asking whether a judge's choice between open alternative interpretations is required to interpret a phrase.[119]

1.4.2.2. Operationalising the assessment of the completeness of law

The assessment of the completeness of the instruments is operationalised by verifying whether the following requirements are met. Firstly, it is analysed whether the scope of the instrument includes all relevant types of debt and all relevant borrowers and lenders.[120] Secondly, it is examined whether there is no gap in the rules of the instrument. This might *inter alia* happen if they are inconsistent or silent on (aspects of) important issues.[121] A gap can create a loophole, and can lead to so-called creative compliance. This means that the regulatees engage in box-ticking and formal compliance with the rules, but act against their purpose, circumventing the restrictions set by the rules as much as possible.[122] Taking advantage of loopholes is often referred to as regulatory arbitrage. Finally, it is analysed whether exceptions to the rules are subject to clear and protective conditions in order to avoid abuse. Some of these issues are interrelated. For instance, whether all relevant borrowers and lenders – both domestic and foreign – are included in the scope of the instrument matters for the possibilities for regulatory arbitrage. The opportunities for regulatory arbitrage are also influenced by issues as whether an instrument applies at the level of an individual loan, borrower or lender, at the level of a country, or even at the level of the EU.[123] If national instruments cannot prevent significant

---

[118] This requirement is less strict than the condition in the *CILFIT* case that 'every provision of Community law must be placed in its context and interpreted in the light of the provisions of Community law as a whole, regard being had to the objectives thereof and to its state of evolution at the date on which the provision in question is to be applied.' (Case 283/81, *CILFIT,* [1982], ECR 3415, para. 20). However, although an analogy with case law of the CJEU is useful, an analogy always has its limitations and applying a less strict criterion is justifiable for two reasons. Firstly, the literature is critical on the strict criteria of the CJEU (see e.g. Broberg (2008), pp. 1388-1390; Hartley (2010), pp. 310-312). Secondly, the requirement as cited above must be applied by national courts, which can be expected to have more expertise than an addressee of a rule. A requirement to evaluate a rule in the light of all EU or national law is thus less burdensome for a court than for an average addressee of a rule.

[119] Cf. Solum (1987), p. 462; Bix (1991), p. 65; Bix (1993), p. 18.

[120] Cf. FinCoNet (2014). In that report the, the following aspects of the scope of a regulator's oversight are distinguished: type of product, type of entity (e.g. a bank or non-bank lender), type of activity, type of consumer and the conduct of the regulator (p. 32).

[121] Regarding silence on important issues: Orakhelashvili (2008), p. 21. Cf. Pistor & Xu (2002), pp. 932, 941. Silence might be a result of socioeconomic or technological changes not covered by existing laws. In turn, this can be tackled by using open-ended provisions (Pistor & Xu (2002, pp. 932-933). However, this impairs the determinacy of the law.

[122] McBarnet & Whelan (1991), pp. 848-850; Black et al. (2007), pp. 194-195; Black (2008), pp. 437-438; Akinbami (2013), p. 19.

[123] Cf. European Central Bank (2015a), pp. 124-126.

regulatory arbitrage resulting from differences between national instruments in EU member states, the subsidiarity principle is fulfilled.[124]

1.4.2.3. The tension between determinacy and completeness of law

When designing rules, there often is a tension between the goal of realising determinacy and completeness. This becomes apparent when comparing three archetypes of rules.[125] Firstly, a straightforward and encompassing rule is most likely determinate and complete. However, it risks being blunt – which can lead to negative side effects – and not fine-tuned to actual risks.[126] These problems are tackled by the second type of rule, which is a complex and detailed rule. In this case, the prescribed outcome depends on the presence of particular circumstances and the fulfilment of certain conditions. However, there are various threats to the determinacy and completeness of this kind of rules. The risk of a gap is larger in case of a complex system of rules, especially if new developments change the regulated market. These gaps, as well as the complexity in itself, increase the risk of creative compliance. Furthermore, if rules become very complex, the system can become opaque, impeding its determinacy.[127] In turn, such problems might be solved by adopting principles. Principles are often general and lack the specificity of rules and point, instead, towards a certain aim or direction.[128] Advantages of principles are the possibilities to fine-tune the application to actual risks and new developments, as well as the potential to combat creative compliance. However, this comes at the expense of a lack of legal certainty and room for non-compliance through utilising the vagueness of the principles to develop a self-serving interpretation.[129] So, principles can more easily be complete, but are often vague and thus indeterminate.[130] All in all, this reveals the difficulty of creating rules that are determinate, complete and fine-tuned to actual risks.

---

[124] Note that the De Larosière report considered a lack of consistent financial regulatory and supervisory rules as a major problem, since it encouraged regulatory arbitrage (The High-Level Group on Financial Supervision in the EU (2009), para. 101, 104).

[125] Cf. Black et al. (2007), Black (2008), pp. 436-438, Brown (2015), pp. 574-575.

[126] This can lead to additional costs for society and/or decreased legitimacy of the rule.

[127] Cf. Haldane & Madouros (2012), who argue that, especially in a complex environment which is characterised by uncertainty instead of risk, simple rules often outperform complex rules. See also Georgosouli (2013), pp. 214-215.

[128] Black et al. (2007), pp. 194-195; Black (2008), p. 437. On the nature of principles, see also Ratsiborinskaya (2016), pp. 24-26.

[129] For a comprehensive discussion of these and other disadvantages of using principles in regulation: Black et al. (2007), pp. 196-200; Black (2008), pp. 446-456. Cf. De Vries (2013).

[130] Nevertheless, general principles are often operationalised over time by detailed guidelines. This might diminish their vagueness to a certain extent. However, the result can also bet that the framework might become even more opaque than under detailed rules, since the guidelines are less accessible and certain than these rules (see Black et al. (2007) and Black (2008)).

1.4.3. The possibility of proportionate and dissuasive enforcement

Rules fall short of accomplishing their purpose if they are not complied with. Non-compliance can be caused by a lack of knowledge about the applicable rules – for instance, because they are indeterminate – or by inability or unwillingness to comply with them. Each cause may require a different solution; for instance, clarification, capacity building, and sanctioning. Nevertheless, in order to incentivise compliance, the possibility to enforce a rule is a necessary, but not always sufficient, precondition for legal effectiveness. Indeed, traditionally enforceability belongs to the concept of effective law.[131] Still, enforceability is an irrelevant precondition for effectiveness for rules only creating incentives instead of prohibiting behaviour, with taxes and subsidies as the most prominent examples.[132] For enforcement to be effective, sanctions must be at least proportionate and dissuasive.[133] Therefore, in line with its focus on preconditions, this study examines the possibility to impose proportionate and dissuasive sanctions.[134]

1.4.3.1. Operationalising the possibility of proportionate enforcement

Many supervisors work with an enforcement pyramid, meaning that enforcement starts with a persuasive approach, but escalates to more punitive measures if regulatees do not change their behaviour.[135] De-escalation starts once the regulatee cooperates.[136] Proportionate enforcement is

[131] Cf. Snyder (1993), pp. 19, 24-25; Allott (1981), pp. 234-235, 238; Sarat (1985), p. 27; Neyer (2004), pp. 22-23; Pistor & Xu (2002), p. 934. The importance of enforceability is also discussed in specific strands of literature, such as consumer protection (see e.g. Iff/ZEW (2010), pp. 59-60; World Bank (2013), p. 15), financial regulation and supervision (see e.g. Aiyar et al. (2014b), p. 185), and institutional economy (see e.g. Voigt (2013), pp. 2, 8, 10). Often, the effectiveness of law is measured by the degree of implementation of or compliance with the law (Chambers (2004), p. 505; Torpman & Jorgensen (2005), p. 148-149; Cf. Snyder (1993), pp. 19, 24-25; Allott, 1981, pp. 234-235, 238; Sarat, 1985, p. 27; Neyer (2004), pp. 22-23). Legal positivists even contend that law cannot be considered law if there is no compliance with it. However, compliance does not show that law actually affects behaviour, since the regulatees might have behaved similarly without the existence of that particular law (Murphy (2014)).

[132] Cf. Torpman & Jorgensen (2005), p. 150.

[133] Cf. Case 68/88, *Commission v. Greece* [1989] ECR 2965, para. 24 (EU:C:1989:339); European Commission (2010), p. 4.

[134] Admittedly, it is also relevant for their deterring effect whether violations can be detected, and whether sanctions are actually imposed (cf. Dorn (2011), pp. 3-4). However, this is to a large extent dependents on actually capacity, and to a lesser degree on legal preconditions.

[135] Mascini (2013), p. 53. Cf. Baldwin & Black (2008), pp. 62-63, Elder (2013).

[136] Mascini (2013), p. 48. Cf. Baldwin & Black (2008), p. 63. In practice, applying the enforcement pyramid is not without problems. For instance, de-escalating after the application of punitive measures can be difficult, since the relationship between the supervisor and regulatee might be troubled due to the punishment. For a discussion of this and other problems, see e.g. Baldwin & Black (2008), pp. 62-64; Gunningham (2010), pp. 127-131; Mascini (2013), pp. 50-53.

possible if the whole range of enforcement measures under the enforcement pyramid is available, from light to severe sanctions.[137]

1.4.3.2. Operationalising the possibility of dissuasive enforcement

The main insight of the deterrence perspective on inducing rule-abiding behaviour is that sanctions are dissuasive if the benefits of violating the rules and requirements are lower than the probability of receiving the sanction multiplied by the costs or impact of this sanction.[138] This perspective assumes rational behaviour of potential offenders, which can generally be considered plausible within the context of “white-collar crime”.[139] Meanwhile, some studies point at downsides of using sanctions to deter – such as hurting the relationship between the supervisor and regulatee – and advocate ensuring compliance by means of persuasion and advice.[140] However, persuading and sanctioning are not mutually exclusive, and are mostly combined in current practice, by means of the enforcement pyramid.[141] Hence, it remains relevant whether there is the treat of dissuasive sanctions.

The evaluation of the potential dissuasiveness of sanctions for non-complying lenders is operationalised by verifying to what extent several prerequisites are met.[142] Firstly, administrative fines shall be high enough to offset benefits acquired from violating the rules.[143] It is difficult to quantify an exact level, but in the financial services sector the maximum amount likely needs to be at least

[137] Otherwise it would be impossible to impose a sanction that reflects the gravity of the violation while not going beyond what is necessary to achieve the aims pursued (cf. European Commission (2010), p. 4; MacNeil (2015), p. 296.

[138] Armour et al. (2015), pp. 7-8, Faure et al. (2009), pp. 166-167; Polinsky & Shavell (2000), pp. 47-48, 70-71; Jackson & Roe (2009), p. 209; Gunningham (2010), p. 122; European Commission (2010), p. 4; Yeung (1999), pp. 449-450. Cf. MacNeil (2015), pp. 282-283, 298; Van Wingerde (2012), pp. 21-67; Mein (2015a), p. 131. The work of Becker (1968) was influential for fuelling research based on this perspective. For a discussion of the deterrence perspective, see e.g. Yeung (1999), pp. 441-457.

[139] Faure et al. (2009), pp. 166-167.

[140] See e.g. Van Wingerde (2012), pp. 35-62; Gunningham & Kagan (2005), pp. 213-214. Cf. Singh (2003), p. 302; Black & Baldwin (2010), pp. 186, 199; Gunningham (2010), pp. 122-125. For a broader discussion on the various supervisory approaches, see e.g. Black (2012) and Tombs (2015).

[141] Gunningham (2010), pp. 123-131; MacNeil (2015), p. 283. Cf. May (2005), p. 32.

[142] For administrative enforcement these are partly based upon the issues which the European Commission (2010) correctly identified as important for ensuring that sanctions in the financial services sector – providing loans is a financial service – are dissuasive. The International Monetary Fund (2011) fully supported the view of the Commission (see e.g. pp. 1, 3). Also some scholars explicitly agreed with the view of the Commission: see e.g. Dorn (2011), p. 2.

[143] European Commission (2010), p. 12; International Monetary Fund (2011a), p. 4. Cf. Dorn (2011), p. 4. The literature on financial sanctions in general, as well as experiments, confirm that administrative fines need to be sufficiently high. See e.g. the discussion and references in Kurz et al. (2014), pp. 170-171.

several million euros.[144] In addition, the financial strength of the offender should be taken into account when determining the amount of the fine, since large lenders might consider the sanctions otherwise as "peanuts".[145] Moreover, setting minimum levels of administrative fines helps to avoid under-sanctioning, which might stem from regulatory capture.[146] Secondly, the publication of sanctions must be mandatory, apart from some specific, well-defined exceptions.[147] Research shows that the publication of sanctions contributes to prevention and deterrence by being a form of naming-and-shaming.[148] The reputational damage resulting from the publication is likely to have even a much larger impact on the offender than the administrative fine itself.[149] If publication serves the goal of warning the public and preventing future violations, it must be timely and reach consumers.[150] Studies namely show too that (the threat of) reputational damage is low if the offender is unknown to the public and the publication receives no media attention.[151] Publication must be surrounded with sufficient safeguards, in order to ensure legal protection of the offender.[152] Thirdly, in order to align incentives to comply with rules, it must be possible to sanction both the individual who is essentially responsible for the violation and the financial institution that benefitted from the violation.[153] Fourthly, credible non-pecuniary sanctions need to be available for situations that financial sanctions cannot be imposed.[154] Such a sanction can be withdrawal of the lender's licence, but it needs to be realised that this ultimate sanction is not a credible threat for every lender, especially not for systemic

[144] I am not aware of any empirical research, outside the area of securities, on the required magnitude of fines in order to reach sufficient deterrence. For research in the area of securities, see e.g. La Porta et al. (2006), Coffee (2007) and Armour et al. (2015). The European Commission (2010) discusses that '[v]iolations of financial services legislation can lead to gains of several million euros' (p. 7). This requires the possibility to impose fines of several million euros.
[145] European Commission (2010), p. 14. Cf. International Monetary Fund (2011a), p. 5. Note that supervisors sometimes show a tendency to sanction only small offenders (e.g. Van Erp (2010), pp. 425-426, 429).
[146] On minimum levels of sanctions, although not in relation to regulatory capture, see: European Commission (2010), pp. 12-13; International Monetary Fund (2011a), pp. 3-4. For more on regulatory capture, see the next sub-section.
[147] European Commission (2010), pp. 7, 12; International Monetary Fund (2011a), p. 4.
[148] *Ibidem.*
[149] Armour et al. (2015), pp. 22-23, 29; Van Erp (2011), pp. 289-290.
[150] Van Erp (2010) discusses that in the Netherlands generally a year passes between the detection of a violation and the imposition of a sanction, meaning that a publication of the sanctions loses its relevance as warning device for the public (p. 424). Moreover, if sanctions are only published on the website of the supervisor and do not receive media attention, they do not reach the public at large and hence their function as instrument of protecting consumers (Van Erp (2010), pp. 425-428).
[151] Van Erp (2011), p. 290, 296. Cf. Van Erp (2010), pp. 420-422.
[152] Ottow (2015), pp. 178-180. She discusses the issue that publication before no appeal is possible anymore can hurt an offender irreversibly, but waiting till no appeal is possible anymore can take years and thereby reduces the effectiveness and timeliness of the publication.
[153] European Commission (2010), pp. 8, 13; International Monetary Fund (2011a), p. 5; MacNeil (2015), p. 295.
[154] For instance, it could be that a lender would go bankrupt due to a fine.

institutions.[155] Therefore, the availability of another ultimate threat is desirable, namely the threat of a criminal sanction.

Although administrative enforcement is the standard within regulation, it is not the only option: criminal prosecution is another avenue.[156] Criminal sanctions are likely dissuasive, due to the “stigma” of a criminal conviction and the possibility of imprisonment. However, criminal proceedings often require substantial costs and efforts, reducing the likelihood that proceedings are started.[157] Therefore, criminal prosecution is often sub-optimal compared to administrative enforcement. However, due to its dissuasiveness, it can function as an ultimate threat at the top of the enforcement pyramid. This can be a credible threat, even in situations where a withdrawal of authorisation is not.

1.4.4. Room for independent application, enforcement and amendment

The effect of an instrument is influenced by decisions of the actors involved in the process of applying, enforcing and amending it (amendment stands for adjusting the legal design of an instrument, whereas application refers to using the instrument as it is currently designed). Any actor which applies, enforces, or tightens rules to restrict lending to households, can expect fierce resistance, probably mostly from the financial industry and politicians. Such decisions are often unpopular, because even though they benefit longer-term general interests – such as financial stability – they can go against special interests, and their costs are felt in the short-term. Therefore, the industry may try to capture a regulator or supervisor, meaning that it is able to influence regulatory or supervisory decisions.[158] Capture can be the result of active lobbying, but also of unconscious biases, like identification of regulators or supervisors with the industry they are supposed to regulate and supervise.[159] Therefore, it is vital for the effectiveness of rules that the risk of inaction or inadequate action – which may be the result of industry and political pressure – is minimised by the allocation of powers and the design of decision-making processes, while the ability and willingness to act is maximised.

[155] Elder (2013), p. 235. It is unlikely that a supervisor will proceed with withdrawing the licence of a large bank.
[156] In consumer law, private enforcement is another alternative for administrative enforcement. However, since only one chapter in this study deals with consumer law, the advantages and disadvantages of private enforcement compared to public enforcement will be discussed in that chapter, in section 5.2.
[157] Faure et al. (2009), p. 177; Ottow (2015), pp. 174-176. In addition, criminal sanctions are often only imposed long after the violation took place, which may weaken the perceived connection between the violation and the sanction, and may thus diminishes the deterrent effect as well.
[158] Mitnick (2011), p. 35. For more on capture and the need to be shielded from it, see e.g. Quintyn & Taylor (2003), p. 265; Den Hertog (2003), pp. 24-25; Barth et al. (2006), pp. 34-46; Pacces & Van den Bergh (2012).
[159] Kwak (2013), p. 98; Aelen (2014), pp. 117-119; Veltrop & De Haan (2014), pp. 22-24; Jansen & Aelen (2015), pp. 26-28. Cf. Lunn (2013). On ongoing post-crisis lobbying of financial industry groups, see Young (2013).

1.4.4.1. Increasing the ability and willingness to act, decreasing the inaction bias

The ability and willingness of an actor (often a regulator or supervisor) to act is fostered if the instrument has (1) a clear legal basis, and (2) well-defined policy objectives, which (3) correspond with a clear mandate of the actor, and (4) a framework which provides this actor with room for action.[160]

Secondly, in this context, the literature has stressed the importance of allocating powers to a regulator or supervisor that is (sufficiently) independent: this enables achieving the objectives, without political and industry interference.[161] This benefits the effectiveness of the rules.[162] Only one dimension of independence is directly relevant for this study, namely operational independence.[163] This entails that a regulator or supervisor can, within the confines of the law, take decisions about an instrument, to achieve the objectives for which it received this instrument, without approval of and interference by

---

[160] For a discussion of these kinds of issues in the context of macroprudential policy, see International Monetary Fund, Financial Stability Board and Bank for International Settlements (2016), p. 7; International Monetary Fund (2014b), p. 6. Cf. Nier (2011), pp. R7-8.

[161] See e.g. Quintyn & Taylor (2003), p. 259, 264-266; Di Noia & Gargantini (2014), pp. 5-6. For an introduction to this literature, see: Majone (2005), Masciandaro et al. (2008), Amtenbrink & Lastra (2008). The principles of independence and accountability are included in the Core Principles for Effective Banking Supervision, published by the Basel Committee on Banking Supervision (2012). Also art. 4(4) Directive 2013/36 requires member states to ensure that national supervisors (competent authorities) have enough independence to carry out prudential supervision. Furthermore, art. 19(1) of the regulation establishing the SSM, regulation 1024/2013, requires national supervisors to act independently when acting within the SSM. These provisions have not yet been interpreted by the CJEU. Also, the ESRB recommends member states to ensure that macroprudential authorities are, in the pursuit of their objectives at least operationally independent, in particular from political bodies and from the financial industry (European Systemic Risk Board Recommendation 2011/3, Section 1, Recommendation E(1)). Concerning broader about good agency principles, including independence, see Ottow (2015), especially the third chapter. For a discussion, based upon a principle-agent model, about the question whether certain tasks can be better delegated to politicians or bureaucrats (such as regulators), see Alesina & Tabellini (2007, 2008).

[162] Empirical research finds evidence that independence of regulators increases financial stability: see e.g. Dincer & Eichengreen (2012), pp. 323-324; Quintyn & Taylor (2003), pp. 262-263. Cf. Jordana & Rosas (2014), p. 685; Amri & Kocher (2012), pp. 33-38.

[163] The literature distinguishes various dimensions of independence. While categorisations vary somewhat, the underlying issues are similar. A first dimension – called operational, functional or decision-making independence – focusses on the regulator's degree of independence in deciding on its primary tasks. Another dimension concerns the legal status of the agency and its staff, independence in matters regarding the organisation of the agency, and the appointment and dismissal of its head and other staff. Finally, budgetary independence focusses on independence from politics with respect to the funding of the agency. For categorisations, see e.g. Quintyn & Taylor (2003), pp. 267-274; Szydlo (2012), p. 800; Gilardi (2002, 2005b); Gilardi & Maggetti (2011); Hanretty & Koop (2012, 2013), Gadinis (2013). Lavrijssen & Ottow (2012) qualify functional independence as "more equal" than the other dimensions (p. 428). Others add informal measures of independence to these formal dimensions, such as the frequency of contacts, and revolving doors between the regulator and politicians, and the regulator and the industry (Gilardi & Maggetti (2011), pp. 211-215; Thatcher (2002), p. 962-966), where the term "revolving door" refers to regulators moving from regulatees to the agency and then back to regulated industries and similarly for politicians and the regulator (Thatcher, 2002, p. 963)).

the executive, another public authority, or the industry.[164] The operational independence of a regulator or supervisor is being restricted if someone else than the judiciary and the legislator limits its discretion.

Thirdly, the effective use of an instrument is supported by a decision-making process that is characterised by a combination of rules and discretion.[165] On the one hand, rule-based decision-making reduces the risk of inaction. On the other hand, a certain degree of discretion is both unavoidable and necessary to be able to react timely to new developments, to tailor action to the specific situation at hand, and to make decisions in complex situations that cannot be incorporated in a simple rule.[166] Therefore, to combine the advantages of rules and discretion, a decision-making procedure should be based upon so-called "guided discretion".[167] Guided discretion is characterised by a combination of rules that steer action, and a certain degree of discretion when applying these rules.[168] In practice, the design of a guided discretion mechanism may differ: for instance, exceeding the threshold of an indicator may trigger an act-or-explain principle, or exceeding this threshold may only function as a warning signal.[169] A successful use of available discretion is facilitated by well-defined policy objectives and a clear mandate, since these provide direction to discretionary decisions.[170]

---

[164] Quintyn & Taylor (2003), p. 267; Lavrijssen & Ottow (2012), p. 428; Szydlo (2012), p. 801; Aelen (2014), pp. 235-236; Basel Committee on Banking Supervision (2012), principle 2, essential criterion 1.

[165] After the crisis, the issue of rules vs. discretion started to be discussed for macroprudential policy: see e.g. Committee on the Global Financial System (2010), pp. 6-7; Goodhart (2011), pp. 18-19. This issue has previously been discussed as well for monetary and fiscal policy: see e.g. Barro & Gordon (1983); Wyplosz (2005, 2011).

[166] Cf. Agur & Sharma (2013), pp. 4-10; International Monetary Fund, Financial Stability Board and Bank for International Settlements (2016), pp. 12-13; Crowe et al. (2013), p. 317; Galati & Moessner (2013), p. 853; MacNeil (2015), p. 283. Rules, especially if part of legislation, will always be adjusted too late (Cf. Aelen (2014), p. 159; Ottow (2015), pp. 10-11, 71-72).

[167] Cf. Crowe et al. (2013), p. 317; European Systemic Risk Board (2014a), pp. 172-180.

[168] In this regard, the ESRB recommends macroprudential authorities to use a sound framework for applying their instruments, including 'appropriate indicators to monitor the emergence of systemic risks and to guide decisions on the application, deactivation or calibration of time-varying macro-prudential instruments as well as an appropriate coordination mechanism with relevant authorities at the national level.' (European Systemic Risk Board recommendation 2013/1, Section 1, Recommendation C(1)(b)).

[169] A strict guided discretion mechanism, imposed by the legislator, is somewhat similar to what the CJEU, in the context of the delegation of tasks to EU agencies, denotes as limited discretion, namely: 'clearly defined executive powers the exercise of which can, therefore, be subject to strict review in the light of objective criteria' (Case 9/56 *Meroni* [1958] ECR 11, p. 152), or powers which are 'circumscribed by various conditions and criteria' (Case C-270/12 *United Kingdom v European Parliament and Council* [2014], para. 45). Cf. Case C-301/02 P *Tralli v ECB* [2005] ECR I-4071 and Joined Cases C-154/04 and C-155/04 *The Queen, on the application of Alliance for Natural Health and Others v Secretary of State for Health and National Assembly for Wales* [2005] ECR I-6541. However, in regulatory and supervisory practice often a wider margin of discretion exists.

[170] Cf. Lastra (2013), p. 224.

Fourthly, all this may not benefit the effectiveness of an instrument, if the risk of serving other interests is not monitored. For this, an accountability[171] mechanism must ensure that an independent regulator or supervisor stays within its mandate, complies with its objectives, interacts with political institutions and stakeholders, and avoids traps like capture and over-regulation.[172] Accountability mechanisms come in all shapes and sizes, and can range from a reporting obligation to an override mechanism for approving, annulling or guiding decisions.[173] In order to create a yardstick to hold the regulator or supervisor to account, it is, once again, important that its mandate and the policy objectives of an instrument are well defined.[174] Probably, an accountability mechanism contributes more to an effective use of instruments if it allows attaching consequences to regulatory or supervisory inaction.[175]

1.4.4.2. Analysing restrictions on an actor's discretion in the decision-making process

An analysis of the instrument's legal basis, its objectives in relation to the actor's mandate, the room for action, and the decision-making process of applying, enforcing and amending an instrument will reveal to what extent the aforementioned, interrelated, issues are taken into account. This also shows how other (national and EU) actors are involved in this process, and to what extent this affects the actor's operational independence and accountability. To this end, it is helpful to examine how the actor's discretion is restricted. This unveils whether a guided discretion mechanism is in place, and to what extent an actor's operational independence, if present, is affected by restrictions. The latter is the case if restrictions do not come from the judiciary or legislator, but from the executive, another public authority, or the industry.[176]

---

[171] Accountability can be defined as 'a relationship between an actor and a forum, in which the actor has an obligation to explain and to justify his or her conduct, the forum can pose questions and pass judgment, and the actor may face consequences.' (Bovens (2007), p. 450). The literature on independent regulatory agencies usually focusses on the accountability mechanism between the delegating actor – the legislator or executive – and the holders of the delegated power – the regulator or supervisor (see e.g. Quintyn & Taylor (2003), p. 278; Majone (2005), pp. 147-152).

[172] Quintyn & Taylor (2003), p. 278; Quintyn (2009), p. 273, 278-280. Cf. Aelen (2014), pp. 154-158. Although this is not the topic of this study, a more fundamental reason that accountability is indispensable is that regulators and supervisors perform, with a degree of discretion, complex tasks that affect individual rights and freedoms and potentially are accompanied with large welfare implications (cf. Szydlo (2012), pp. 805-806 and Amtenbrink (1999)).

[173] For more on override mechanisms, see e.g. Amtenbrink (1999), pp. 51-54; Amtenbrink & Lastra (2008), p. 125. For more on accountability mechanisms, see e.g. Bovens (2007), Biela & Papadopoulos (2014), pp. 1-9.

[174] Cf. Amtenbrink & Lastra (2008), p. 118; Quintyn & Taylor (2003), pp. 280-281; Amtenbrink (1999), pp. 40-59; De Haan et al. (1999), pp. 172-173.

[175] Cf. Amtenbrink & Lastra (2008), pp. 123-126; Bovens (2007), pp. 463-464.

[176] Moreover, in judgments about powers given by an EU directive to regulatory authorities in the telecommunication sector, while the directive instructed member states to guarantee the independence of these authorities, the CJEU ruled that national legislation may not encroach on the authority's discretion to

For analysing restrictions on an actor's discretion, a further comprehension of this concept is useful. Szydlo (2012) distinguishes three types of discretionary powers. Firstly, he discerns *administrative discretion in a strict sense*, meaning a degree of freedom in opting for a particular decision amidst all possible decisions.[177] A second form of discretion is the interpretation of clauses that are formulated in a relatively general and imprecise way.[178] This is called *interpretative discretion* in the remainder of this study. A third type of discretion is present if an actor has a margin of appreciation when assessing whether a specific 'factual situation may be subsumed under the given legal notion (…) in order to apply the legal norm that uses such notion.'[179] The term *subsuming discretion* is used as a shortcut for this type of discretion in this study. All three types of discretion can be constrained by the legislator, judiciary, executive, or the actor itself.[180] Restrictions can be imposed at different points in time, namely before, during and after the moment of taking a decision.[181]

All three forms of an actor's discretion can be restricted *ex ante* by adopting detailed rules or guidelines.[182] This may create a guided discretion mechanism. It depends on its design which types of discretion are constrained. For example, threshold-based indicators that are only used as signals solely limit an actor's subsuming discretion to classify a particular situation as risky or problematic. However, if there is a rule demanding action or explanation by the actor if a threshold is exceeded, its administrative discretion in a strict sense is constrained as well. Finally, it depends on the determinacy and completeness of the rules how much interpretative discretion is left for the actor to interpret the rule in a certain manner.[183]

The presence of restrictions *during* the decision-making process mainly affects an actor's administrative discretion in strict sense. This happens if decision-making powers are shared with other actors, if approval of another actor is required, or if decisions are subject to ongoing control in the

exercise the powers given by the EU legislator (Case C-424/07 *Commission v. Germany* [2009], ECR I-11431, ECLI:EU:C:2009:749, para. 54, 61, 74, 78-79, 83; Case C 543/09 *Deutsche Telekom* [2011], ECR I-03441, ECLI:EU:C:2011:279, para. 43). So, apparently, if the EU legislator gives powers to an independent regulator or supervisor, the national legislator is not allowed to restrict the discretion to exercise these powers.

[177] Szydlo (2012), pp. 798-799.

[178] *Ibidem,* p. 799.

[179] *Ibidem.* Szydlo (2012) uses three German concepts to distinguish these types of discretion, namely respectively *Verwaltungsermessen*, *unbestimmte Rechtsbegriffe* and *Beurteilungsspielraum* (p. 798).

[180] For instance, case law and legal principles may confine both the interpretative and subsuming discretion, while a legislator can restrict the administrative discretion in a strict sense and the interpretative discretion by adopting clear and detailed legislation. The actor can constrain its own discretion by adopting policy rules.

[181] Cf. Busuioc (2009), who distinguishes *ex ante,* ongoing and *ex post* control (pp. 604-610).

[182] Cf. Lavrijssen & Ottow (2012), p. 429.

[183] Cf. Pistor & Xu (2002), pp. 946-947.

form of steering, directing or issuing orders.[184] While the operational independence of a regulator or supervisor diminishes if its decision-making powers are shared with another actor, the effectiveness of the rules will not necessarily be impaired. This depends on the mandate and independence of the actor with whom the decision-making powers are shared.[185] Moreover, participation of other actors during the decision-making process may increase the accountability of the (main) decision-maker. For instance, it can be expected that consultation procedures contribute to the accountability of a regulator or supervisor, by increasing transparency about the practice of decision-making and the influence of other actors, in particular of the financial industry, and by inducing providing feedback to responses.[186] Moreover, it requires the actor to explain its decisions, which is a soft form of accountability.[187]

Ex post restrictions on an actor's discretion can be the result of judicial review or the presence of an override mechanism, through which specific decisions can be altered, annulled or suspended by someone else than the judiciary. Whether an override mechanism will increase or decrease the effectiveness of the instruments depends on the framework for intervening. If the mechanism is rule-based, the situations in and conditions under which overriding a decision is allowed, are well defined. If not, the authority with the overriding power has ample discretion to decide on intervention. Rule-based override mechanisms are to be preferred, since they provide clarity, and limit the room for violating the operational independence of a regulator or supervisor for wrong reasons.[188] A rule-based override mechanism can be part of an accountability relationship, as it enables attaching consequences to the (in)action(s) of an actor.[189]

1.5. Legal and economic background of selected countries

1.5.1. The Netherlands

The Netherlands is a civil law country. Primary legislation, *wetten* (acts), is adopted by the bicameral parliament. Acts can authorise the adoption of an *algemene maatregel van bestuur* (AMvB) (general administrative order), which is a delegated form of regulation from the legislator to the government.

[184] Cf. Busuioc (2009), p. 609.
[185] Cf. Gilardi (2002), p. 883; Gilardi (2005b), p. 149.
[186] Cf. Thatcher (2002), pp. 966-967; Masciandaro et al. (2008), p. 846.
[187] It is only a soft form of accountability, since the forum to which the actor gives account cannot attach consequences to the actor's action (*supra,* footnote 171).
[188] Cf. Quintyn & Taylor (2003), p. 282.
[189] *Supra,* footnotes 171-173. Cf. De Haan et al. (1999), pp. 175.

In turn, an AMvB can provide for the adoption of certain aspects of a regulation by means of a ministerial decree, a form of sub-delegation from the government to a minister. While an AMvB is discussed in the Dutch Council of Ministers, and has to be sent to the Council of State for advice, this is not required for a ministerial decree. Although discussion in the parliament is officially not required for both an AMvB and a ministerial decree, they are often sent to the parliament before adoption, to give it the opportunity to discuss it.[190] All in all, a hierarchy exists between an act, a general administrative order, and a ministerial decree. The Netherlands has opted for a twin-peaks model of financial sector supervision, where De Nederlandsche Bank (DNB), the Dutch central bank, is responsible for microprudential and macroprudential supervision, while the Autoriteit Financiële Markten (AFM) (Authority for the Financial Markets) exercises conduct of business supervision.[191] Microprudential and macroprudential supervision have as objectives the soundness of individual financial institutions, partly for protecting their consumers, and the stability of the entire financial system, respectively.[192] Conduct of business supervision is aimed at ensuring appropriate behaviour and transparency of financial institutions, and monitoring behaviour that can be harmful to both customers and to the functioning of markets.[193] In 2012, a Financial Stability Committee has been created to reinforce consultations between DNB, the AFM and the Ministry of Finance on financial stability issues, and to identify systemic risks and make recommendations to deal with them.[194]

In the run-up to the crisis, the Netherlands experienced a large increase in household debt, among other things, due to deductibility of mortgage interest payments and easier available credit.[195] The loan-to-deposit ratio is high in the Netherlands, leading to funding risks.[196] The Netherlands

[190] Van der Pot (2014), pp. 682-690.
[191] Art. 1:24 and 1:25 *Wet op het financieel toezicht* (Wft) (Act on Financial Supervision), available at http://wetten.overheid.nl/BWBR0020368. Macroprudential supervision is officially a primary task of DNB since 1 January 2014 (art. 1:24(1) Wft and art. 3(2) and 4(1)(c) *Bankwet 1998*. Cf. Wissing & Dieben (2014), p. 90. The *Bankwet 1998* is available at http://wetten.overheid.nl/BWBR0009508. The *Wijzigingswet financiële markten 2014* official introduced macroprudential policy as a primary task of the DNB: see *Wijzigingswet financiële markten 2014*, *Staatsblad,* 2013, 487. It is available at https://zoek.officielebekendmakingen.nl/stb-2013-487.html (last visited 28 July 2016). The AFM shall take the interest of the stability of the financial system into account when performing conduct of business supervision (Art. 1:25(1) Wft). Cf. Wissing & Dieben (2014), p. 90).
[192] Ayuso & Blanco (2013), p. 437; Galati & Moessner (2013), p. 848. Although the perspective and purpose of macro- and microprudential regulation and supervision differs, their instruments are to a considerable extent comparable: many of them are employed at the level of individual financial institutions and are related to capital and liquidity ratios (Osinki et al. (2013), pp. 8-9).
[193] De Haan et al. (2009), pp. 304-317; Dragimor (2010), pp. 53-55.
[194] See further Box 4.1 in sub-section 4.1.3.2.
[195] European Commission (2013), pp. 15-16.
[196] European Commission (2013), p. 38; European Commission (2014h), p.46; De Nederlandsche Bank (2014b), pp. 17-18.

experienced a considerable housing boom and bust. Yet, while many houses were underwater, the percentage of non-performing loans is low, clearly below EU-average.[197] Deleveraging resulted in a drag on consumption, and thus GDP growth.[198] The Netherlands did not experience negative real interest rates in the years before the crisis.[199] In 2016, house prices have risen considerably, but around 30% of the houses were still underwater.[200]

1.5.2. Ireland

Ireland is a common-law country with a constitution and statutory law.[201] Primary legislation – called Acts – is adopted by the bicameral parliament, the Oireachtas. Secondary legislation is formed by Statutory Instruments (S.I.).[202] Explicit conferral of law-making powers in an Act is required for a S.I. to be legal.[203] An individual provision in an Act is named a "section" and an individual provision in a S.I. a "regulation". Ireland has opted for an integrated model of financial sector supervision, in which the Central Bank of Ireland (CBI) is responsible for microprudential and macroprudential supervision of all regulated entities, as well as for consumer protection in the area of financial services.[204]

Ireland experienced a pronounced housing boom and bust, which resulted in high levels of arrears, widespread negative equity, and a sharp decline of GDP.[205] The housing boom and the increase of household debt has been driven by rapid credit expansion through the banking sector and tax incentives for housing investment, like deductibility of mortgage interest payments.[206] According to Regling and Watson (2010), the rapid credit expansion was a result of the adoption of the euro, which led to falling interest rates (real interest rates were even negative for several years) and abundant

---

[197] De Nederlandsche Bank (2014b), p. 44; Whitehead et al. (2014), pp. 16-23.
[198] International Monetary Fund (2014c), pp. 4-9.
[199] See graph 1.3.
[200] European Commission (2016a), pp. 25-26.
[201] See e.g. http://www.ucc.ie/law/irishlaw/guide/ (last visited 30 July 2016)
[202] Five types of Statutory Instruments exist: orders, regulations, rules, bye-laws and schemes.
[203] Often different Acts and Statutory Instruments on the same issue coexist without being integrated: this hinders understanding the complete legal framework.
[204] Section 6A Central Bank Act 1942 lists the objectives of the CBI, which include 'the stability of the financial system overall' and 'the proper and effective regulation of financial service providers and markets, while ensuring that the best interests of consumers of financial services are protected'. A financial services provider is a person carrying on a business of providing one or more financial services or products (section F14 and F5 Central Bank Act 1942). A consolidated version of the Central Bank Act 1942 is available at http://revisedacts.lawreform.ie/eli/1942/act/22/front/revised/en/html (last visited 29 April 2017). The CBI received its responsibility to protect consumers with the Central Bank Reform Act 2010, available at: http://www.irishstatutebook.ie/2010/en/act/pub/0023/ (last visited 17 April 2015).
[205] See e.g. Norris & Coates (2014). Cf. Priemus & Whitehead (2014), table 1; Whitehead et al. (2014), pp. 16-23.
[206] European Commission (2011a), p. 6.

availability of cross-border bank funding without foreign exchange exposure.[207] This contributed to the credit boom, rising household debt and the property bubble. This was reinforced by lower lending standards due to competitive pressure.[208] Loan-to-deposits ratios in Ireland strongly increased since the beginning of the 2000s.[209] Arrears on mortgage loans have rapidly grown in the crisis years, reaching levels above 15% since 2012.[210] In recent years, house prices started to grow strongly, but households remain vulnerable due to high debt levels.[211]

1.5.3. Germany

Germany is a civil law country as well. At the federal level, *Gesetze* (acts) are adopted by the *Bundestag* and *Bundesrat,* consisting of directly elected parliamentarians and representatives of the *Länder* (federal states), respectively. Secondary legislation is formed by *Verordnungen* (regulations), which require explicit delegation in an act. The *Bundesanstalt für Finanzdienstleistungsaufsicht* (BaFin) (Federal Financial Supervisory Authority) is the main German prudential supervisor, with decision-making powers, but the *Bundesbank,* the German central bank, received certain tasks as well, including ongoing supervision of banks and the responsibility for monitoring financial stability and identifying systemic risks.[212] BaFin has no mandate to protect individual consumers.[213] In 2012, a Financial Stability Committee has been created to strengthen cooperation between the Ministry of Finance, the Bundesbank and BaFin, and to issue warnings and recommendations on financial stability risks.[214]

Germany had its housing boom in the 1990s after the reunification, and has since engaged in a more restrictive policy regarding mortgage lending, including tax reforms in 2005 eliminating tax incentives

[207] Regling & Watson (2010), pp. 24, 28-29. This is confirmed by Whelan (2014, pp. 427, 430) and the role of international funding possibilities also by Addison-Smyth et al. (2009, p. 389); Everett (2015, p. 362).
[208] Norris & Coates (2014), pp. 304-305. Cf. Honohan (2010), para. 6.9 and 6.39.
[209] Lowering these LTD ratios was part of the Irish Economic Adjustment Programme (European Commission (2011a), pp. 10, 24).
[210] European Commission (2012b), p 9; European Commission (2012d), p. 11-12; European Commission (2014f), p. 35.
[211] See e.g. International Monetary Fund (2016d), pp. 9, 11, 22.
[212] §§ 6-7 of the *Gesetz über das Kreditwesen* (KWG) (Banking Act), BGBl. I, 1998, 2776, available at http://www.gesetze-im-internet.de/kredwg/; § 1 *Finanzstabilitätsgesetz* (FinStabG) (Financial Stability Act), BGBl. I, 2012, 2369, available at http://www.gesetze-im-internet.de/finstabg/. English translations of these acts are available at respectively https://www.bafin.de/SharedDocs/Downloads/EN/Aufsichtsrecht/dl_kwg_en.html and https://www.bundesbank.de/Redaktion/EN/Downloads/Bundesbank/Organisation/act_monitoring_financial_stability.pdf (all last visited 3 September 2016).
[213] Cf. sub-section 5.3.4.
[214] See further Box 3.2 in sub-section 3.3.1.

for acquiring owner-occupied houses.[215] Moreover, Kofner (2014) explains that the German lending culture is conservative, with high creditworthiness standards, many fixed-rate mortgages, and few innovative products, such as interest-only mortgages.[216] Thus, Germany did not experience a housing boom during the last decade.[217] Nevertheless, in 2016 the IMF concluded that house price growth in some regions deserve monitoring, even though credit growth is still moderate.[218]

1.6. Scientific and societal relevance

This study examines a topic that is located at the intersection of various disciplines and sub-disciplines. This multi-dimensional perspective helps to further the scientific knowledge, but comes at the risk of losing depth in the analysis. Still, this study contributes in many ways to existing knowledge, also in specific sub-disciplines. It starts with, but goes beyond, offering a comprehensive review of the range of approaches, across various fields of research, which identify and examine the factors behind rising household debt levels.

Methodologically, this study builds an analytical framework based upon combined insights from various disciplines and sub-disciplines – law, economics, and the literature on regulation and supervision. The literature on enforcement is enriched by a comparison of enforcement possibilities in several member states, and conditions under which powers can be exercised. Moreover, this research adds to the literature on regulatory and supervisory independence by examining it in the context of macroprudential policy, and analysing the actual operational independence of supervisors. By analysing the role of guided discretion mechanisms in this regard, it explores new avenues to achieve and combine independence and accountability.

What is more, this research adds to various specific literatures. It contributes to the literature on EU law by mapping the influence of the Union on the sensitive topic of household finance across sub-fields, such as financial regulation and supervision and consumer protection. This reveals the implication of EU action. It analyses the principles of conferral, subsidiarity, proportionality with respect to the examined instruments, in particular macroprudential instruments. This study highlights were EU action is necessary to ensure the effectiveness of these instruments. Specifically regarding

[215] European Commission (2014b), pp. 38-39, 45-46, 52; Kofner (2014), pp. 262-263.
[216] Kofner (2014), pp. 270-272. Cf. Hamm (2008), pp. 47-48. But see Immobilien Zeitung (2015), which indicates that some lenders are adopting less conservative practices.
[217] Kofner (2014), pp. 255-256; Whitehead et al. (2014), p. 21.
[218] International Monetary Fund (2016c), p.17.

the system of economic governance in the EU, the influence of several new procedures, the macroeconomic imbalance procedure and the enhanced surveillance procedure, on household finance is analysed. This shows the interplay between these instruments, and the effects of the various reforms in practice.

This study contributes particularly to the analysis of financial regulation and supervision in the EU. It examines the functioning of new EU (macroprudential) instruments within the banking union, and investigates the procedural aspects of decision-making by supervisory authorities within the SSM. This ends in uncovering the need for improvements to the institutional structure and macroprudential decision-making within the banking union. Moreover, this study adds to the growing literature on macroprudential policy in general by examining the conditions under which it can be effective. This is mainly done from a legal perspective, while most research on macroprudential policy still does not offer an in-depth analysis of the legal framework underlying macroprudential instruments, especially borrower-based caps.

This study also contributes to the literature on consumer protection in the European Union, by comparing the Consumer Credit Directive and the Mortgage Credit Directive, and analysing them in light of the literature on creditworthiness assessment, which has not been done yet. In addition, it compares their implementation in various member states. The comparison of aspects of consumer law in the area of financial services in several countries helps to detect where improvement is crucial.

By analysing and comparing national legislation in the fields of financial regulation and supervision and consumer protection, this study helps to identify areas for improvement, and contributes to the Dutch, Irish and German legal strands of literature on these issues. It also updates these strands of literature by discussing the recent regulatory changes, coming from either EU legislation or national reforms.

Undoubtedly, this study also has significant societal relevance. It contributes to the understanding of the problem of household indebtedness, and analyses how it is possible to improve EU, Dutch, Irish and German instruments that seek to address the problem of household indebtedness and try to prevent future crisis due to excessive credit growth. Furthermore, it contributes to topical policy discussions on designing the institutional structure of (macroprudential) regulation and supervision (of household debt), from an independent perspective, firmly based upon previous scientific literature.

1.7. Overview of the study

Chapter 2 starts with a literature review examining which factors affect household debt levels, in order to find out what needs to be targeted by the instruments that seek to limit household indebtedness. After having given an overview of these factors, it continues with reviewing the existing – mainly empirical and economic – literature on the effectiveness of these instruments. This chapter answers the first part of sub-question (a), as well as, to some extent, the second part, albeit without going into the details of the transmission mechanisms.

Chapters 3-6 each examine a subset of instruments, and answer the second part of sub question (a), sub-question (b), as well as the first part of sub-question (c). Chapter 3 discusses the preconditions for effectiveness of the selected capital-based instruments, i.e. risk-weighted capital requirements, the countercyclical capital buffer, and, briefly, the leverage ratio. Thus, the EU system of financial regulation and supervision is scrutinised. It also examines the use of LTV ratios in covered bonds regulation. Chapter 4 turns to the preconditions for effectiveness of borrower-based caps – LTV, DSTI, LTI and DTI limits – in the Netherlands, Ireland and Germany, which are part of national law. Thereafter, chapter 5 analyses the potential effectiveness of the rules on mandatory creditworthiness assessment of consumers, which have mainly been transposed from EU directives. Chapter 6 looks at the systems of mortgage interest deductibility and relief in the Netherlands and Ireland, respectively. It examines and how they affect household debt levels.

Finally, chapter 7 examines the interaction between the various instruments, draws overarching conclusions regarding the preconditions for effectiveness, and provides some recommendations to improve the instruments. This answers sub-question (d), as well as the remainder of sub-question (c), and the main research question, insofar not already answered for individual instruments in the previous chapters. It discusses as well conflicts between creating effective instruments and ensuring the unity of the internal market.[219] More than other chapters, it analyses the principles of subsidiarity and proportionality with respect to the examined instruments, and indicates were EU action is necessary to ensure their effectiveness.

[219] *Supra,* footnote 73.

2. The determinants of household debt and the instruments to influence them

People take on debt for various reasons. It is crucial to know why households borrow, and how debt affects the economy and households' behaviour. Therefore, this chapter starts with examining literature that tries to explain why people take on debt, and why household debt levels have increased during the past decades. This literature review results in an overview and classifications of the determinants of household debt. In section 2.3, this is followed by a discussion of the available instruments for addressing these determinants, which partly answers the first and second sub-questions, as stated in sub-section 1.2.3. This results in a selection of the instruments to be examined in this research.

2.1. Identifying household debt determinants: a literature review

The literature review starts with studying theories and research with a macroeconomic perspective. This includes relevant literature about the role of household debt in the financial system. Subsequently, the findings based on theories explaining household debt from the perspective of individual consumers or households will be discussed.

2.1.1. A macroeconomic perspective

The first chapter put forward several macroeconomic explanations for rising household debt levels, including macroeconomic stability, diminished inflation, and falling unemployment. These factors reduce costs and risks for both borrowers and lenders, and lead to an easing of credit constraints.[220] Yet, from a macroeconomic perspective, there is more to say about rising household debt levels.

[220] Kent et al. (2007), pp. 128, 131-138; Cecchetti et al. (2011), p. 8.

2.1.1.1. Household debt in macroeconomic models and theories

Household debt in mainstream macroeconomic models and theories

Economists often use models – stylised, mostly mathematical, representations of reality – to understand economic processes and behaviour. Surprisingly, until recently most mainstream macroeconomic models did not explicitly take credit market and thus household debt into account.[221] The theories behind these mainstream models considered the functioning of the credit market as irrelevant for understanding the working of the economy. This can be traced back to the concept of monetary neutrality. Traditionally, neoclassical economists argue that money is neutral, at least in the long run, meaning that changes in the stock of money – e.g. doubling the amount of money in circulation – affect nominal variables proportionality, and thus do not affect real variables. Money is a veil in this view. This idea sounds logical: money is – among other things – a unit of account, and changes in the unit of account do not need lead to changes in the real variables. If money only is a veil, modelling the credit market is irrelevant. This "irrelevance view" has been the dominant perspective on the role of money and credit markets in the economy during the past decades.[222]

The concept of monetary neutrality is, however, contested: several schools of thought disagree with it. Keynes has argued that money cannot be regarded as neutral, since nominal variables – in particular wages – are rigid. Consequently, changes in the money stock affect real prices and wages. In addition, the monetarist school, based on the work of Friedman and Schwartz (1963), regards changes in the money supply as highly relevant for explaining growth and short-run fluctuations.[223] Another school of thought, disagreeing with the neutrality of money and credit markets, adheres to the "credit view".[224] In this view, the availability and costs of bank credit, as well as the composition of banks' balance sheets and their leverage, are important for explaining macroeconomic performance, among other things, due the assumption of imperfect information.[225] Consequently, banks and other intermediaries are crucial for gathering and transmitting information in the credit market, and cannot be considered as irrelevant.[226] Nonetheless, although not all economists uphold the (absolute) neutrality of money,

---

[221] E.g. Stiglitz (2011), p. 626; Eggertson & Krugman (2012), pp. 1470-1471; Bezemer (2010), p. 678. Cf. Goodhart & Hofmann (2008), p. 180. This view relates to the ideas of *inter alia* Modigliani and Miller (1958).
[222] Schularick & Taylor (2012), p. 1030.
[223] *Ibidem.*
[224] *Ibidem.*
[225] See e.g. Bernanke (1993), Anari et al. (2002), p. 267; Schularick & Taylor (2012), p. 1030. This is different from the model of Modigliani and Miller (1958), which assumes perfect information.
[226] Bernanke (1993), pp. 51-53. In the "credit view" the banking sector has also a special role in the transmission of monetary policy, since bank credit is considered an imperfect substitute for other forms of credit (for an explanation, see Bernanke (1993), pp. 55-59).

the mainstream models describing the working of the entire economy – the general equilibrium models – did not explicitly model credit markets and household debt.[227]

After the outbreak of the financial crisis, economic models that ignore the credit market, were criticised again by various economists, mostly those associated with New Keynesian economics. Eggertsson and Krugman (2012) consider it somewhat surprising that most mainstream models completely abstract from debt, given its prominent place in the discussion of the crisis, and the long tradition of regarding debt as an important factor in explaining economic contractions.[228] Stiglitz (2011) is critical about the standard models, *inter alia* because they do not take into account excess indebtedness, debt deleveraging and restructuring, and their distributional aspects, since representative agents[229] are assumed and financial markets are not modelled.[230] One of his many other points of critique is that these models do not incorporate institutional characteristics, while institutional details are often of first-order importance to understand the functioning of the economy.[231]

In recent years, models that include credit markets have been developed.[232] The features of these models are, among other things, heterogeneous agents,[233] financial frictions,[234] non-linearities,[235] endogenous determined boom-bust cycles,[236] or the assumption that banks create money instead of

[227] *Supra*, footnote 221.
[228] Eggertsson & Krugman (2012), pp. 1470-1471.
[229] This means that individuals are considered identical and can be aggregated in the analysis.
[230] Stiglitz (2011), pp. 598, 626-628.
[231] Stiglitz (2011), p. 604. Also Kohn, then the Vice-Chairman of the Federal Reserve, regarded the macroeconomic models as inadequate, among other things, because they abstract from institutional arrangements (cited in Muellbauer (2010), p. 1). Interestingly, Bezemer states that economists who saw the global financial crisis coming, share *inter alia* an attention to debt and a critical attitude towards mainstream economic models. More specifically, shared elements in their thinking are a rejection of mainstream tenets such as neglecting assets and debt (Bezemer, 2010, p. 678), rational individual optimisation, efficient financial markets, or the irrelevance of financing methods as stated by the Modigliani-Miller theorem (Bezemer, 2011, p. 7). Furthermore, they all examine the evolution of financial institutions and their influence on society over time, while considering attention to organisational and historical detail (Bezemer, 2011, p. 7).
[232] Cf. Borio (2014) on the key features that models need to include: (1) a 'move away from model-consistent (''rational'') expectations', (2) 'attitudes towards risk that vary with the state of the economy, wealth and balance sheets', and (3) 'capture more deeply the monetary nature of our economies.' (p. 188).
[233] See e.g. Eggertson & Krugman (2012); Pintus & Wen (2013); Boissay et al. (2016).
[234] See e.g. In't Veld et al. (2011); Bekiros & Paccagnini (2015); Clerc et al. (2015); Boissay et al. (2016).
[235] Non-linearities can account for sudden events or shocks. See e.g. Bekiros & Paccagnini (2015); Boissay et al. (2016).
[236] See e.g. Pintus & Wen (2013); Boissay et al. (2016). Cf. Hillebrand & Kukuchi (2015), who developed an overlapping generations model to this effect.

being an intermediary.[237] Some economists developed other models than the prevailing dynamic stochastic general equilibrium (DSGE) models, in order to better capture certain phenomena.[238]

Household debt in non-mainstream economics

Among the contemporary economists focussing on issues around household debt are Keen, Bezemer, Mian, and Sufi. They base themselves on the work of Schumpeter (1939), Minsky (1978, 1980, 1982), and Kindleberger (1978).[239] Mian and Sufi (2015) explain the crucial role of debt in booms and busts. Several factors cause expanding credit supply. Households were willing to borrow too much due to their 'irrational behavioural tendencies.'[240] Lenders were willing to supply credit to borrowers with a low creditworthiness, because securitisation enabled them to pass on risks. In turn, investors were willing to buy securities, because they were supposed to be safe, due to the involved tranching.[241] So, securitisation led to an expansion of mortgage credit. The increased credit supply led to rising house prices in areas with inelastic housing supply.[242] This enabled more borrowing, since rising house prices increase housing wealth and reduce borrowing constraints, due to the possibility of home equity withdrawal (using mortgage credit for consumption).[243] Mian and Sufi (2015) expound that debt magnifies this process, because it feeds a bubble by enlarging the buying power of the people who are over-optimistic about the value of houses.[244] Due to their increased demand, house prices will rise.

This theory, including the key role for over-optimism in explaining rising debt levels, shows large similarities with the work of Minsky on financial instability.[245] In his theory, rising expectations about future investment success and decreasing risk aversion push up asset (e.g. real estate) prices, which

[237] See e.g. Jakab & Kumhof (2015).
[238] See e.g. Caiani et al. (2016), who acknowledge improvements in DSGE models, but remain critical of these models (mentioning the fallacy of composition and the assumption of external shocks (p. 376)), and therefore developed an Agent Based and Stock Flow Consistent model. See also De Grauwe & Macchiarrelli (2015), who developed a New Keynesian Model with banks, and actors without rational expectations (their beliefs are biased, but they want to learn from their mistakes), in order to capture so-called animal spirits.
[239] Keen (2009b), pp. 348-352; Bezemer (2010), p. 680; Mian & Sufi (2015), pp. 106-108.
[240] Mian & Sufi (2015), p. 90. For more on such irrational behavourial tendencies, see sub-section 2.1.2.2. Cf. Nofsinger (2012), who explains boom-bust cycles with household behaviour and their psychological biases.
[241] Mian & Sufi (2015), chapter 7. Securitisation involves packing up to several thousand mortgage loans together in a mortgage-backed security (MBS) to disperse risks. A MBS often exists of several tranches, varying in seniority of their claims on the cash-flow from the pool of mortgage loans. MBS are sold and, in principle, removed from the originator's balance sheet, although the risks, in practice, do not completely disappear for the originator, since it often holds some MBS, or provides guarantees (cf. sub-section 3.1.3).
[242] Mian & Sufi (2015), pp. 80-85.
[243] *Ibidem,* pp. 86-90. Cf. sub-section 2.1.1.2.
[244] Mian & Sufi (2015), pp. 106-108. This is in line with the findings of Kindleberger, who discovered that asset bubbles, including real estate bubbles, depend on and are often preceded by credit growth.
[245] Minsky (1978, 1980, 1982). Minsky's theory is summarised in Keen (2009b), pp. 351-352; Roubini & Mihm (2010), pp. 51-52. Cf. Bhattacharya et al. (2015), p. 932.

stimulates borrowers to take on more debt, for some even beyond their repayment capacities, because they rely on rising asset prices for repayment. In this way, a boom is created. However, eventually some borrowers are forced by their debt-service costs to sell some assets, which preludes the bust.

For these kinds of reasons, Bezemer and Keen warn against increasing debt-financed investment in existing unproductive assets (including houses).[246] This only inflates asset prices, in contrast to credit provided to entrepreneurs in the real economy in order to enable investment, which increases productivity.[247] Bezemer (2010) concludes that a trade-off exists between credit that flows to the productive sector, and credit that flows to the financial and real estate sector.[248] An increase in unproductive credit might hurt economic growth.[249]

Several scholars have tried to empirically investigate the theories of Minsky and Kindleberger that financial instability and crises are caused by credit booms. A range of studies found that credit booms, measured by credit growth, are indeed good predictors of a financial crises.[250] Several studies report findings that are more specific. Roy and Kemme (2012) discovered that increasing private sector debt, together with housing and stock bubbles, in a period of financial liberalisation, best predicts banking crises.[251] Bezemer and Zhang (2014) show that credit booms in which the share of mortgage credit in total credit increases, and in which there are surges in capital inflows, increase the probability of a

---

[246] Drawing on the work of Schumpeter, they distinguish between productive and unproductive debt (Bezemer (2010), p. 680; Bezemer (2009), p. 97; Keen (2009b), p. 352; Bezemer (2014)).
[247] See Bezemer (2009), p. 97; Keen (2011), p. 156. The following example clarifies their argument: 'Speculation, rather than investment, was overwhelming the focus of post-1990 lending [in Australia]. The primary role of mortgage debt was to purchase existing dwellings rather than to finance the construction of new ones: in 1985, less than 25 per cent of new mortgage finance was for new dwellings; by 2000, this had fallen below 10 per cent. Therefore, 85 per cent of the additional $985 billion of mortgage debt accumulated since 1986 predominantly has inflated house prices, rather than built new homes.' (Keen, 2009b, pp. 349-350).
[248] Bezemer (2010), p. 683.
[249] Bezemer (2014), pp. 936, 939-941.
[250] Borio & Drehmann (2009) found that an indicator based upon the credit-to-GDP gap, combined with either the property price gap or the equity price gap is useful for predicting crises (pp. 40-41). Jordà et al. (2011), using a dataset covering 140 years and 14 countries, suggest that credit growth – i.e. growth of banks loans – is a better variable than money growth to explain financial crises (pp. 354-355). Schularick & Taylor (2012), using the same dataset, found that growth of bank loans is a very good predictor of a heightened risk of financial crises (pp. 1045, 1057). Also Dell'Ariccia et al. (2016), using a dataset covering 175 countries over 50 years, found that credit booms are often followed by financial crises (pp. 309-313). Babecký et al. (2014) find that private credit growth is the most robust early warning indicator of a banking crisis (pp. 3, 10-13). For an overview of more studies confirming that excess credit growth is powerful in predicting financial crises, see Giese et al. (2014), pp. 26-27. Note that Giese et al. (2014) also discuss some empirical difficulties of this indicator. Other researchers experienced mixed results when using measures of credit growth to predict financial crises (Kauko (2014), pp. 295-296).
[251] Roy & Kemme (2012), p. 292.

bust.[252] The relevance of mortgage credit is underlined by the findings of Jordà et al. (2016), who show that, for a sample of 17 advanced economies, credit growth since the 1970s is almost entirely a result of increased mortgage lending, especially to households, which become much more leveraged.[253] Davis et al. (2016) demonstrate that the effect of private debt growth on the probability of a crisis is much larger when combined with a current account deficit – so, when financing comes from foreign lenders.[254] Lainà et al. (2015) discovered that not only indicators of household loan growth, but also of house price growth and of loan-to-deposit ratio growth are successful predictors of banking crises. Jordà et al. (2011) also found that several global crises, including the 2007/2008 crisis, were preceded by periods in which interest rates were unusually low relative to real growth rate in the economy.[255]

Dell'Ariccia et al. (2016) identify triggers of credit booms, which usually are financial liberalisation, capital inflows and buoyant economic growth.[256] Others explain lending booms as a result of herding in loan decisions, whether in combination with competition or not, or reduced incentives for banks to screen borrowers when interest rates are low.[257]

2.1.1.2. Housing, taxation and household debt

The previous sub-section showed the relevance of housing for understanding household debt developments. Goodhart and Hofmann (2008) explain how house prices can affect credit demand (and thus debt) of homeowners in various ways. Firstly, a wealth effect of housing on credit exists: 'a permanent increase in housing wealth leads to an increase in household spending and borrowing'.[258] Secondly, there is a collateral effect of rising house prices, as houses are commonly used as collateral for loans, thereby enabling increased borrowing.[259] Thirdly, credit demand grows, because higher housing prices stimulate investment in housing, since the value of the houses compared to the

[252] Bezemer & Zhang (2014), pp. 27, 30. Cf. Jordà et al. (2016), pp. 125-127, 139-140.
[253] Jordà et al. (2016), pp. 115-120.
[254] Davis et al. (2016), p. 376. Cf. Borio et al. (2011), who observe that in many countries which experienced a crisis, cross-border credit grew rapidly, or at least stronger than overall credit (pp. 47-54).
[255] Jordà et al. (2011), pp. 352-353.
[256] Dell'Ariccia et al. (2016), pp. 313-317. Cf. Borio (2014), pp. 185-186.
[257] De Bandt et al. (2010), pp. 652-653, and references there. See e.g. Gorton & He (2008) for a model where lending standards depend on strategic interaction between competing banks, and an empirical test of this model.
[258] Goodhart & Hofmann (2008), p. 181. This follows from the life-cycle model of household consumption, which will be discussed below.
[259] So, higher house prices not only stimulate homeowners to spend and borrow more – which is the wealth effect – but also enable them to do so, by strengthening their borrowing capacity.

construction costs increases.[260] Effects for starters on the housing market are, however, different. On the one hand, higher house prices diminish demand of housing and thus mortgage loans. On the other hand, if house prices are higher, starters need more money, which increases credit demand. In addition, under 'adaptive expectations, households may interpret current house price increases as indicating an upward trend, creating incentives to buy the dwelling to benefit from future capital gains.'[261] These combined effects may contribute to a boom; housing booms are closely related to credit booms, because credit has a significant share in explaining housing booms.[262] Generally, factors as low interest rates, abundant liquidity, deregulation and (tax) policies that stimulate homeownership have been identified as determinants of housing booms, as well as over-optimistic expectations about rising house prices.[263]

Various tax policies affect demand for and prices of houses, and may contribute to higher household debt levels. While especially mortgage interest deductibility is considered a culprit,[264] also other tax policies support housing and stimulate to take on mortgage debt, most importantly those regarding imputed rents, housing transactions, capital gains and consumption (VAT). In most EU countries, imputed rents are not taxed in case of owner-occupied housing.[265] This means that homeowners 'pay their rent out of pre-tax income, while tenants pay their rent out of after-tax income. This tax advantage can be, however, mitigated or offset by the imposition of property taxes on homeowners.'[266] Property taxes are levied in most EU countries.[267] In most, but not all, member states primary dwellings are exempted from the capital gains tax, while in almost all member states a transfer tax is levied, although the amount varies substantially.[268] Finally, in most member states reduced or

[260] Goodhart & Hofmann (2008), p. 181. Cf. Basten & Koch (2015), who found empirical evidence for higher credit demand due to higher house prices.
[261] Wolswijk (2006), p. 137.
[262] On the relationship between housing and credit cycles, see e.g. Igan et al. (2011) and Mian & Sufi (2015), as discussed in the previous sub-section. Goodhart & Hofmann (2008) and Favara & Imbs (2015) also explain how exogenous changes in credit supply affect house prices.
[263] See e.g. Agnello & Schuknecht (2011). Cf. sub-section 1.1. However, contrary to most studies, Glaeser et al. (2010), conclude from their research with US data, covering 30 years, that the effects of relaxed credit constraints and low interest rates on the recent housing boom in the United States are much smaller than often claimed (pp. 2-3, 38). According to them, higher approval rates and higher LTV ratios cannot explain the boom in the US either (pp. 5-7, 39). Case & Shiller (2003) and Shiller (2005, 2007) put forward the influence of over-optimistic expectations on house prices. Their views are supported by, among others, Glaeser et al. (2010), p. 39; Dokko et al. (2011), p. 271. Cf. Mian & Sufi (2015).
[264] Debelle (2004), p. 3, Cecchetti et al (2011), p. 7-8; Sutherland & Hoeller (2012), p. 11. Cf. Keen et al. (2010), p. 63.
[265] European Central Bank (2009), p. 34; Wolswijk (2010), pp. 161-162. Cf. Keen et al. (2010), pp. 58-59.
[266] André (2010), p. 32.
[267] European Central Bank (2009), p. 34; Wolswijk (2010), p. 162.
[268] Table 6.1. Cf. European Central Bank (2009), pp. 34-35; André (2010), p. 32; Wolswijk (2010), p. 162. Cf. Keen et al. (2010), p. 59

zero VAT rates apply to the supply, construction, and renovation of houses, even though buying a house is partly consumption, and therefore would, in a neutral fiscal system, be 'subject to the same VAT rate as buying another durable good such as a car.'[269] These tax policies, and other domestic factors, can produce substantial differences between member states in terms of the effective (average) tax rate on housing and home ownership.[270]

2.1.1.3. Financial regulation and household debt

Many scholars point out that the same factors that cause credit booms explain the high levels of household debt. This is convincing, because bank lending (credit) to households, and household debt more or less mirror each other. Consequently, lower real interest rates and deregulation of the financial sector – which happened since the 1980s – are counted among the important causes of higher debt levels.[271] Cecchetti et al. (2011) describe that 'restrictions on financial market activity and lending had been progressively and systematically removed'.[272] Deregulation is a necessary, although not sufficient, condition for creating competitive pressure among banks.[273] This pressure contributed to the easing of credit constraints and development of innovative financial products, reinforcing the effects of deregulation.[274] Moreover, deregulation led to a removal of many restrictions for lending to households, and created room for rising leverage of banks' balance sheets.[275] This is particularly true for mortgage lending, which was tightly controlled.[276] Yet, in the past decades, many countries relaxed, among others, controls and ceilings for interest rates, as well as restrictions on amortisation schemes, and on the amount and allocation of lending. This resulted in reduced borrowing constraints for households.[277] In various member states, the loosened restrictions led to an extension of loan maturities, the creation of interest-only loans and loans with flexible repayment schedules, higher

[269] Wolswijk (2010), p. 163.
[270] Kent et al. (2007), p. 131. The effective (average) tax rate on housing is 'the ratio of the [present value] of total taxes over an expected holding period to the sum of the [present value] of imputed rent and capital gains.' (Keen et al. (2010), p. 61).
[271] Cecchetti et al. (2011), pp. 7-8; Sutherland & Hoeller (2012), p. 10; Kent et al. (2007), p. 127; Girouard et al. (2006), p. 8; OECD (2006), p. 137; Debelle (2004), pp. 6, 15-17; Wolswijk (2006), pp. 142, 144; Georgopoulos et al. (2011); Buiter & Rahbari (2012), pp. 8-9.
[272] Cecchetti et al. (2011), p. 8
[273] Cf. Wolswijk (2006), p. 137. Note that Cubillas & González (2014) found empirical support indicating that financial liberalisation increases risk-taking by banks by promoting stronger competition among banks.
[274] Kent et al. (2007), p. 127.
[275] Crowe et al. (2013), pp. 300-305; Cecchetti et al. (2011), pp. 7-8. Cf. Debelle (2004), pp. 4, 16; Buiter & Rahbari (2012), p. 9; sub-section 1.1.2.
[276] Debelle (2004), p. 15.
[277] Debelle (2004), pp. 15-17; André (2010), p. 21; Agnello & Schuknecht (2011), p. 185. Cf. Wolswijk (2006), p. 137; Buiter & Rahbari (2012), p. 9.

loan-to-value ratios, and a larger share of loans with variable interest rates, as well as the development of securitisation and home equity withdrawal.[278]

These loan characteristics affect the amount of debt that a household can take on. Variable interest rates enable banks to shift credit risk to the borrower and thus to lend more.[279] Interest-only loans reduce net debt-service costs if borrowers benefit from mortgage interest deductibility, but create vulnerability to interest rate developments.[280] Flexible repayment schedules, longer loan maturities, higher LTV ratios and the possibility of home equity withdrawal enable or stimulate higher household debt levels.[281] Securitisation seemingly allows banks to remove risks from their balance sheets and avoid higher capital requirements, and thus to originate more and riskier loans.[282] Due to securitisation, credit rationing diminished and risks were discounted to a smaller extent in interest rates charged.[283] Studies have found that longer loan maturities played a role in the Spanish housing boom, whereas increasing securitisation was a factor in the Irish boom.[284] However, others argue that securitisation and the proliferation of new mortgage products must not be regarded as causes of the lending boom, because they predate it.[285]

Partly as a reaction to the trend of deregulation, the Basel Committee on Banking Supervision, an international standard-setting body in which regulatory and supervisory authorities of 28 large financial economies are represented,[286] adopted the first Basel Accord in 1988, leading to the first global standards on financial regulation and supervision.[287] Although the Basel standards are not legally binding, they have been transposed into binding legislation in many jurisdictions, including the EU.[288] The Basel standards prescribe how much capital banks minimally have to hold relative to outstanding loans and other assets. The higher the risk-weight of an asset is, the more capital banks are required

[278] European Central Bank (2009), pp. 25-36; André (2010), pp. 20-21.
[279] European Central Bank (2009), p. 28. Note that the variation in adjustable interest rates is capped in some countries (p. 27).
[280] André (2010), p. 20; Scanlon et al. (2008), p. 114.
[281] Cf. Igan & Kang (2011), who found that limiting LTV and DTI ratios in Korea contributed to lower house price appreciations and less housing transactions.
[282] Schwartz & Seabrooke (2008), p. 249; Starr (2010), p. 464; Nield (2010), pp. 623-624; Allen (2004), p. 79. Cf. Bertola & Hochguertel (2007), p. 118.
[283] Schwartz & Seabrooke (2008), p. 253; Starr (2010), p. 464; Debelle (2004), p. 1; Carbo-Valverde et al. (2015). Cf. Mian & Sufi (2015), pp. 101-103.
[284] Dokko et al. (2011), p. 271.
[285] Gerardi et al. (2010), p. 334.
[286] For the members of the BCBS: http://www.bis.org/bcbs/membership.htm (last visited 31 December 2016).
[287] Hellwig (2010), p. 5.
[288] Allen et al. (2013), pp. 247-251.

to hold.[289] Basel II and III – on which the current CRR and CRD IV are based – distinguish between two possibilities for calculating risk-weights: the Standardised Approach and Internal Ratings Based (IRB) Approach.[290] The former approach prescribes a system with standardised risk-weights for various categories of loans, while the latter approach allows banks, under certain conditions, to use their own rating-system to assign risk-weights to classes of assets. The advantage of the IRB Approach is that the required capital can be closely aligned to the actual risks, because banks know themselves best how risky their borrowers are.[291] However, banks exploited this freedom, with low capital levels as result.[292] According to Hellwig (2010), this contributed to the excessive indebtedness in the US,[293] and it cannot be excluded that the same is true for some EU member states.

Other flaws in the Basel accords may also have contributed to this. Allen (2004) signals that the first Basel accord inadequately measured credit risk in the mortgage market, since no risk-weight adjustments are made for loan-to-value ratios and mortgage insurance.[294] Consequently, incentives existed for banks to issue uninsured mortgages with high LTV ratios.[295] According to Allen (2004), this 'may explain the growth of the jumbo mortgage market in the post Basel I years.'[296] Nonetheless, this author also mentions that several European countries adopted more restrictive mortgage limitations than those in the Basel I standards.[297]

2.1.2. An individual perspective

Most research on household debt is conducted from the perspective of the individual household or consumer. The most prominent strand of literature is based on the permanent income and/or lifecycle hypotheses, but there are alternative perspectives on household borrowing as well, perhaps currently most notably the behavioural economic approach.

---

[289] For a more extensive explanation, see e.g. Farag (2013), Drumond (2009), pp. 809-812; Dermine (2013), pp. 660-661. Cf. sub-section 3.1.
[290] See e.g. Drumond (2009), p. 811.
[291] Benink & Benston (2005), p. 305; Drumond (2009), p. 811.
[292] Hellwig (2010), p. 3; Mavroudeas & Papadatos (2012), p. 493. Cf. Drumond (2009), pp. 811-812; Alexander (2012), pp. 336, 341; Wolf (2015), pp. 132-133; Mészáros (2013), p. 169; Admati (2016), p. R8; Behn et al. (2016), p. 32. Crotty (2009) also points to various problems regarding calculation and incentives from which the models which banks use to calculate the risks suffer (pp. 570-572).
[293] Hellwig (2010), p. 3.
[294] Allen (2004), pp. 85-86; Calem & LaCour-Little (2004), p. 648. Cf. Demirgüç-Kunt et al. (2013), pointing at the flaws in Basel I regarding risk weights secured by mortgages (p. 1149).
[295] Allen (2004), p. 85.
[296] *Ibidem.*
[297] *Ibidem.*

2.1.2.1. The permanent income and lifecycle hypotheses

The basic idea behind the permanent income and lifecycle hypotheses is that households' consumption choices are not determined by their current income, but by their income over their entire life-time.[298] The permanent income hypothesis is based on the work of Friedman (1957), and the lifecycle hypothesis on the essays of Modigliani and Brumberg (1954, 1979).[299] It follows from these theories that debt is used to smooth consumption over the lifecycle of consumers or households.

Several assumptions are underlying those theories, at least in their purest form, including rational intertemporal decision-making, certainty about future income, and the absence of liquidity constraints, such as borrowing or lending constraints.[300] The term rationality is interpreted in various ways in economics, but is mostly used to refer to agents (such as consumers) acting as if they maximise utility.[301] Generally, it is assumed that they are capable enough of doing this, and do not behave inconsistent or make systemic errors.[302] These and other assumptions have been criticised in the literature.[303] Empirical tests of the lifecycle hypothesis have produced mixed results.[304] Empirical research into borrowing behaviour, based upon the lifecycle hypothesis,[305] generally acknowledges that liquidity constraints exist, and investigates how both demand and supply factors shape borrowing behaviour through the incentives and constraints that they provide. Regulatory factors are considered important in explaining differences in household debt levels between countries.[306]

---

298 See e.g. Romer (2012), pp. 365-371; Dynan & Kohn (2007), p. 3. The former hypothesis contends that people base their consumption on their permanent instead of their current income. The latter theory states that for people's consumption decisions expected income over their entire lifetime is leading.

299 See also Modigliani's Nobel Prize lecture (pp. 152-153). http://www.nobelprize.org/nobel_prizes/economic-sciences/laureates/1985/modigliani-lecture.pdf (last visited 13 August 2016)

300 On certainty see e.g. Romer (2012), pp. 365-371. Under uncertainty, consumption will probably exhibit features of a so-called random walk (cf. Hall, 1978). On liquidity constrains, see e.g: Jappelli & Pagano (1989), p. 1088; Vandone (2009), p. 11.

301 See e.g. Hodgson (2012), pp. 94-96.

302 See e.g. Burda & Wyplosz (2005), p. 103.

303 See e.g. Muellbauer (1983), Deaton (1992), chapter 6-7; Carroll (2001, 2014); Geiger et al. (2016), pp. 6-22. For instance, the assumption of representative agents and homogeneity of assets have been criticised, because housing affects consumption differently than financial assets, and institutional aspects matter in this respect: down-payment requirements (i.e. LTV limits lower than 100%) determine how much households need to save to buy a house, and the possibility of home equity withdrawal stimulates borrowing for consumption (Geiger et al. (2016), pp. 17-18).

304 Results which mainly support the hypotheses of these theories are reported in, among others, Haug (1991), Jappelli (1999), DeJuan & Seater (1999, 2007), and Gerlach-Kristen (2014), while results which mainly reject the hypotheses of these theories are reported in, among others, Deaton (1987), Flavin (1993), and Leong & McAleer (1999).

305 For convenience, the remainder of this chapter refers to the life-cycle hypothesis instead as to the permanent income and life-cycle hypotheses. Also within the literature, the term life-cycle model is used more often. The intuition behind both hypotheses with respect to borrowing behaviour is similar.

306 See e.g. Crook & Hochguertel (2007), p. 8.

The permanent income and lifecycle hypotheses: demand

Household characteristics are the first group of demand factors that have often been deemed relevant in theoretical and empirical work about the lifecycle model. Most prominently, this includes age or life-stage, education and the expected income-profile, the attitude towards debt, prudence and the time preference regarding present versus future consumption.[307] Age is important because young people, who often await rising income, borrow more in order to raise consumption, or to finance owner-occupied housing.[308] The expected income-profile determines the permanent or lifetime income, while education is an important factor in explaining expected income, since higher-educated people will commonly earn more.[309] Unsurprisingly, studies found a significant influence of the attitude towards credit on taking out loans.[310] Prudence is a factor that is invoked by various researchers to explain the finding that the debt behaviour of households does not perfectly correspond with the standard lifecycle model.[311] Finally, demographic changes can boost aggregate debt.[312]

Besides household characteristics, economic and legal factors influence households' borrowing behaviour, and may lead to deviations from the situation predicted by a standard lifecycle model. Credit demand is namely strongly influenced by tax incentives, the structure and actual working of the financial sector and economy, and the characteristics of the debt instruments.[313] Relevant loan characteristics are *inter alia* the type and maturity of debt, tax treatment, as well as associated interest costs and risks for borrowers.[314] Several researchers observe that borrowing constraints have been diminished in the years preceding the financial crisis due to financial innovations.[315] From the

[307] See e.g. Jappelli & Pagano (1989); Barnes & Young (2003); Baek & Hong (2004); Tudela & Young (2005), Del Rio & Young (2006, 2008); Bertola & Hochguertal (2007); Dynan & Kohn (2007); Jappelli et al. (2013); Bover et al. (2014).
[308] See e.g. Jappelli & Pagano (1989), pp. 1098-1099; Barnes & Young (2003), p. 7; Del Rio & Young (2006), p. 1137; Jappelli et al. (2013), p. 27. Instead of age, some researchers investigate the role of lifecycle stages – e.g. households in the empty nest or solitary households – and found a significant effect of these lifecycle stages on consumer debt (see e.g. Baek & Hong (2004), p. 381).
[309] See e.g. Del Rio & Young (2006), p. 1138; Dynan & Kohn (2007), p. 5; Bover et al. (2014), p. 15.
[310] Baek & Hong (2004), pp. 363-364, 382. Much economic and psychological research into the effects of attitude on debt behaviour is performed. To name but a few: Chien & Devaney (2001), Kamleitner et al. (2012), Cosma & Pattarin (2012). Borrowing can be seen as dissaving; saving and dissaving show consumers' intertemporal preferences regarding consumption (Baek & Hong (2004), p. 361).
[311] See e.g. Baek & Hong (2004), p. 361-362, 382. Cf. Tudela & Young (2005) about facts not fitting the basic lifecycle model (p. 34).
[312] Dynan & Kohn (2007) provide the following illustrative example: 'households with more education generally have steeper life-cycle income paths and therefore do more borrowing at young ages. The increase in average educational attainment of the population would then be expected to push up debt accumulation.' (p. 5).
[313] See e.g. Jappelli & Pagano (1989), p. 1089; Bertola & Hochguertal (2007), p. 120. Cf. sub-section 2.1.1.2.
[314] Bertola & Hochguertal (2007), pp. 123-130. Types of debt are, for example, revolving credit, credit card balances, or instalment credit. Also substitutes for classical loans exist, such as leasing contracts (p. 131).
[315] Dynan and Kohn (2007), p. 5. Cf. Rinaldi & Sanchis-Arellano (2006), p. 7. Cf. Ortalo-Magné & Rady (1999), who extended a lifecycle model to show that financial liberalisation contributed to boosts in housing prices.

perspective of consumption smoothing, deregulation is favourable, since it enables households to choose a more desirable path of consumption over their lifetime.[316] However, it comes with risks.[317]

The permanent income and lifecycle hypotheses: supply

A considerable amount of research investigates how credit rationing and credit constraints influence credit supply and hence debt levels.[318] It has been found that the chance of rejection of an application for a loan is negatively related to the applicant's income and wealth.[319] Credit rationing by banks is a result of uncertainty and asymmetric information, which incites banks to reject some loan applications, since they are unable to perfectly determine the risk of non-repayment.[320] Due to this lack of perfect information, credit supply depends on the lender's possibilities to assess the prospect of repayment, and on the chance of recovering non-performing loans.[321] Therefore, researchers have examined two types of legal and regulatory factors, namely arrangements for information sharing, and the efficiency of the legal system in recovering non-performing loans.[322] Information sharing is facilitated by public credit registries and private credit bureaus, i.e. organisations maintaining a database with financial information about households. The possibilities for efficient recovery of non-performing loans depend on creditor rights and the efficiency of the judicial system.[323] Both information availability and efficiency of recovering credit from delinquent borrowers reduce lenders' risks.[324] Arrangements for *ex ante* information sharing and *ex post* legal enforcement are not mutually exclusive, but can reinforce each other, or be substitutes.[325]

Theoretically, arrangements for information sharing and creditor rights contribute to bank lending.[326] This is indeed confirmed by empirical research, covering both European and other countries.[327]

[316] Ramsay (2012a), p. 26; Barba & Pivetti (2009), p. 119.
[317] Cf. sub-sections 1.1.2 and 2.1.1.3.
[318] See e.g. Cox & Jappelli (1993), Jappelli & Pagano (1989), p. 1089; Gross & Souleles (2002), Rinaldi & Sanchis-Arellano (2006), p. 12; Crook & Hochguertel (2007), Vandone (2009), pp. 11-12, 18-19.
[319] Vandone (2009), p. 18; Crook & Hochguertel (2007), pp. 25, 29-30, 32.
[320] Rinaldi & Sanchis-Arellano (2006), p. 12; Vandone (2009), p. 11. Rinaldi & Sanchis-Arellano (2006) explain that asymmetric information can lead to moral hazard and adverse selection, which induces banks to ration borrowers (p. 12).
[321] See e.g. Jappelli & Pagano (2000, 2002). Brown & Zehnder (2007) find that information sharing arrangements are less important when relationship-banking takes place.
[322] See e.g. Jappelli et al. (2005), Crook & Hochguertel (2007), p. 11; Magri (2007); Vandone (2009), pp. 11-12; Jappelli et al. (2013).
[323] Djankov et al. (2007, 2008); Safavian & Sharma (2007).
[324] Djankov et al. (2007), pp. 300-301, 303; Crook & Hochguertel (2007), p. 11.
[325] Djankov et al. (2007), p. 301.
[326] *Ibidem.*
[327] Jappelli & Pagano (2002), p. 2033; Jappelli et al. (2005), p. 224; Jappelli & Pagano (2006), pp. 354-355; Djankov et al. (2007), pp. 301, 325, Jappelli et al. (2013), p. 40; Nketcha Nana (2014), p. 316. Cf. Fabbri & Padula

Therefore, debt levels increase, but the risk of insolvencies decreases.[328] Indeed, research finds that information-sharing arrangements does not only reduce the ratio of non-performing loans,[329] but also the likelihood of banking crises.[330] Some studies also find that information-sharing arrangements reduce the costs of extending credit.[331] Duygan-Bump and Grant (2009) consider these factors from the side of the borrower, assuming that a default of a borrower is not necessary a genuine inability to repay, but can be a choice, which depends on the costs of default.[332] Their research shows that better information sharing and enforcement lead to fewer arrears, because incentives to default decrease.[333]

2.1.2.2. Behavioural economics and household debt

The permanent income and/or lifecycle hypotheses are contested. The behavioural economics perspective on household debt departs from assumptions underlying these hypotheses. For instance, Shefrin and Thaler (1988) adjusted the lifecycle model in order to incorporate changing utility over time, as well as non-rational behaviour.[334] Behavioural economists acknowledge that households might act non-rational in saving, spending and debt decisions.[335] 'Consumers may favour the short term over the long term, underestimate risk and be over-confident in their ability to stay out of trouble. Individuals may also act in a herd like fashion.'[336] This can increase debt levels.

(2004), p. 2386; Magri (2007), pp. 403-405, 423-424; Warnock & Warnock (2008), pp. 245-250. Cf. Bae & Goyak (2009), who showed that better contract enforceability significantly and largely increases the size of the loan, lengthens its maturity, and reduces loan spreads (p. 824). Contradicting aforementioned findings, Horioka & Sekita's (2011) research into Japanese households shows that better judicial enforcement increases in some cases the probability of being rationed, while it decreases the size of the loan. In these studies, information sharing is usually measured by the existence of credit registries or bureaus. Creditor rights are *inter alia* measured by the possibility to seize the collateral, and the existence of priority for secured creditors to be paid out in case of bankruptcy. Efficiency of the legal system in recovering non-performing loans is commonly measured as the number of days necessary to enforce a loan contract.

[328] Jappelli et al. (2013), p. 40.

[329] Jappelli & Pagano (2002), p. 2035. Cf. Brown & Zehnder (2007), pp. 1883-1886, 1908-1909; Miller (2014).

[330] See e.g. Houston et al. (2010) and Büyükkarabacak & Valev (2012).

[331] Brown et al. (2009), p. 152. Brown & Zehnder (2007), (p. 1884). Cf. Pagano & Jappelli (1993).

[332] Duygan-Bump & Grant (2009), p. 110. Their research covers 10 EU member states. The possibility to default would enable consumers to smooth consumption more, since they are better insured against adverse shocks (Livshits et al. (2007), p. 402).

[333] Duygan-Bump & Grant (2009), p. 130-131. More specifically they found that longer recovery procedures increase arrears, and that public and private coverage of defaults (reporting/databases) decrease arrears, either because households care about their reputation or because they can be excluded from the credit market.

[334] Shefrin & Thaler (1988), pp. 609-610, 636-637.

[335] On bounded rationality and not fully informed people, see e.g. the work of Kahneman, summarised in his Nobel Prize lecture (Kahneman, 2003). For a short summary of some findings from behavioural economics, see Ramsay (2001), pp. 369-374; Ramsay (2012c), pp. 57-61. Non-rational behaviour can also have inhibitory effects: according to Prelec & Loewenstein (1998), consumers display also debt aversion.

[336] Ramsay (2012a), p. 27. Cf. Kilborn (2005, pp. 18-19) and Vandone (2009, p. 19) about over-confidence. Cf. Starr (2010) about underestimation of risks (pp. 461-464).

The over-confidence of and underestimation of risks by individuals is reflected in findings that individuals can be non-rational in their assessment of the probabilities that a certain event will happen: they tend to assess it based upon their own available experience, instead of on objective analyses.[337] 'Consequently, if experiences of certain adverse events, such as liquidity crises, financial difficulties or over-indebtedness, are not available, individuals will tend to underestimate the chances of being affected by such events.'[338]

The findings that individuals lack self-control and attach greater weight to the short term compared to the long term explains why they choose "buy now, pay later" deals that bring immediate satisfaction at future costs.[339] If individuals lack self-control and their borrowing constraints are relaxed, their debt can easily increase, while their long-term utility might decrease.[340] Studies have found a significant relationship between lack of self-control and higher debt levels.[341] Wonder et al. (2008) found other time-inconsistencies in the behaviour of consumers as well, showing that individuals understand the undesirability of high interest rates, but 'generally [have] a weak sense of the time value of money and compound interest.'[342] Those effects are stronger for less educated individuals.

These latter findings are related to another area of research, financial literacy, which examines whether households' knowledge about debt and other financial concepts influences their decisions.[343] It has been found that individuals who are more debt illiterate, make choices leading to more borrowing-costs.[344] Individuals with lower self-reported debt literacy levels are much more likely to have debt difficulties.[345] The potentially imprudent decisions resulting from financial illiteracy (or behaviour biases) make households vulnerable to negative income shocks.[346] Financial illiteracy also

[337] Kilborn (2005), pp. 19-21; Vandone (2009), p. 20.
[338] Vandone (2009), p. 20.
[339] *Ibidem*. Cf. Akerlof (2002), pp. 422-424.
[340] Dynan and Kohn (2007), pp. 6-7.
[341] Achtziger et al. (2015), p. 146 (and pp. 142-143 for references to more studies). Cf. sub-section 2.1.2.4.
[342] Wonder et al. (2008), p. 266. Cf. Frederick et al. (2002) for other time-inconsistencies of people when discounting money.
[343] Campbell (2016) mentions five types of financial ignorance of households, being a lack of understanding of (1) even the most basic financial concepts, (2) the terms of financial contracts, (3) the explanatory power of historical data over their own limited experiences, (4) their own financial capacity, and finally of (5) the incentives and behaviour of other parties (pp. 9-14).
[344] Lusardi & Tufano (2015), p. 361. Cf. Lusardi & Mitchell (2014) who refer to several other studies with similar findings (pp. 22-23).
[345] Lusardi & Tufano (2015), p. 356. On the contrary, Bover et al. (2014), found less robust results for an effect of financial literacy on households' debt levels (p. 32).
[346] Braunstein & Welch (2002), p. 445.

makes consumers vulnerable to unscrupulous lenders, who offer them loans that are disadvantageous to them.[347]

Behavioural economics also abandons the assumption of complete information. Individuals cannot only lack capabilities to process available information, but also information itself, for instance, about the loan characteristics and associated risks.[348] Therefore, asymmetric information might hurt both lenders – as discussed before in the context of credit registries – and borrowers.

2.1.2.3. The loan-for-wages hypothesis and household debt

Another approach to explain households' borrowing decisions, departing from the permanent income and/or lifecycle hypotheses, is taken *inter alia* by Barba and Pivetti (2009). They try to explain the empirical fact that in the United States DTI and LTV ratios are highest for the lowest and middle incomes.[349] The authors interpret the phenomenon of rising household debt as an 'effort by low and middle-income households to maintain, as long as possible, their relative standards of consumption in the face of persistent changes in income distribution in favour of households with higher incomes'[350] and the retrenchment of the welfare state.[351] The shortcut "loans for wages"[352] refers to this substitution of loans for (falling) wages.[353] Therefore, in contrast with the predictions of the permanent income and lifecycle hypothesis, debt-financed consumption is not driven by households' own lifecycle income, but by income of other households. Several studies confirm the loans for wages hypothesis, namely that the amount of outstanding loans increases with the perceived income of a social circle,[354] or the likelihood that households take out loans increases with the comparison income of the neighbourhood.[355] Disney et al. (2008) discovered that individuals who became unemployed use consumer credit to maintain their consumption.[356]

---

[347] *Ibidem,* pp. 446-447.
[348] See e.g. Vandone (2009), pp. 75, 77. Cf. Broekhuizen (2016), pp. 103-111.
[349] Barba & Pivetti (2009), pp. 113-114.
[350] *Ibidem,* pp. 121-122. Cf. Ramsay (2012a), p. 27.
[351] Barba & Pivetti (2009), p. 114.
[352] Ramsay (2012a) uses this phrase to describe this theory (p. 27). Still, it should be noted that this theory encompasses not only loans for wages, but also the notion of the retrenchment of the welfare state.
[353] On this substitution: Barba & Pivetti (2009)*,* pp. 127-129.
[354] Georgarakos et al. (2014), p. 1426. Using Dutch data, they find that 'the higher the perceived income of a social circle is, the greater the tendency is that respondents will have outstanding and sizeable loans', both collateralised and uncollateralised. This finding is significant for households with a perceived lower income than that of their social circle. Also, Starr (2010) refers to lines of research investigating whether consumption patterns are driven by a concern to keep them in line with relevant social norms (p. 460).
[355] Berlemann & Salland (2016), p. 8. They use data of a large German urban savings bank.
[356] Disney et al. (2008), p. 31.

Guttman and Philon (2010) follow a similar reasoning as Barba and Pivetti (2009), explaining that Americans use household debt to buy services that are not provided by the state.[357] In this reasoning public and private debt could easily become substitutes. A crucial question is whether this model could also explain household debt in European countries, since the welfare state is organised differently in these countries.[358] The higher social security benefits are, the less dependent a household will be on debt for sustaining consumption. Generally, Anglo-Saxon and Southern European welfare states have lower levels of social security benefits,[359] so one might expect that households in these countries borrow more, if dependent on social security benefits. However, Crouch (2012) could not empirically confirm this.[360] Instead, Angel and Heitzmann (2015) discovered a significant negative effect of the level of employment benefits on the risk of over-indebtedness.[361]

2.1.2.4. The literature on over-indebtedness

The literature discussed thus far is concerned with explaining borrowing behaviour of households, including the factors that can lead to high household debt levels. Another strand of literature focusses specifically on over-indebtedness. It attempts to find out when household debt is unsustainable, and which factors cause this.[362] Researchers employ a large variety of indicators to measure over-indebtedness, and the choice for certain indicators seems rather *ad hoc* and arbitrary.[363] Nonetheless, the various types of indicators for measuring over-indebtedness or debt sustainability can be divided into different categories, although there is no agreement about this classification.[364] A first approach defines over-indebtedness by using objective criteria, mostly ratios concerning income and debt repayment.[365] Commonly, individuals who spend more than 30% of their gross monthly income on total borrowing repayments are considered over-indebted.[366] A second approach uses subjective indicators to define over-indebtedness, such as households' feelings about the burden of their

---

[357] Guttman & Philon (2010), p. 272.
[358] Ramsay (2012a), p. 27; Chrouch (2012), pp. 389-391.
[359] See e.g. Esping-Andersen (1989), pp. 21-25; Ferreri (1996); Bonoli (1997); Arts & Gelissen (2002), pp. 143-144. Generally, the literature distinguishes four types of welfare states in Europe, depending on the extent to which they stimulate equality, and the degree on which people need the market for acquiring income.
[360] Chrouch (2012), pp. 393, 405.
[361] Angel & Heitzmann (2015), p. 344.
[362] Vandone (2009), p. 69.
[363] Cf. Betti et al. (2007), p. 137.
[364] Somewhat different categorisations have been proposed by: Betti et al. (2007), p. 138; Davydoff et al. (2008), pp. 38-39; Vandone (2009), pp. 71-72. Cf. D'Alessio & Iezzi (2013), p. 8.
[365] Betti et al. (2007), p. 138.
[366] See e.g. Disney et al. (2008); D'Alessio & Iezzi (2013), p. 8. Many variations exist: some indicators also take assets and poverty into account, or distinguish between secured and unsecured debt, and recurring and temporary expenses (see e.g. Disney et al. (2008), p. 11; European Commission (2010b), pp. 3-4; D'Alessio & Iezzi (2013), p. 8).

borrowing repayments.[367] Finally, legal or administrative approaches consider households over-indebted, if they are in arrears, in a debt settlement procedure, or face other legal consequences of their inability to redeem their debt.[368]

Researchers also investigate which factors cause over-indebtedness, whereby some differentiate between active and passive over-indebtedness. The former is understood as the result of wrong decisions that lead to unsustainable debt levels. In this regard, a lack of financial literacy and self-control, financial imprudence and poor management of money have been found to contribute to over-indebtedness.[369] The same holds for spending too much and buying goods that cannot be afforded, while paying it by using one loan to repay another.[370]

Passive over-indebtedness arises from factors beyond the immediate control of individuals, such as economic variables and unexpected events, both in the economic and the social sphere. Shocks that have been identified as important are becoming unemployed, losing income, rising interest rates and divorce.[371] Disney et al. (2008) report that unemployment is especially a problem, if people want to sustain their level of consumption.[372] Other unexpected shocks that have sometimes been found relevant are illness,[373] getting children,[374] and rising costs of living.[375] Studies often find that having a low income contributes to over-indebtedness.[376] Wage and social security levels have been discovered as relevant too.[377] Several studies report that debt-servicing-to-income costs, and especially interest-

[367] Betti et al. (2007), p. 138; Disney et al. (2008), p. 11; Vandone (2009), p. 72; Davydoff et al. (2008), p. 39.
[368] Betti et al. (2007), p. 138. Vandone (2009), p. 72. Regarding the third approach: some scholars consider indicators focussing on arrears and indicators measuring whether people are involved in debt settlement or face other legal consequences as different approaches (Davydoff et al. (2008), p. 39; Vandone (2009), p. 72).
[369] Disney et al. (2008), p. 27; Davydoff et al. (2008), pp. 24-25; Gathergood (2012), Disney & Gathergood (2013), Civic Consulting (2013), p. 8; Gathergood & Weber (2014). Cf. sub-section 2.1.2.2.
[370] Betti et al. (2007), p. 141; Disney et al. (2008), p. 28; Davydoff et al. (2008), pp. 25-26.
[371] Becoming unemployed and losing income: May & Tudela (2005), p. 25; Anderloni & Vandone (2008), p. 8-9; Davydoff et al (2008), pp. 23-24; Disney et al. (2008), p. 31; Keese (2009), p. 28; Vandone (2009), pp. 74-75; European Commission (2010b), pp. 42-45; Civic Consulting (2013), pp. 6, 8; D’Alessio & Iezzi (2013), p. 6; Kelly & McCann (2015), pp. 14-19; Angel & Heitzmann (2015), pp. 339-342. Cf. Piorkowsky (2012). Rising interest rates: Disney et al. (2008), pp. 33-35; D’Alessio & Iezzi (2013), p. 6; Civic Consulting (2013), p. 6. Divorcing: Disney et al. (2008), p. 32; European Commission (2010b), p. 37; D’Alessio & Iezzi (2013), p. 6; Kelly & McCann (2015), pp. 14-19; Angel & Heitzmann (2015), pp. 339-342. Cf. Piorkowsky (2012).
[372] Disney et al. (2008), p. 31. Cf. sub-section 2.1.2.3.
[373] Anderloni & Vandone (2008), p. 9.
[374] Keese (2009), p. 21; D’Alessio & Iezzi (2013), p. 6.
[375] Civic Consulting (2013), p. 7.
[376] Anderloni & Vandone (2008), pp. 8-9; Davydoff et al (2008), p. 24; European Commission (2010b), p. 33; D’Alessio & Iezzi (2013), pp. 17-18; Civic Consulting (2013), p. 5; Angel & Heitzmann (2015), pp. 333, 342. But see Betti et al. (2007), who signalled that in some EU countries younger, high-income households reported more debt problems (p. 154).
[377] Civic Consulting (2013), p. 6; Angel & Heitzmann (2015), p. 344. Cf. sub-section 2.1.2.3.

servicing costs, are a contributing factor causing over-indebtedness.[378] Some scholars find that higher DTI and LTV levels increases the risks of arrears,[379] while others conclude that this relationship is weak.[380] Kelly and McCann (2015) find that the existence of non-mortgage debt increases the chance of experiencing long-term mortgage arrears.[381] Finally, renters face a higher risk of becoming over-indebted than homeowners,[382] although this trend recently reversed in Ireland and Spain.[383]

2.2. Household debt determinants: an overview and classifications

2.2.1. Overview of and relationships between debt determinants

From this review of the strands of literature, a wide range of debt determinants emerge, from both the demand and supply side. Table 2.1 provides a comprehensive overview of the factors, distinguishing between levels and types of factors, based upon the findings of the literature. Relevant at a macro level are both regulatory and economic factors – the former concept is discussed in box 2.1. At a micro level, both characteristics of the loan and the parties involved – households at the demand side and banks at the supply side – play a role.[384] Alternatively, factors can be differentiated from the perspective of a loan transaction, that is there are factors affecting the context in which the transaction takes place (regulatory and economic factors), the parties involved in the transaction (individual characteristics of households and banks), and the product of the transaction (loan characteristics).

Table 2.1 indicates whether a factor affects household debt levels (mainly) through the demand (D) or supply (S) side, or through both,[385] and whether it contributes to higher (+) or lower (-) household debt levels. The relationship between these factors and arrears or other measures of debt problems are not shown. Although higher debt levels normally imply a higher risk of financial fragility, and an increased sensitivity of households to adverse developments, for some factors this relationship is less

---

[378] May & Tudela (2005), pp. 24-25; Kelly & McCann (2015), pp. 14-19.
[379] DTI levels: Rinaldi & Sanchis-Arellano (2006), pp. 28-29; Anderloni & Vandone (2008), p. 11. LTV level: Kelly & McCann (2015), pp. 14-19.
[380] European Commission (2010), p. 32.
[381] Kelly & McCann (2015), pp. 14-19.
[382] Anderloni & Vandone (2008), p. 9; European Commission (2010b), p. 38; Civic Consulting (2013), p. 6.
[383] Civic Consulting (2013), p. 6.
[384] For reasons of clarity the term "banks" is used, although also other credit suppliers can provide loans to households.
[385] If a factor mainly affects one side, it is only coded with the corresponding letter, even if it also indirectly affects the other side. For instance, the existence of mortgages with flexible repayment schemes mainly affects debt demand, because it enables households to adjust their repayments in case of temporary shocks. Meanwhile, indirectly it affects the supply side, since risks and lending possibilities for lenders might alter.

straightforward. Arrangements for information sharing and the efficiency of loan recovery in case of delinquency of a borrower contribute to higher household debt levels, but reduce the risk of arrears.[386]

Box 2.1: The term regulatory factors

The term regulatory factors, as used in this study, includes what economists (and in particular institutional economists) call institutions. This latter term has, however, different meanings in different disciplines. In (European) law, an institution denotes a body that acts for the legal entity EU and is identified as such in primary Union law; and is used accordingly in this study. In institutional economics, institutions have been defined as the 'humanly devised constraints that shape interaction.'[387] They both constrain and incentivise/enable, and can be formal and informal.[388] Formal institutions comprise of laws and legislation, and informal institutions of norms, self-imposed codes of conduct, which underlay and supplement formal institutions.[389] In this area, almost all institutions are formal, justifying the use of the term regulatory factors.

The two upper rows show the factors at a macro level that influence demand and supply of debt. Regulatory and economic factors differ in at least one important aspect, namely the required time to change them. Basically, economic factors can quickly adjust in response to market developments, whereas regulatory characteristics are based upon choices of policymakers or regulators, and must be changed by them.[390] In other words, the economy functions within a *given* regulatory context. In addition, regulatory factors can influence economic factors: for instance, tax policies can affect the credit flows to the unproductive sector, including the housing market. The two bottom rows of the table show factors at a micro level: respectively the characteristics and situation of the parties to the loan contract, and the characteristics of the loan, most notably the price of debt – the interest costs – and fees. Three types of household characteristics are distinguished: (1) demographic and social characteristics, (2) mental and cognitive characteristics and (3) the economic situation. For the parties

[386] Cf. sub-section 2.1.2.1.
[387] North (1990), p. 3. Cf. Hodgson (2006), p. 2; Acemoglu et al. (2005). Cf. Voigt (2013), p. 7. It can be difficult, both analytically and empirically, to distinguish between institutions on the one hand, and their outcome or policies on the other hand. To solve this problem, Glaeser et al. (2004) put forward that a defining element of an institution is its permanent or stable character (p. 275). Cf. Davis (2010), p. 5; Voigt (2013), pp. 3-4. Rodrik et al. (2004) use another approach to differentiate between institutions and policies, namely by thinking of policy as a flow variable, in contrast to institutions, which is a stock variable. (p. 156). They regard institutions as the cumulative outcome of previous policies. Cf. Milo (2007), pp. 22-23; Voigt (2013), p. 23.
[388] Hodgson (2006), p. 2; Acemoglu et al. (2005). Cf. Voigt (2013), p. 7.
[389] North (1990), p. 4; North (1994), p. 360; De Jong (2009), p. 32.
[390] Although this is generally true, the reality is more complex. For instance, wages are not only determined by demand and supply, but also governed by regulations, and determined by wage negotiations by labour unions.

to the loan contract, the regulatory and economic factors are given – they cannot directly change them – and provide constraints and incentives.

Table 2.1: Types of household debt determinants at various levels

Level	Factors influencing household debt levels		
Macro level: regulatory factors (context)	**General:** Arrangements for information sharing (S+) Efficiency of recovery in case delinquency (S+) Social security level (D-)	**Financial sector:** Maximum DTI & LTV ratio (D-) Interest rate controls (S-) Possibilities securitisation (S+) Strictness capital requirements (S-) Housing equity withdrawal possible (D+) Type of mortgage amortisation schemes, such as: Interest only possible (D+) Flexible repayments possible (D+)	**Taxes (D):** Mortgage interest deduction possible (+) Imputed rents taxed (-) Property tax applicable to housing (-) Housing transactions taxed (-) Capital gains on housing taxed (-) VAT applicable to housing (-)
Macro level: economic factors (context)	Macroeconomic stability (+) Inflation (-) Wage level (D+) Level of unemployment (D-) Capital inflows (+) Credit flows to unproductive/productive sector (D+) Monetary policy interest rates (-) House prices (+)		
Micro level: individual characteristics and situation (parties)	**Household (D):** *Demographic and social characteristics:* Age / lifecycle stage Number children Experienced a divorce Illness Peer-income in social group (+) *Mental and cognitive characteristics:* Time preference regarding consumption Attitude towards debt Prudence (-), self-control (-), and risk aversion (-) Financial literacy (-) Over-optimism about economic / house price developments (+) *Economic situation:* Income & expected lifecycle income (+) Education (+) Employment status Renting/owner-occupied housing Value collateral (+)		**Bank (S):** Funding costs / wedge between borrowing & lending rates (-) Maturity match on both sides balance sheets LTD-ratio (-) Reduced lending standards due to *inter alia* competitive pressure, fees or sales targets (+) Over-optimism about economic / house price developments (+)
Micro level: loan characteristics (product)	Interest costs (D-, S+) Fees (D-, S+) Risks related to a certain type of loan (-) Maturity (D+) Lack of information about the product and associated risks (D+)		

"+" indicates a positive relationship between the factor and household debt levels, while "-" indicates a negative relationship. "D" and "S" stand for respectively affecting demand and supply of household debt.

There are top-down, bottom-up, and horizontal effects between the various factors that influence household debt levels. For instance, the economic situation of a household, and the interest rate of a loan, depend partly on economic factors, such as the stability of the economy, and – in case of the interest rate – (expected) inflation.[391] In fact, economic factors mainly have an indirect effect on household debt levels, through these top-down influences on other factors. Bottom-up effects are feedback effects flowing from determinants in the lower rows of the table, to the factors by which they are influenced.[392] Regulatory factors might be changed in response to their effect on borrowing and lending behaviour. An example of horizontal effects – between factors categorised at the same level in table 2.1 – is that a rising wage level leads to inflation, whereas increasing unemployment generally sets a drag on wages. Finally, the household debt determinants are also influenced by other factors. For instance, competition in the financial market influences the wedge between borrowing and lending rates, and sentiments and risks on the financial market determine part of the costs for banks.[393]

2.2.2. EU and national influences on household debt determinants

Most of the regulatory and economic factors driving household debt are affected by national as well as European influences. For instance, financial regulation is adopted at both levels,[394] while some basic rules regarding information sharing are set at EU level, but most of them at national level.[395] In addition, economic determinants of household debt levels are influenced by both national and supranational developments, although national factors will often determine the exact outcome. For example, in the EMU, real interest rates are determined by the combination of the nominal policy rates as set by the ECB, and inflation, which varies per member state.[396] In this regard, it is telling that household debt levels vary a lot among EU member states. This supports a nuanced view about the level at which issues should be addressed, and thus to which degree the subsidiarity principle is fulfilled for possible EU action.[397] Acting is not done by either the EU or a member state, but rather by both, each with their own responsibilities. Considering this influence of national factors, the subsidiarity principle is certainly not easily met for creating far-reaching instruments at EU level that deprive member states of possibilities to act.

---

[391] The economic situation of a household can also depend on the social security level. Loan characteristics which are restricted by regulatory factors are another example of a top-down influence.
[392] Cf. Williamson (1998), p. 26; Williamson (2000), pp. 596-600. In his institutional model higher institutional levels impose constraints on lower institutional levels, whereas feedback effects flow vice versa.
[393] Cf. De Nederlandsche Bank (2014b), p. 13.
[394] Cf. chapters 3-4.
[395] Cf. section 5.1.
[396] Cf. graph 1.3, which shows a clear common trend in member states' real interest rates, but also substantial differences between them.
[397] Cf. sub-section 1.2.2.

2.3. Influencing household debt: selecting instruments to analyse

Several instruments are able to somehow influence the plethora of determinants of household debt. These are part of one of the following categories: financial regulation, fiscal policy, monetary policy, employment policy, and consumer protection and support.

Inevitably, choices on the instruments to analyse have to be made, apart from the fact that every research needs demarcation. A first reason for being selective in the analysis is that not all causes are equally important and thus deserve the same attention. Table 2.1 and its discussion show that some factors have a direct effect on borrowing and lending behaviour, while others only have indirect effects by influencing more proximate causes of borrowing and lending behaviour. The problem with using indirect instruments for influencing household debt is uncertainty about achieving the desired result, which highly depends on the transmission channels. It is thus reasonable to pay attention to factors that exert a direct influence on borrowing and lending behaviour. Arguably, the factors identified as contributing to over-indebtedness are especially relevant.[398]

The choice of instruments to analyse can be further circumscribed based on the following considerations. Firstly, if certain instruments have main goals other than influencing borrowing and lending behaviour, large side effects on their primary objectives can occur when using them to influence household debt levels. Consequently, such instruments are less useful for influencing household debt, and consequently require no further investigation. Secondly, the scope of this study and the findings of existing literature provide further guidance for selecting instruments to analyse. Since the problems and risks of high household debt levels are the motivation for this study, instruments requiring examination are those that are directly targeted at the *amount* of debt that consumers can borrow or lenders can supply.[399] The only reason for not investigating instruments that fulfil this criterion is that existing literature gives a clear indication that an instrument will not be effective, even if legally constructed in the best possible manner. Similarly, instruments aimed at influencing borrowing and lending behaviour, but *not* directly at influencing the *amount* of debt are only examined if existing literature clearly indicates that an instrument significantly reduces household debt levels.

[398] Cf. sub-section 2.1.2.4.

[399] Such hard restrictions can halt a growing boom and can function as a buffer for household to prevent that a shock pushes them from being indebted to being over-indebted.

Consequently, monetary policy and employment/social security policy will not be further examined in this study. They are able to affect more proximate determinants of household debt, such as the economic situation of households and interest costs of loans, but do so indirectly. Furthermore, their primary objectives are not to affect household borrowing and lending. Hence, large side effects on their primary objectives can occur when using these policies for influencing housing debt levels, as for monetary policy is widely highlighted in the literature.[400] Thirdly, these policies do not directly affect household debt *levels.*

2.3.1. Financial regulation

Financial regulation 'concerns the drafting and implementation of rules and regulations governing the activities of the financial system'[401], and consists of prudential and conduct of business regulation.[402] Some financial regulatory instruments directly affect the amount of debt that can be lent, namely the so-called borrower-based caps, like DTI and LTV limits, while other instruments only exert an indirect influence on this amount, such as rules governing securitisation. Some instruments do not directly restrict lending quantities, but are nevertheless closely related to the amount of debt supplied to households. Firstly, this concerns risk-weighted capital requirements, which are aimed at covering credit risk, which is 'the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms.'[403] This risk is directly related to the borrower, unlike other risks related to the process of lending.[404] Secondly, this is true for the countercyclical capital buffer, since its objective is building up capital buffers during periods of excessive credit growth.[405]

[400] Dell'Ariccia et al. (2016, pp. 321-326) and Crowe et al. (2013, p. 306) conclude that monetary policy is able to reduce the demand for loans by increasing policy interest rates (cf. Maddaloni et al. (2013), p. 145), but they (and others) conclude too that it can be rather costly to use monetary policy to reduce debt demand and house prices, given the negative (side) effects on overall economic growth (Crowe et al. (2013), pp. 306-309; Dokko et al. (2011), pp. 272-275; Jeanne & Korinek (2014), p. 166. Cf. Baldi (2014), Badarau & Popescu (2014), p. 310). In the euro area, the concerns about negative side effects are even reinforced, because it is difficult to avoid negative side effects for one or more national economies, due to the low chance that all economies are in the same stage of the business cycle (Cf. Lim et al. (2011), p. 11; Crowe et al. (2013), p. 311).
[401] Masciandaro & Quintyn (2013), p. 263. Note that financial 'supervision is about ensuring that financial institutions obey the regulatory framework, and imposing sanctions on those institutions that do not abide by the rules and regulations.' *(ibidem).*
[402] Cf. sub-section 1.3.4.2.
[403] Basel Committee on Banking Supervision (2000), p. 3. Cf. De Haan et al. (2009), p. 305. The borrower itself can be the counter-party, if the lender keeps the loans on its own balance sheet. However, the counter-party can also be the lender or another bank, for instance if the lender repackages loans into securities or covered bonds and sells them to another party. Then the default of a borrower can trigger the non-performance according to contractual agreement of other parties.
[404] For a definition of several types of risks, see De Haan et al. (2009), pp. 305-306. Cf. art. 76-87 Directive 2013/36, which prescribe how various risks need to be treated.
[405] If necessary, these buffers can be released to compensate for losses during periods of stress.

2.3.1.1. Types of macroprudential instruments

The potential effectiveness of these instruments needs to be assessed with a special focus on the literature on macroprudential policy, since household debt levels are mainly limited for macroprudential purposes, and the identified instruments are macroprudential, except for risk-weighted capital requirements, which combine microprudential and macroprudential features.[406]

Many researchers consider macroprudential policy most appropriate for dealing with credit and housing booms, especially because it can be more directly targeted at the problems and thus produce fewer distortions than monetary policy,[407] while they are considered more flexible than fiscal instruments.[408] Macroprudential policies are relatively new, and many countries lack experience with them, especially developed economies.[409] Consequently, many researchers stress that the effectiveness of macroprudential tools is still unclear and that more research on those instruments is necessary.[410] Three types of instruments can be distinguished:[411]

1. Credit-based tools, either static or time-varying, such as maximum LTV, DTI and LTI ratios, ceilings for credit or credit growth, and caps on foreign currency lending;
2. Liquidity-based tools, like loan-to-deposit ratios, limits on currency or maturity mismatch, and reserve requirements;
3. Capital-based tools, such as countercyclical capital requirements, sectoral risk-weights, dynamic provisioning,[412] maximum leverage ratios, and systemic risk buffers.

The credit-based tools are especially intended to affect credit supply to households (and other actors), but liquidity and capital-based tools can indirectly influence this too. For instance, sectoral risk weights may curb credit growth in certain sectors, while the countercyclical capital buffer introduced in Basel III is primarily intended to increase resilience for a bust that may follow a period of excessive credit growth, but secondary to lean against a boom.[413] In addition, a loan-to-deposit (LTD) ratio can diminish

[406] Cf. sub-section 3.1.1.
[407] See e.g. Lim et al. (2011), p. 10; Dokko et al. (2011), p. 276; Dell'Ariccia et al. (2016), pp. 327-328; Crowe et al. (2013), p. 317, Shi et al. (2014), pp. 25-26; Angeloni (2014), p. 77.
[408] Lim et al. (2011), p. 10.
[409] See e.g. Claessens et al. (2013), p. 183; Crowe et al. (2013), p. 312.
[410] Dokko et al. (2011), pp. 276-277; Crowe et al. (2013), p. 312; Clerc et al. (2014), p. 184; Galati & Moessner (2013), p. 861; Galati & Moessner (2014), p. 8. Cf. Angeloni (2014), p. 72; Claessens & Kodres (2014), p. 16.
[411] Lim et al. (2011), p. 8. Also (slightly) different categorisations are possible, see e.g. Balogh (2012), pp. 644-645; Dell'Ariccia et al. (2016), p. 328; Knot (2014), table 1; Galati & Moessner (2014), pp. 3-6.
[412] This is mandating higher loan loss provisions during upswings.
[413] Cf. See e.g. table 1 of European Systemic Risk Board Recommendation 2013/1 of 4 April 2013, OJ 2013, C 170/01; Knot (2014), table 1; Galati & Moessner (2014), p. 4. The Basel Committee on Banking Supervision

the procyclicality of credit supply by limiting the use of non-deposit funding.[414] Reducing procyclicality is relevant for increasing financial stability, since the risk of extending too much credit is especially present in upswings. This might result in painful deleveraging in the subsequent downturn. Still, since worldwide only a handful of regulators impose LTD ratios on banks, this instrument will not be included in the literature review.[415] Moreover, a LTD ratio is in particular aimed at stabilising funding, not at reducing lending.[416]

2.3.1.2. The potential effectiveness of credit-based prudential instruments

A literature on the effectiveness of credit-based tools is emerging. Not much research on ceilings on credit growth exists, since these instruments are barely used in developed countries, including EU member states.[417] Generally, empirical research finds that maximum LTV, DTI and DSTI ratios are effective in limiting (procyclical) credit supply to households, and thus in affecting household debt levels.[418] Nonetheless, interpreting and generalising these results is not possible without being aware of some limitations. Firstly, such ratios are not binding in all countries; in some instances they are only guidelines.[419] Secondly, their design can vary a lot.[420] The caps can apply undifferentiated to everyone, be targeted at certain groups, or be differentiated depending upon household characteristics, loan maturities, or housing prices.[421] In addition, those limits can be constant or time-varying, in line with the cycle. Moreover, decision-making about their adjustment can be rule-based or discretionary.[422] So, doing further research is necessary, taking into account the relevant differences; among other things,

(2010) described the primary aim of the countercyclical capital buffer as 'to achieve the broader macroprudential goal of protecting the banking sector from periods of excess aggregate credit growth' (p. 8).
[414] Kim (2014), p. 128.
[415] Cf. Van den End (2016).
[416] Van den End (2016). Cf. Recommendation B of European Systemic Risk Board Recommendation 2013/1 of 4 April 2013, OJ 2013, C 170/01.
[417] See table 2 in Claessens et al. (2013) and the database of Shim et al. (2013) on the use of these instruments.
[418] Lim et al. (2011), pp. 18, 22, 25; Crowe et al. (2013), p. 31; European Central Bank (2013), pp. 103-105; Kuttner & Shim (2013), pp. 20, 22-26, 29, 31-32; He (2014), p. 106; Kim (2014), p. 126; Cerutti et al. (2015), pp. 12-13, 28; Jácome & Mitra (2015), pp. 25-29, 31. Note that Kuttner & Shim (2013) found that especially DSTI caps have a significant effect on housing credit, more than maximum LTV ratios (pp. 20, 22-26, 29, 31-32). Cf. Claessens et al. (2013), who found that LTV and DTI caps are quite effective in reducing bank vulnerabilities, such as bank leverage (pp. 154, 170). McDonald (2015) found that tightening of LTV and DTI ratios has larger effects than loosening them (pp. 19-20).
[419] Crowe et al. (2013), p. 312; Galati & Moessner (2013), p. 861.
[420] Cf. Kuttner & Shim (2013), p. 13.
[421] Lim et al. (2011), p. 64; Kim (2014), p. 125.
[422] Lim et al. (2011), p. 65.

their calibration in relation to the characteristics of member states' legal and financial and financial systems need to be considered.[423]

There are relevant differences between maximum LTV ratios on the hand and DTI, LTI and DSTI ratios on the other hand. Firstly, LTV caps are particularly aimed at addressing risks of house price shocks, residual debt and diminished usefulness of the collateral in case of default, whereas income-based limits especially reduce the risks of non-repayment. Moreover, maximum DTI, LTI and DSTI ratios are less dependent on the cycle and speculation, since income is less prone to bubbles than house prices.[424] Therefore, both types of borrower-based caps can be considered complementary, but DTI, LTI and DSTI limits can be expected to prevent excessive credit growth better than LTV limits.[425] Basten and Koch (2015) even question the effectiveness of a maximum LTV ratio, since their and some other research indicates that house prices grow faster during a boom than mortgage credit.[426]

2.3.1.3. The potential effectiveness of capital-based prudential instruments

Theoretical and empirical research identified several conditions that need to be fulfilled for (risk-weighted) capital requirements to be effective in containing credit growth.[427] Firstly, bank capital must be a relatively costly means of bank financing; otherwise it would be costless to raise it.[428] A substantial empirical literature confirms that this is indeed the case, according to Aiyar et al. (2014b).[429] Meanwhile, Admati and Hellwig (2013) argue that equity – most bank capital is equity – is primarily more expensive for banks than debt, because of the higher risks (the first losses are borne by the shareholders), and the tax-incentives for debt-financing.[430] Therefore, if a bank's equity will increase, its relative price will probably decrease, because the bank's leverage and associated risks become smaller.[431]

Secondly, capital requirements must be binding constraints, and affect actual capital ratios.[432] According to Aiyar et al. (2014b), the empirical literature delivers mixed results regarding the response

[423] Many researchers stress the need to investigate the design and calibration of macroprudential tools: e.g. Lim et al. (2011), p. 31; Claessens et al. (2013), p. 155; Claessens & Kodres (2014), p. 16.
[424] Gelain (2013), pp. 229-230.
[425] Cf. footnote 418.
[426] Basten & Koch (2015), pp. 2, 21-22.
[427] See Aiyar et al. (2014b) and also Athanasoglou et al. (2014).
[428] Aiyar et al. (2014b), p. 183.
[429] *Ibidem.*
[430] Admati & Hellwig (2013), in particular chapters 7-9.
[431] *Ibidem.*
[432] Aiyar et al. (2014b), p. 185.

of actual bank capital to changes in capital requirements.[433] Barros and Blanco (2003) conclude in an empirical study that capital requirements contribute to actual capital buffers, but that market pressure is more important.[434]

A third condition is that loan supply depends on the capital buffers of banks. 'Many studies (…) suggest that increases in regulatory capital requirements can precipitate contractions in the supply of credit'.[435] Aiyar et al. (2016) find 'that lending growth responds negatively to increases in capital requirements'.[436] Similarly, simulations of the ECB with a DSGE-model show that increases of both system-wide and sectoral capital requirements lead to declining loan supply.[437] However, Crowe et al. (2013) find that the empirical evidence of the effectiveness of capital requirements in influencing credit supply to the private sector is mixed.[438] They explain that capital requirements and procyclical risk-weights will turn ineffective when actual bank capital ratios are well above the regulatory minima, as often is the case during booms.[439] Also Kuttner and Shim (2013) found mostly insignificant results when testing whether risk-weighted capital requirements can contain housing credit.[440] Recently, Michelangeli and Sette (2016) found that higher capital ratios lead to more rather than fewer acceptances of credit applications, while Gambacorta and Shin (2016) discovered that bank capital increases lending growth.[441] Although these findings sound counterintuitive, they confirm that capital requirements function as a constraint, since less capitalised banks are apparently unable to lend more. All in all, the literature delivers mixed, but more confirmative than dismissive results regarding the question of whether capital requirements can contain credit growth.

Furthermore, various scholars discuss how procyclical bank lending can be mitigated by countercyclical measures, such as the countercyclical buffer and dynamic provisioning.[442] These measures intend to

[433] *Ibidem,* p. 185.
[434] Barros & Blanco (2003), p. 1956.
[435] *Ibidem,* p. 184.
[436] Aiyar et al. (2016), pp. 150, 158
[437] European Central Bank (2013), pp. 103-105.
[438] Crowe et al. (2013), p. 314.
[439] *Ibidem,* p. 313.
[440] Kuttner and Shim (2013), pp. 20, 22-26, 29, 31-32. These results concerning risk-weighted capital requirements are based upon an analysis of 50 countries (p. 27).
[441] Michelangeli & Sette (2016), p. 19; Gambacorta & Shin (2016), pp. 18-19, 23. The former also find that banks with lower capital ratios accept less risky borrowers.
[442] This is related to the question of whether "standard" capital requirements reinforce the procyclicality of bank lending. The presumption behind this is that banks can easily expand lending during upswings, while capital requirements become stricter during a downturn, leading to diminished lending (see e.g. Jokipii & Milne (2008), pp. 1440, 1450; Andersen (2011), p. 138; Agénor & Pereira da Silva (2012), pp. 43-44). In principle, several conditions must be fulfilled for capital requirements to be procyclical. Firstly, capital requirements have to increase in the downward phase of the cycle and vice versa. Secondly, banks' actual capital buffers have to

build up capital buffers – on top of the minimum capital requirements – during periods of excessive credit growth, in order to use them, when necessary, to compensate for losses during periods of stress.[443] López et al. (2014) find positive effects of countercyclical provisions in Colombia, namely lower loan amounts.[444] Lim et al. (2011) find that dynamic provisioning can reduce procyclical credit growth, and Jiménez et al. (2014) report that countercyclical dynamic provisioning in Spain contributed to smoothing credit supply, although it did not prevent the boom from happening.[445] However, according to Crowe et al. (2013), dynamic provisioning is better fit for strengthening the system during a bust than for preventing a boom.[446]

Finally, the Basel III accord introduced the leverage ratio, which requires banks to hold a minimum level of Tier 1 capital for their unweighted exposures.[447] The leverage ratio is still under development, but the literature is mostly positive about it, because it is not based upon banks' internal models, which can be used to manipulate risk-weights.[448] However, if the leverage ratio is not applied in combination with risk-weights, it can incentivise banks to take on riskier assets, because all types of exposures need to be capitalised equally, while riskier exposures may generate more profits.[449]

2.3.1.4. The influence of circumvention or leakage on the effectiveness of prudential instruments

Another factor determining the effectiveness of macroprudential measures is the degree to which circumvention of macroprudential rules or regulatory leakage is possible. Regulatory leakage is 'the extent to which non-regulated forms of credit offset changes in the supply of credit from regulated institutions.'[450] Jeanne and Korinek (2014) consider two general forms of regulatory leakage. 'First,

be close to their regulatory minimum, which however is in practice often not the case, according to Athanasoglou et al. (2014, p. 67). Nonetheless, they explain how various elements in the calculation of the capital requirements are indeed affected by the economic cycle (p. 68). They conclude that the literature confirms the procyclicality of Basel II banking regulation (pp. 68-69. Cf. Blum & Hellwig (1995), p. 740; Heid (2007), p. 3898; Jokipii & Milne (2008), pp. 1440, 1450; Andersen (2011), p. 138; Agénor & Pereira da Silva (2012), pp. 43-44; Coffinet et al. (2012), Grosse & Schumann (2014)). Consequently, this strand of literature actually confirms that capital requirements have an effect on bank lending, albeit not the desired effect.
[443] See e.g. recital 80 of the preamble of Directive 2013/36 (CRD IV).
[444] López et al. (2014), p. 14.
[445] Lim et al. (2011), pp. 25, 66; Jiménez et al. (2014), pp. 22-23. Cf. Peydró (2014), 221.
[446] Crowe et al. (2013), pp. 314-315.
[447] Cf. Schoenmaker (2015), pp. 477-478.
[448] Cf. footnotes 292 and 574. E.g. Schoenmaker (2015, pp. 477-478) and Wolf (2015, p. 243) are positive about the leverage ratio. Also, Brei & Gambacorta (2014) found that the leverage ratio is more countercyclical than a risk-weighted capital ratio.
[449] The expected returns for riskier assets are higher, while a bank needs to hold as much capital as for a low-risk asset. Cf. European Systemic Risk Board (2015), p. 14. Cf. Kiema & Jokivuolle (2014), p. 250.
[450] Aiyar et al. (2014a), p. 50.

some of the borrowing and lending activities that generate negative externalities may occur outside of the banking sector and as such fall outside the scope of banking regulation.'[451] They observe that it is a common trend that lending activities moved from banks to non-bank financial intermediaries, which are less or not regulated.[452] Secondly, lending activities might shift from domestic to foreign credit providers, if a national regulator or supervisor tightens restrictions. Obviously, these kinds of problems diminish the effectiveness of regulation and supervision. Indeed, empirical research shows that the effects of regulatory measures are often subject to a considerable degree of leakage,[453] but that measures can have still significant effects, since leakage is only partial.[454]

In order to battle the substantial leakage and improve the reach of regulators, Jeanne and Korinek (2014) and the European Systemic Risk Board (2016b) propose to move macroprudential regulation beyond banking regulation and align it as closely as possible to the activities that generate externalities leading to system problems.[455] Jeanne and Korinek (2014) regard leverage in the real estate sector as the origin of many externalities, and thus propose measures aimed at highly leveraged borrowers, for instance, by using consumer protection laws and tax laws.[456]

All in all, this literature review shows that especially credit-based instruments like LTV and DTI caps are promising for addressing household debt levels, and thus deserve attention. Capital-based measures cannot *a priori* be ignored in this research: the literature reports mixed, and certainly not unequivocally negative, results about their potential effectiveness regarding containing lending to households. Therefore, sectoral risk-weights of capital requirements and the countercyclical capital buffer will be examined as well.

2.3.2. Tax policy

Taxes are among the causes of high household debt levels, especially taxes related to housing. Consequently, whenever fiscal policies are part of the problem, they should be changed to become

[451] Jeanne & Korinek (2014), p. 166.
[452] *Ibidem,* p. 167. Cf. Crowe et al. (2013), p. 315. See also the findings of Jiménez et al. (2013), pp. 25-26.
[453] Aiyar et al. (2014b) show the presence of considerable leakage of increased capital requirements in the UK (pp. 209-210). Reinhardt & Sowerbutts (2015) and Cizel et al. (2016) examine macroprudential measures in dozens of countries and demonstrate the presence of considerable leakage. Kim (2014) reports that practical experiences with LTV and DTI limits show that banks try to circumvent them, among other things, by increasing types of household lending not being subject to the caps (p. 126).
[454] Aiyar et al. (2014b), pp. 209-210; Cizel et al. (2016), pp. 17-19, 21.
[455] Jeanne & Korinek (2014), pp. 167-168. Cf. European Systemic Risk Board (2016b).
[456] *Ibidem,* p. 168.

part of the solution. Fiscal policies can be used to incentivise households or to support households at risk of over-indebtedness by means of allowances or tax benefits. Several taxes stimulate homeownership and thus household lending, but especially the fiscal treatment of debt is relevant, since it directly influences the amount of debt that consumers can borrow.[457] This is true even though the primary objective of measures like mortgage interest deductibility is different, namely supporting home-ownership.

Various authors discuss the suitability of fiscal tools for addressing credit and real estate booms. According to Dell'Ariccia et al. (2016), they are likely not effective in taming a boom, due to significant time lags and political difficulties in its application.[458] In addition, they state that removing borrowing incentives will have no *cyclical* effects on credit growth.[459] They refer to empirical evidence supporting those considerations.[460] However, if the only goal is lowering household debt levels, regardless of the cycle, time lags or cyclical effects matter less.

Generally, research reveals a significant relationship between mortgage interest deductibility on the one hand, and borrowing behaviour and household debt levels on the other hand. Studies find that reforming mortgage tax deductibility can lead to lower actual LTV ratios and a decline in housing prices,[461] to lower mortgage demand,[462] and to lower interest payments.[463] On the contrary, Jappelli and Pistaferri (2007) find no response of Italian borrowers to a changed mortgage interest deductibility

[457] In this literature review only fiscal tools directly related to the fiscal treatment of debt will be discussed. Crowe et al. (2013) also reviewed the literature regarding the financial transaction tax and property tax. They expound that property taxes can help to contain a boom, for which there is supporting empirical evidence. Nonetheless, this tax does not address the main causes of the boom, namely excessive credit growth and leverage. (p. 310). Neither is it directly related to household debt. They argue that financial transaction taxes could help to "thin" the market, and thus to tame booms. Results from practical experiences are however mixed (p. 309). Since a financial transaction tax is aimed at transactions in the market, it affects primarily trading, and not lending. So, it is less relevant for this research. This is confirmed by Buckley and North (2012), who summarise possible achievements of a financial transaction tax: this list (p. 794) shows that it is primarily aimed at trading and not lending.

[458] Dell'Ariccia et al. (2016), pp. 326-327. The phrase "political difficulties in its application" refers to the term "political economy factors", as used by the authors.

[459] *Ibidem.*

[460] *Ibidem.* Kuttner & Shim (2013) found in some specifications of their regressions that housing-related taxes exert a significant influence on housing credit (pp. 20, 29).

[461] Crowe et al. (2013), p. 310. This concerns research on tax reforms in the UK, US and Sweden.

[462] Saarimaa (2010), pp. 30-37. His results show that a reduction or elimination of mortgage interest deductibility in Sweden would result in a reduction in mortgage demand.

[463] Alan et al. (2016) show that interest payments reduced for Danish households after mortgage interest deductibility was cut back. Raya & Kucel (2015) find that the Spanish mortgage interest subsidy stimulated risky borrowing by households, and that the resulting increase in annual payments exceeded the savings that stem from the subsidy (pp. 104-107).

regime,[464] indicating a lack of effectiveness of the incentives given by such a regime. Keen et al. (2010) show that in countries which offer tax relief for mortgage interest, the effective average tax rate on housing falls if leverage increases.[465] This implies that taking on mortgage debt is stimulated. Indeed, they refer to evidence showing that countries that offer more favourable tax treatment for home ownership, display higher mortgage debt ratios.[466] Comparably, Wolswijk's (2006) research into mortgage debt determinants shows that the after-tax interest rate chokes off demand for housing loans, although the effect is not very large.[467] This indicates that mortgage interest deductibility increases the demand for loans, since it reduces the after-tax interest rate.[468] This brief literature review highlights that mortgage interest deductibility has effects on debt demand and levels, and thus deserves further attention in this study.

Another potential fiscal instrument is a countercyclical tax on debt. Jeanne and Korinek (2010, 2014) propose this tax, because individual borrowers do not internalise all the social costs of their borrowing choices – i.e. the increased leverage in the economy, which can force deleveraging in bad economic times – and hence take on excessive debt levels, leading to a vulnerable economy in bust times.[469] Also Bianchi and Mendoza (2013) propose a tax on debt, because their model shows that it neutralises the externality of overborrowing.[470] According to Dell'Ariccia et al. (2016), a countercyclical tax on debt goes directly to the heart of the problem, and will solve problems of circumvention as well, since it, unlike prudential regulation, does not only apply to banks.[471] However, they fear practical difficulties, like tax planning. Despite its promising potential, the countercyclical tax on debt will not receive further attention in this study, due to the absence of concrete legal rules or even concrete proposals to analyse.

[464] Jappelli & Pistaferri (2007), pp. 248-249, 264-270. They attribute this finding to lack of information about the tax reform and borrowing constraints due to judicial inefficiency (pp. 268-269).
[465] Keen et al. (2010), p. 61.
[466] *Ibidem,* pp. 63-64.
[467] Wolswijk (2006), p. 139.
[468] Of course, this conclusion should be drawn with care, since Wolswijk (2006) did not distinctly investigate mortgage interest deductibility, so it cannot be determined whether the significance of his indicator is a result of the pre-tax interest rates, the tax influences or both.
[469] Jeanne & Korinek (2010), pp. 3, 6, 33; Jeanne & Korinek (2014), p. 165. Cf. Bianchi & Mendoza (2011), p. 4. Also Clerc et al. (2014) consider the effects of borrowing behaviour on house prices, an externality that is not taken into account by borrowers, while it affects their collateral constraints and net worth (p. 186).
[470] Bianchi & Mendoza (2011), p. 51.
[471] Dell'Ariccia et al. (2016), p. 327.

2.3.3. Consumer protection

Consumer law seeks 'to guarantee and protect the autonomy of the individual, who appears in the market without any profit-making intentions, primarily against undertakings which engage actively in the market'.[472] A range of instruments aims at protecting consumers who borrow. This includes mandatory information disclosure, financial education, interest rate ceilings, as well as mandatory creditworthiness assessments. Uniting these instruments is that they either intend to correct behavioural deficiencies, or try to overcome market failures, such as information asymmetries.[473] Although credit registries or bureaus and efficient insolvency procedures are not necessarily aimed at protecting consumers, they are comparable with these instruments by also intending to resolve market failures, including information asymmetries.

2.3.3.1. Instruments addressing behavioural deficiencies and market failures

Many of these instruments are aimed at addressing the mental and cognitive characteristics and capabilities of households, like time preferences regarding consumption, attitude towards debt, prudence, self-control and risk aversion. People's cognitive capabilities and awareness for risks can be improved by means of financial education, advertorial campaigns and debt counselling agencies that offer advice to households and requirements for lenders to disclose risks to consumers or even warn them.[474] This addresses behavioural deficiencies and causes of active over-indebtedness. However, these instruments do not directly aim at restricting the *amount* of debt. In addition, they are not legal instruments, and their optimal content and design requires no legal research. Moreover, the literature reports at best mixed results for the effectiveness of financial education.[475] Therefore, these types of instruments will not be examined in this study.

Mandatory information disclosure, credit registries or bureaus and efficient insolvency procedures provide the necessary conditions for borrowing and lending, and try to overcome market failures like information asymmetries. Thereby, they – at least the credit registries and insolvency procedures[476] –

[472] Reich (2009), p. 6.
[473] These kind of issues are the rationale for consumer protection: see e.g. Ramsay (2012c), pp. 41-84.
[474] On financial education and debt counselling agencies, see e.g. Vandone (2009), pp. 75-83.
[475] See e.g. Lusardi & Mitchell (2014), p. 2, 12-27, 33; Fernandes et al. (2014), pp. 1867-1872; García (2013), p. 303; Willis (2009), p. 456. Cf. Kilborn (2005), p. 23. But see Martin (2007), p. 22; Brown et al. (2013), p. 23.
[476] The significant influence of credit registries and bureaus and efficient insolvency procedures is discussed in section 2.1.2.1.

exert a significant, but nonetheless indirect, influence on household debt levels.[477] Moreover, they are not primarily meant for influencing the amount of household debt, but for facilitating and creating a sound credit market in general. So, this study will not further examine these instruments either.[478]

2.3.3.2. Interest rate ceilings and mandatory creditworthiness assessments

Interest rate ceilings set an upper limit to the interest rate or the annual percentage rate of charge.[479] This study will not further investigate them. Although these ceilings affect an aspect of the debt-service costs, they do not directly target the amount of debt, and are only indirectly related to debt levels.[480] This becomes even clearer when considering that the high-cost credit market segments - which are most sensitive to interest rate ceilings – only represent a minor share of the total volume of credit.[481] In addition, studies on interest ceilings – in the EU or in general – deliver mixed conclusions about their effectiveness.[482]

Instead, rules on mandatory creditworthiness assessments will be examined, since they are directly aimed at restricting lending to certain consumers, especially when combined with an obligation to refrain from lending in case of a negative outcome. A creditworthiness assessment means that the lender examines the likelihood that a borrower will meet his repayment obligations.[483] This implies an assessment whether the borrower can afford the loan.[484] Traditionally, the creditworthiness of a

[477] The literature is critical about the effectiveness of mandatory disclosure (see e.g. Ben-Shahar & Schneider (2011), pp. 665-679), especially because consumers are not able to benefit from extra information, due to information overload (Bar-Gill & Ferrari (2010), p. 116. Cf. Bar-Gill & Ben-Shahar (2013), pp. 117-118) and behavourial biases in their decision-making (Kilborn (2005), p. 23; Stark & Choplin (2011), pp. 12-19). Nonetheless, some empirical studies find that certain types of mandatory disclosure can have positive effects, under the right conditions: see e.g. Bertrand & Morse (2011) and Salisbury (2014).
[478] Credit registries will briefly receive attention, but only insofar as they support other instruments that are analysed.
[479] The annual percentage rates of charge cover the actual costs for obtaining a credit, including fees. Some countries apply ceilings to the interest rate, and others to the annual percentage rates of charge (Maimbo & Henriquez Gallegos (2014), p. 10).
[480] Still, avoiding the negative macroeconomic consequences of high levels of indebtedness can serve as a reason for adopting interest rate ceilings (several countries have adopted ceilings), besides the important aim of protecting the poor for behavourial mistakes and against predatory lending (Ramsay (2010), pp. 708-710; Morris (1988), pp. 152, 159-160).
[481] Iff/ZEW (2010), p. 238.
[482] See e.g. Iff/ZEW (2010), pp. 57-60, 226-245, 263-273, 313-316; Ramsay (2010), p. 710; Littwin (2008), p. 452; Zinman (2010), p. 554; McKernan et al. (2013), p. 208; Hynes & Posner (2002), pp. 179-180.
[483] Cf. art. 4(17) Directive 2014/17.
[484] However, some researchers distinguish between a creditworthiness and an affordability assessment, stating that the latter focusses especially on the question of whether a borrower is able to meet its obligations in a sustainable way, while still being able to afford an acceptable level of consumption (Bijak et al. (2014), pp. 4, 7). This point of view is mainly based on the situation in the UK, where official guidelines made this distinction (cf.

borrower was assessed in a judgmental process by a loan officer, often guided by the so-called five C's. These are the borrower's character, own capital, capacity to repay, the availability of collateral and finally the conditions in the market and the economy.[485] Although this process has the advantage of taking into account qualitative characteristics, it easily becomes subjective, inconsistent, and prone to individual preferences of the loan officer.[486] During the last decades, credit scoring has become the prevailing method for assessing a borrower's creditworthiness. This approach uses statistical techniques and large amounts of quantitative information to predict whether a borrower with certain characteristics is creditworthy.[487] Besides using credit-scoring models, lenders will often consult a credit registry or credit bureau to check the applicant's repayment history and outstanding loans.[488]

Credit scoring models are not uniform. Firstly, all kinds of variables are used in credit scoring models, varying from personal characteristics, such as gender, age and type of job, to information about income and other debt.[489] Also actual LTV and DSTI ratios are often used.[490] Moreover, developments concerning big data enable lenders to feed their models with a range of other variables, even information from Facebook.[491] Secondly, all kinds of statistical models and techniques are used to predict the creditworthiness of a person, resulting in a strand of literature that develops and evaluates such models.[492] In their literature review, Abdou and Pointon (2011) conclude that there is no overall best statistical technique for building credit score models, but that more advanced and sophisticated techniques perform better in terms of predictive ability.[493]

Nield, 2010, pp. 624-626). Nevertheless, it is true that affordability puts the emphasis on the borrower, while creditworthiness is mainly a concern of the lender.

[485] Durkin & Elliehausen (2010), p. 559; Thomas (2000), p. 152.

[486] Hand (2001), p. 141; Abdou & Pointon (2011), p. 61.

[487] Durkin & Elliehausen (2010), p. 560; Abdou & Pointon (2011), pp. 59-61. Two types of credit scoring can be distinguished, namely application scoring and behavioural scoring. The former is a static analysis, which compares the characteristics of the applying person with the relevant data in the lender's records about other borrowers. The latter means that data about the past performance of the applicant is used in the analysis. (Thomas (2000), pp. 161-162; Thomas et al. (2001), p. 91; Hand (2001), pp. 141-142; Crook et al. (2007), p. 1463).

[488] Ferretti (2010), p. 1. Cf. Lehnert (2010), who describes the credit extension decision regarding a mortgage loan (pp. 568-571).

[489] Abdou & Pointon (2011), p. 66; Ferreira et al. (2014), pp. 185-186.

[490] Lehnert (2010), pp. 568-571; Ferreira et al. (2014), pp. 185-186.

[491] See e.g. Metz (2014) and Alloway (2015).

[492] Abdou & Pointon (2011), pp. 68-76; Kalapodas & Thomson (2006), pp. 26-38. Examples of this strand of literature are Thomas (2009), Fabozzi et al. (2010), Yap et al. (2011), Huynh (2013), Rězác (2015), Kirkos (2015), Gutiérrez-Nieto et al. (2016) and Sousa et al. (2016). The issue of creditworthiness assessment is also investigated from another side, by a strand of literature which examines to what extent households are credit-constrained: see e.g. Jappelli (1990), Cox & Jappelli (1993), Getter (2006), Johnson & Li (2010) and Deku et al. (2015).

[493] Abdou & Pointon (2011), p. 79.

Generally, researchers are quite positive about the abilities of assessing creditworthiness by means of credit scoring.[494] However, these practices have not prevented the financial crisis from happening, nor did they preclude widespread arrears on household loans in several member states.[495] Indeed, the literature points to drawbacks and flaws in credit-scoring models, with as most-mentioned weakness the fact that most models do not take the general economic conditions into account.[496]

Hence, it can be concluded that creditworthiness assessments can be effective in limiting risky forms of household debt. However, the extent to which this is the case depends on the type and accuracy of the credit-scoring model, and on the variables that are included in the model. The incorporated variables must take the general economic conditions into account, and at least be sensitive to the commonly identified determinants of household over-indebtedness. This implies that a credit-scoring model should include predictors of the economic cycle and factors like income, DSTI ratios, education and preferably data about spending.[497] Additionally, there must be a certain buffer to allow for unexpected shocks, without immediate arrears as a consequence of these shocks. Moreover, it is crucial that lenders attach consequences to the outcome of a creditworthiness assessment, be it a denial of credit or a higher interest rate to account for the increased credit risk.[498] Although the latter provides an economic incentive to households to reconsider the borrowing decision, it does not offer consumer protection. Attaching consequences to the outcome of a creditworthiness assessment might sound obvious and in the best interest of the lender too, but the latter is not necessarily the case. A lender might choose to mainly rely on a LTV ratio, because the house can be sold if payment problems occur. He can also build upon on a strategy of passing on risks by means of securitisation. Alternatively, a loan officer might be subject to distorted incentives, due to fees or bonuses.

---

[494] For instance, Abdou & Pointon (2011) call 'credit scoring techniques (…) an astonishingly useful tool, which should help banks control an array of risks' (p. 79). Kirkos (2015) concludes – albeit in an article on credit scoring applied to businesses, instead of consumers – that '[r]ecent research has yielded fruitful results in terms of building models capable of predicting business failure cases' (p. 120). Cf. Crook et al. (2007), p. 1463.
[495] Cf. Ferretti (2015), p. 365.
[496] See e.g. Thomas (2000), pp. 163-165; Kalapodas & Thomson (2006), pp. 39-40; Thomas (2010), p. 50. For other drawbacks or challenges, see e.g. Ferreira et al. (2014), pp. 186-187 and Thomas (2010).
[497] Cf. sub-section 2.1.2.4.
[498] Getter (2006) found that, while borrowers who pose the highest non-repayment risk face credit rejections, there is also a group of high-risk borrowers who face a higher credit price instead of an outright rejection (p. 60).

2.4. Conclusion: the instruments deserving examination

In the light of the literature review and the considerations stated in sub-section 2.3, the subsequent chapters of this study focusses, amidst all instruments, on maximum LTV, DTI, LTI and DSTI ratios, sectoral risk weights used in capital requirements, the countercyclical capital buffer, the fiscal treatment of debt, and consumer law provisions that prescribe creditworthiness assessment and prohibit credit supply to consumers who are judged unable to meet their repayment obligations. In addition, some brief remarks will be included about the future leverage ratio.

Before continuing, the heterogeneous use of maximum LTV, DTI, LTI and DSTI ratios in EU member states need to be clarified. Firstly, direct LTV, DTI, LTI and DSTI caps are in force in many, but not all, EU member states. This study reserves the term direct maximum ratio/limit/cap for an instrument directly applying to a borrower, limiting the amount which he is allowed to borrow vis-à-vis the value of the house or a measure of income. Direct ratios are also referred to as borrower-based caps. Although this is the most common understanding of a LTV, DTI, LTI or DSTI ratio, it is not the only manner in which they are applied. Alternatively, a LTV ratio can determine the risk-weight of capital requirements, i.e. a higher risk-weight is assigned to (the part of) a loan with a LTV ratio above a certain threshold. Thirdly, it is possible that only the part of the loan below a certain LTV ratio is eligible for some types of funding, such as covered bonds. Finally, other arrangements involving LTV caps can be used. For instance, in the Netherlands eligibility for a scheme of mortgage guarantees is subject to meeting certain DSTI, LTI and LTV ratios.[499] Consequently, the various types of maximum ratios will be discussed in separate chapters. Borrower-caps will be discussed in chapter 4, whereas the use of LTV ratios in combination with capital and liquidity requirements will be examined in chapter 3.

[499] Cf. Box 4.1. Before Portugal discontinued its guarantee scheme was, it also imposed LTV requirements.

3. Capital- and funding-based regulatory instruments

The most promising macroprudential instruments for influencing household debt seem credit-based tools, such as LTV and LTI caps, but also some specific capital-based tools, i.e. sectoral risk-weighted capital requirements and countercyclical capital requirements, as discussed in the previous chapter. These capital-based instruments will be examined in this chapter, including the role of LTV ratios in determining risk-weights. The leverage ratio, which is expected to be fully implemented in 2018, is briefly discussed as well. The backbone of these instruments is part of EU legislation, but they are also partly a national matter. Whenever necessary national aspects or the national implementation will be examined – often only a brief discussion suffices. In addition, some funding-based instruments impose LTV requirements. The use of LTV ratios in these instruments, which are partly governed by EU and partly by national law, is briefly discussed in this chapter. The discussion of these capital- and funding-based regulatory instruments is based upon the analytical framework, described in section 1.4. Hence, the first sub-section examines their determinacy and completeness, the second sub-section the proportionality and dissuasiveness of their enforcement, and the third sub-section the room for applying, enforcing and amending them independently.

3.1. Determinacy and completeness of capital- and funding-based instruments

The risk-weights for capital requirements and the countercyclical capital buffer are governed by the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRD) IV, adopted in June 2013.[500] These legal acts implement the international Basel III standards on capital.[501] They set forth rules applying to banks, and assign specific powers for specifying and enforcing these rules to European and national supervisors (in this study, the term “bank” refers to the term “credit

[500] CRR: Regulation 575/2013. CRD IV: Directive 2013/36 (*supra,* footnote 51). The CRR is the first regulation on capital requirements, whereas the CRD IV replaces the CRD III. These two legal acts are a step towards the Single Rulebook, a set of fully harmonised rules, minimising discretion for national supervisors: the CDR IV package removed many options and derogations existing in the CRD III (Moloney (2010), p. 1357. Cf. http://europa.eu/rapid/press-release_MEMO-11-527_en.htm?locale=en). Before the crisis, minimum harmonisation and optionality characterised EU financial regulation, but with the latest reforms, the EU institutions seized the opportunity to strive for maximum harmonisation and removing optionality, in order to contribute to the internal market (European Commission (2012f), p. 4. Cf. Wymeersch (2014), pp. 5-6).

[501] The Basel III standards intend to create a more robust financial system by increasing its ability to absorb shocks, *inter alia* by raising capital requirements. See Allen et al. (2013), pp. 247-251. For the Basel III accord, see https://www.bis.org/bcbs/basel3.htm (last visited 23 July 2016).

institution", as made clear in box 3.1).[502] Insofar as relevant, the proposals for amendments of the CRR and CRD IV, as recently published by the Commission, will be discussed, as well as the ongoing review of the EU macroprudential framework.[503] The CRR and CRD IV distinguish between two types of national supervisors: competent and designated authorities. The competent authority is the national prudential supervisor.[504] However, the CRR and CRD IV enable member states to designate some macroprudential instruments to the designated authority, which can be the same or a different authority as the competent authority.[505] In other words, member states can have a single prudential supervisor or a different micro and a macroprudential supervisor.

Box 3.1: Official terms of the institutions regulated by the CRR and CRD IV

Most of the rules and requirements in the CRR and CRD IV – including those investigated in this research – apply to credit institutions and investment firms, together called institutions.[506] A credit institution is defined as 'an undertaking the business of which is to take deposits or other repayable funds from the public and to grant credits for its own account.'[507] This is what is traditionally understood as a bank.[508] Hence, for reasons of convenience, the term "bank" will be used in this study to denote for a "credit institution".[509] Entities that lend to consumers, but do not fulfil all the basic elements of this definition, are not subject to the requirements of the CRR and CRD IV.[510] In the definition of an investment firm providing certain investment services and activities is of decisive importance.[511] Since investment firms are less relevant for this research, the term "banks" is used for all institutions which are subject to the CRR and CRD.

The CRD IV and CRR are based upon three pillars, like the Basel standards.[512] The first pillar, primarily incorporated in the CRR, contains rules on capital to cover various kinds of risks, mainly based upon a quantitative risk assessment. The second pillar, included in the CRD IV, regulates the governance and

[502] The general powers of the EU supervisory institutions are governed by the regulations which established them. The general powers of national supervisors are governed by national law.
[503] European Commission (2016c,d,e,f).
[504] Art. 4(1)(40) Regulation 575/2013.
[505] Art. 129(3), 130(3), 131(1), 133(2) and 136(1) CRD IV and art. 458 CRR.
[506] Art. 4(1)(3) Regulation 575/2013.
[507] Art. 4(1)(1) Regulation 575/2013.
[508] For an extensive explanation and discussion of this definition, see Theissen (2013a), pp. 140-146, 173-189.
[509] Cf. Theissen (2013a) and Wymeersch (2014, p. 27), who also use the term "banks" for "credit institutions".
[510] Cf. Theissen (2013a), pp. 141-144, 176.
[511] Art. 4(1)(2) Regulation 575/2013 in combination with art. 4(1)(1)-(2) and Section A and C of Annex I of Directive 2004/39 of the European Parliament and of the Council of 21 April 2004, OJ 2004, L 145/1.
[512] See the summary of Basel III at http://www.bis.org/bcbs/basel3/b3summarytable.pdf (last visited 23 July 2016); Theissen (2013a), pp. 8-9, 47; Alexander (2015b), pp. 349-359). Cf. De Haan et al. (2009), pp. 304-309).

risk management of banks, and the supervisory review by authorities. It focusses on a qualitative risk assessment. A relevant example is the obligation of competent authorities to ensure that 'credit-granting is based on sound and well-defined criteria'.[513] The third pillar, contained in the CRR, sets disclosure requirements in order to facilitate and enhance market discipline. Apart from microprudential rules, which are largely uniform for all member states, the CRR and CRD IV contain macroprudential instruments.[514] Table 3.1 presents an overview of the key macroprudential measures covered by the CRD IV and CRR.[515] The instruments in italics are particularly relevant for this research. Some of these measures are meant for both micro and macroprudential use, including these governed by art. 124 and 164 Regulation 575/2013 and the so-called Pillar 2 measures.[516]

Table 3.1: Coverage of macroprudential instruments by EU legislation

CRR	CRD IV	Not included in the CRD & CRR
Sectoral capital requirements/risk weights (Art. 124, 164, 458)	*Countercyclical capital buffer (Art. 130, 135-140)*	*Loan-to-value ratio caps*
Leverage ratio (Art. 429)	*Pillar 2 measures*	*Loan-to-income ratio caps*
Liquidity coverage ratio (Art. 412, 458)	Systemic risk buffer (Art. 133)	Loan-to-deposit ratio caps
Net stable funding ratio (as of 2019) (Art. 413, 510, 458)	Capital surcharge for SIFIs (Art. 131)	Margin and haircut requirements
Large exposure limits (Art. 392,395-403, 458, 493)	Capital conversation buffer (as of 2016) (Art. 129, 141-42)	Levy on non-stable funding
Increased disclosure requirements (Art. 431-455, 458)		

[513] Art. 79(a) CRD IV. This provision resulted in Germany, for instance, in an obligation of banks to assess, *inter alia*, the debt-servicing capacity of the borrower, with the intensity of the assessment depending on the riskiness of the loan. See B.T.O. 1.2.1 of Rundschreiben (Circular) 10/2012 - *Mindestanforderungen an das Risikomanagement* (MaRisk) (Minimum Requirements for Risk Management), available at https://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/Rundschreiben/rs_1210_marisk_ba.html. An English translation is available at http://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Meldung/2014/meldung_140815_marisk_uebersetzung_en.html (both last visited 2 August 2016).

[514] The microprudential rules are mainly included in the CRR.

[515] This table is an adaptation of table A.1 in the Financial Stability Review of May 2013 of the European Central Bank (2013). Note that the listed instruments are almost similar to those included in table 1 of European Systemic Risk Board Recommendation ESRB/2013/1 of 4 April 2013, OJ C 170/1.

[516] European Banking Authority (2014b), pp. 17-19, 44-47; European Systemic Risk Board (2014b), pp. 9-10. Originally, Pillar 2 measures were designed for microprudential purposes, but currently they may be used for macroprudential aims (see art. 97(1)(b) and 103-104 Directive 2013/36).

3.1.1. Sectoral risk-weighted capital requirements

The standard, microprudential, framework of risk-weighted capital requirements is based upon Basel II standards, since the standards on calculating risk-weights for credit-risk were not amended with the adoption of the Basel III standards.[517] However, the Basel Committee on Banking Supervision (BCBS) launched consultations for amendments of the standards on these issues, in December 2014, December 2015 and March 2016.[518] These proposals require attention, because of the prospect that they will become law. After the discussion of the microprudential rules on risk-weights for household loans, the options to increase these risk-weights will be examined, followed by an overall evaluation of the determinacy and completeness of risk-weighted capital requirements.

3.1.1.1. The microprudential rules on risk-weights for household loans

The capital requirements for credit risk are set forth in Title II of Part Three of the CRR, prescribing how much capital a bank must hold in relation to various types of risks, most prominently credit risk.[519] The preceding Part Two sets the rules on bank capital itself, i.e. regulating what qualifies as bank capital.[520] In the EU, a bank is required to have a total capital ratio of 8% of the risk-weighted exposures.[521] An exposure is 'an asset or off-balance sheet item'.[522] Loans to households are part of banks' assets and thus exposures. As a rule, the risk-weight is applied to the accounting value of the exposure.[523] If a risk-weight of, for example, 50% is assigned to an exposure, a bank must hold 4% capital for that exposure. Risk-weights are higher for riskier exposures.

The CRR distinguishes between two approaches for calculating risk-weights: the Standardised Approach and Internal Ratings Based Approach (IRB Approach).[524] The former approach prescribes a system with standardised risk-weights, while the latter approach allows banks, under certain

[517] Basel Committee on Banking Supervision (2006).
[518] Basel Committee on Banking Supervision (2014b,c, 2015, 2016).
[519] Art. 107-311 CRR deal with credit risk. Other risks are dealt with in subsequent titles of Part Three.
[520] Part Two is titled "Own Funds" and consists of art. 25-91 Regulation 575/2013. In EU financial law, "own funds" 'means the sum of Tier 1 capital and Tier 2 capital' (art. 4(1)(118) Regulation 575/2013). Tier 1 and 2 capital is respectively core capital and additional capital of a bank. For an extensive discussion of the own funds requirements and the capital ratios, see e.g. Theissen (2013a), pp. 291-310, 375-429)
[521] Art. 92 Regulation 575/2013. Total capital is the sum of Tier 1 and Tier 2 capital (art. 92(2)(c) in combination with art. 4(1)(118) Regulation 575/2013). This provision requires not only a total capital ratio of 8%, but also of a Common Equity Tier 1 capital ratio of 4.5% and a Tier 1 capital ratio of 6%. For these two concepts, see art. 25-60 Regulation 575/2013.
[522] Art. 5(1) Regulation 575/2013.
[523] Art. 111(1) and 166(1) Regulation 575/2013.
[524] See Chapter 2 and 3 of Title II of Part Three of the CRR, respectively. Moreover, within the IRB Approach banks can opt for a foundation IRB or advanced IRB Approach (cf. Theissen, 2013, pp. 454-464).

conditions, to use their own rating-system to assign risk-weights to classes of assets. The CDR IV states that competent authorities must encourage significant banks to use the IRB approach.[525] Both approaches will be briefly discussed with respect to risk-weights of unsecured and secured loans.

Risk-weights of household loans under the Standardised Approach

The Standardised Approach distinguishes between various classes of exposures, with own rules for each class to assign the risk-weights to an exposure.[526] Loans to households can be classified under two exposure classes: retail exposures and exposures secured by mortgages on immovable property.[527]

Unsecured credit supplied to consumers – either in the form of instalment loans or revolving credit or credit cards – will be classified as retail exposures, and consequently receives a risk weight of 75%, upon fulfilling certain conditions.[528] Unsecured loans not fulfilling these conditions are assigned a risk-weight of 100%.[529] Securities are not eligible for the retail exposure class.[530] Nothing prevents banks from classifying mortgage loans as retail exposures, but they will generally prefer to classify them as exposures secured by mortgages on immovable property, due to the preferential risk-weight of that class.[531] However, classifying mortgage loans as retail exposures is prohibited in the proposed amendments for the Basel standards.[532] Since the rules on retail exposures are not sensitive to actual risks, the BCBS considered amendments, but decided, after consultations, to keep the risk-weight at

[525] In the context of this provision, significance depends on the size, internal organisation and the nature, scale and complexity of the activities of a bank (art. 77(1) Directive 2013/36).

[526] If a risk-weight of 100% is assigned to an exposure under the Standardised Approach, this reflects that the banks needs to take its full risk into account (cf. 111(1) Regulation 575/2013). A 50% and 0% risk-weight respectively reflects that the exposure is medium-risk and low-risk. For more information about the Standardised Approach for calculating capital requirements for credit risk, see Theissen (2013a), pp. 448-454.

[527] Art. 112, 123-125 Regulation 575/2013.

[528] Loans to a consumer or household can be classified as retail exposures, if their total amount is lower than € 1 million, excluding loans which are fully and completely secured on residential property and are assigned to the corresponding exposure class. Furthermore, a loan must be one of a significant number of loans with similar characteristics in order to substantially reduce the risks associated with the lending. This condition is vague and general, and thus leaves banks with plenty of room to categorise loans under this exposure class: it suffices to offer a significant number of more or less comparable loans to consumers. Nevertheless, with respect to most mortgage loans this is no major risk, since these will generally be not very atypical. Note that the conditions of art. 123 Regulation 575/2013 differ slightly from the criteria in the Basel standards, as described in para. 70 of Basel Committee on Banking Supervision (2006).

[529] Unless these loans are exposures secured by mortgages on immovable property, no other class of exposures is available for them. So, they are assigned a 100% risk-weight according to art. 113(5) Regulation 575/2013.

[530] A special regime for assigning risk-weights to securities exists, so if a certain amount of consumer loans is repackaged into securities, they cannot be retail exposures (art. 123, 130 and 242-270 Regulation 575/2013).

[531] Art. 123 Regulation 575/2013 differs in this respect from the Basel standards, which explicitly exclude mortgage loans from the class of retail exposures if the mortgage loans qualify for the class of exposures secured by mortgages on immovable property (para. 70 of Basel Committee on Banking Supervision (2006).

[532] Basel Committee on Banking Supervision (2015), para. 46 (at p. 33).

75%, because views on the necessity of introducing risk sensitivity where mixed, while introducing it would result in 'undue complexity'.[533]

The assignment of risk-weights to loans qualifying for the class of exposures secured by mortgages on immovable property is governed by more differentiated rules. Moreover, these rules provide for an option to increase the risk-weights, as will be discussed in the next sub-section. A loan receives a risk-weight of 35% if it qualifies as an exposure fully and completely secured by mortgages on residential property.[534] In order to ensure that banks assign the 35% risk-weight only to low-risk loans, four conditions determine whether a loan is fully and completely secured in the sense of art. 124-125 Regulation 575/2013:

1. The value of the house must not materially depend upon the credit quality of the borrower.[535] This excludes the possibility to assign the low risk-weight to mortgage loans in some cases of speculative house prices, not based upon fundamentals. However, this phrase is vaguely worded, and might lead to questions in borderline cases.
2. The risk and debt repayment capacity of the borrowers may not materially depend upon the underlying house and cash flows generated by it, coming, for instance, from letting or selling it. Instead, it must depend on other sources of income. Banks are obliged to set LTI limits for these other sources, and to obtain suitable evidence of relevant income.[536] No specific LTI limits are prescribed. This condition must guarantee the soundness of lending policies and capital ratios, by preventing high-risk lending to borrowers who cannot afford a house.[537] Banks may derogate from this condition, if the relevant competent authority has shown evidence of very low loss rates.[538] Although this condition provides banks with some guidance to develop sound lending policies, the phrase "not materially depend" is vague and creates leeway for circumvention.
3. The part of the loan to which the 35% risk weight is assigned, is not allowed to exceed a loan-to-value ratio of 80%.[539]

[533] Basel Committee on Banking Supervision (2015), p. 10; Basel Committee on Banking Supervision (2014c), pp. 13-14.
[534] Art. 125(1) Regulation 575/2013. Residential property is defined as 'a residence which is occupied by the owner or the lessee of the residence' (art. 4(75) Regulation 575/2013).
[535] Art. 125(2)(a) Regulation 575/2013. Purely macroeconomic factors that affect both the house value and the performance of the borrower may be excluded from an assessment whether the value of the house is dependent on the credit quality of the borrower.
[536] Art. 125(2)(b) Regulation 575/2013.
[537] The best-known example of the kind of lending that is prohibited by this condition is sub-prime mortgage lending: households with a sub-prime mortgage could not afford their house, but the lender speculated on the rising value of the collateral, the house.
[538] Art. 125(3)-(4) Regulation 575/2013.
[539] Art. 125(2)(d) Regulation 575/2013.

4. The valuation requirements of art. 208 and 229(1) CRR for the collateral (the home) must be satisfied.[540] Art. 208 CRR contains criteria on, among other things, the legal enforceability of the mortgage, on documentation, as well as on monitoring the house value. According to art. 229(1) CRR, the house value must be determined by an independent valuer at or at less of either the market value or the mortgage lending value. Then, it must be documented in a transparent and clear manner. The mortgage lending value is the prudent value of the house, taking into account its long-term sustainable aspects, while disregarding speculative elements.[541] This valuation method can only be used in member states that have laid down rigorous criteria for the assessment of the mortgage lending value in statutory or regulatory provisions.[542] The EBA will develop regulatory technical standards for specifying these rigorous criteria, but has not yet done this.[543] These valuation requirements provide some safeguards against circumventing the LTV requirements by inappropriate valuation, but are still rather vague. Moreover, while the mortgage lending value prevents that banks calculate actual LTV ratios with the use of (substantially) overvalued house prices, the market value does not offer this protection.

If not all conditions are satisfied, a mortgage loan is not fully and completely secured and a risk-weight of 100% applies.[544] However, the part of the loan exceeding a LTV ratio of 100% must receive the risk weight applying to the unsecured exposures of the counterparty involved.[545] If the borrower is the counterparty, this is the 75% risk-weight applying to retail exposures. This creates the strange situation that a risk-weight of 100% is assigned to the part of the loan with a LTV ratio between 80% and 100%, but a risk-weight of only 75% to the part above a LTV ratio of 100%. However, a bank can avoid the risk-weight of 100% by assigning the part of the loan with a LTV ratio above 80% to the class of retail exposures. A bank is namely allowed to assign any part of the loan to another exposure class, provided

[540] Art. 125(2)(c) Regulation 575/2013.
[541] Art. 4(74) and 229(10) Regulation 575/2013. The former provision defines the mortgage lending value as 'the value of immovable property as determined by a prudent assessment of the future marketability of the property taking into account long-term sustainable aspects of the property, the normal and local market conditions, the current use and alternative appropriate uses of the property'. The market value is defined as 'the estimated amount for which the [immovable] property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without being under compulsion (art. 4(76) CRR).
[542] Art. 229(1) CRR. It is unclear, due to the wording of art. 124(1) CRR, whether banks are even allowed to use the market value under the Standardised Approach (cf. European Banking Authority (2015b), pp. 5-6).
[543] Art. 124(4) Regulation 575/2013. The EBA has issued an opinion to the Commission to ask clarification about certain issues, and waits for this clarification before it proceeds: European Banking Authority (2015b).
[544] Art. 124(1) Regulation 575/2013. Note that the terminology in art. 124(1) and art. 125(1)-(2) might cause confusion. Art. 124(1) uses the term 'fully secured' and art. 125(1)-(2) 'fully and completely secured'. Reading these articles in their context reveals that 'fully secured' means that the LTV ratio does not exceed 100%, whereas "fully and completely secured" means that the four conditions of art. 125(2) are satisfied.
[545] Art. 124(1) Regulation 575/2013.

that the conditions for that exposure class are met. By allowing loansplitting, the EU is non-compliant with the Basel standards, which explicitly forbids this.[546]

This discrepancy will be solved if the proposed amendments to the Basel standards will become law, since they do not allow for assigning mortgage loans to the category of retail exposures.[547] Moreover, in these proposals, actual LTV ratios will play an important role in determining risk-weights, because the LTV ratio is considered as the most appropriate risk driver, by best predicting the losses incurred in case of a default.[548] Loans with a lower LTV ratio are also less likely to become non-performing.[549] In the first instance, the BCBS intended to use the DSTI ratio as well for determining risk-weights, but it later abandoned this idea, because of 'the challenges of defining and calibrating a [DSTI] ratio that can be equitably applied across jurisdictions'.[550] Table 3.2 shows the proposed risk-weights as a function of the actual LTV ratios.[551] A risk-weight will apply to the full loan; loansplitting is not allowed.[552] The proposed risk-weights in the second BCBS proposal for reform are lower than those in the first proposal.[553]

Table 3.2: Proposed risk-weights as a function of the actual LTV ratios

LTV ≤ 40%	40% ≤ LTV < 60%	60% ≤ LTV < 80%	80% ≤ LTV < 90%	90% ≤ LTV < 100%	LTV ≥ 100%
25%	30%	35%	45%	55%	75%

The risk-weight in table 3.2 only applies if various criteria are met; otherwise it will be 100%.[554] These criteria are concerned with, among other things, legal enforceability and hierarchy of claims over the house, documentation, the repayment capacity of the borrower, valuation, and the calculation of the LTV ratio.[555] In order to guarantee that the borrower's repayment capacity is taken into account, national supervisors must ensure that banks use underwriting policies with metrics like DSTI ratios.[556] For calculating the LTV ratio, the 'value of the property will be maintained at the value measured at origination unless national supervisors elect to require banks to revise the property value downward.

[546] Basel Committee on Banking Supervision (2014a), pp. 19, 34.
[547] Basel Committee on Banking Supervision (2015), para. 46 (at p. 33).
[548] Basel Committee on Banking Supervision (2014c), p. 15; Basel Committee on Banking Supervision (2015), p. 13.
[549] *Ibidem*.
[550] Basel Committee on Banking Supervision (2015), p. 13.
[551] Basel Committee on Banking Supervision (2015), para. 54 (at p. 36).
[552] *Ibidem.*
[553] Cf. Basel Committee on Banking Supervision (2014c), para. 38 (at p. 36).
[554] Basel Committee on Banking Supervision (2015), para. 55 (at p. 36).
[555] *Ibidem,* para. 50 (at p. 34).
[556] *Ibidem,* para. 51 (at pp. 34-35).

The value must be adjusted if an extraordinary, idiosyncratic event occurs resulting in a permanent reduction of the property value.'[557] To ensure prudent valuation, the 'value must exclude expectations on price increases and must be adjusted to take into account the potential for the current market price to be significantly above the value that would be sustainable over the life of the loan.'[558] Hence, this proposal for reform will improve safeguards, and is more sensitive to actual risks than the current regime for calculating risk-weights. Also, it will reduce circumvention by prohibiting loansplitting.

Risk-weights of household loans under the IRB Approach

The Internal Ratings Based Approach, under which banks use their own rating-system to calculate risk-weights, was introduced in the Basel II framework because of the conviction that banks were better able to estimate the true counterparty credit risk than the "one-size-fits-all" Standardised Approach.[559] For lending to consumers, this own-rating system is often an application of a bank's credit scoring model.[560] Black (2012) depicts the IRB Approach as a form of meta-regulation, because banks use their own systems to assess risks, but subject to several requirements and conditions.[561] The conditions include that a bank's rating system must provide for a meaningful assessment of debtor characteristics, a meaningful differentiation of risk, and accurate and consistent quantitative estimates of risk.[562] If these requirements and conditions have been met, the competent authorities must permit banks to use the IRB Approach.[563]

Under the IRB Approach all loans to consumers – both secured and unsecured – belong to the class of retail exposures, at least if fulfilling eligibility conditions similar to those of the class of retail exposures under the Standardised Approach.[564] Except for securitised household loans, the risk-weights of retail exposures are calculated with the formula prescribed by art. 154 CRR.[565] Central to this formula are two important indicators: the Probability of Default (PD) and the Loss Given Default (LGD), standing for, respectively, the probability that a counterparty defaults, and the loss incurred in case of a

[557] *Ibidem,* para. 52 (at p. 35).
[558] *Ibidem.*
[559] See e.g. Dragomir (2010), pp. 135-136.
[560] Thomas (2010), pp. 44, 48-49; Sousa et al. (2016), p. 341.
[561] Black (2012), pp. 1045-1046. On the advantages and disadvantages of meta-regulation, see Black (2012), pp. 1045-1046; Akinbami (2013), pp. 19-21.
[562] Art. 144(1) Regulation 575/2013. Other conditions are listed in art. 144-150 and 169-191 CRR.
[563] Art. 143(1) Regulation 575/2013. The EBA shall develop draft regulatory technical standards to specify the assessment methodology that competent authorities shall follow in assessing whether a bank complies with the requirements to use the IRB Approach (art. 144(2) CRR). Cf. Theissen (2013a), pp. 332-336, 454-464.
[564] Art. 147(2)(d) and 147(5) Regulation 575/2013.
[565] Art. 151(1) and 154 Regulation 575/2013. According to art. 151(10) CRR, the risk-weights of securitised household loans are calculated in accordance with the regime of art. 242-270 Regulation 575/2013.

default.[566] Both indicators are estimated by the banks themselves, based upon historical experience and empirical evidence, and subject to certain requirements, such as the obligation to take into account (changes in) lending practices, economic and market conditions, and using data that covers at least five years.[567] However, these requirements lack determinacy, due to their generality. This conclusion fits in with the large variety of risk-weights assigned under the IRB Approach, as reported by the EBA, based upon input and data in December 2012 from 43 banks, active in 14 member states. While the average risk-weight of loans secured by residential mortgages was 15-20%, it varied from 5% in Sweden to 45% in Ireland (10% in the Netherlands, 16% in Germany).[568] The reports of the EBA also reveal considerable variety across Europe of the sensitivity of assigned risk-weights to actual LTV ratios.[569] Although all this can be partly explained by country-specific circumstances, it shows that the IRB Approach grants banks considerable freedom in assigning risk-weights.

The CRR sets input floors for both the PD and the LGD: the estimated PD of a consumer or household loan must at least be 0.03%, while the weighted average LGD for loans secured by residential property must at least be 10%.[570] In 2016, the BCBS published a consultative document, in which it proposed input floors for certain parameters, namely 0.05% and 10% for the PD and LGD, respectively.[571] It also proposed output floors, meaning that risk-weights calculated with internal models under the IRB Approach may not be lower than a certain percentage of the risk-weights prescribed by the Standardised Approach.[572] This should tackle the low level of and diversity in assigned risk-weights, and create a level playing field between banks using the Standardised and IRB Approach.[573] These proposals possess the potential to improve the present rules.

---

[566] The PD is defined as 'the probability of default of a counterparty over a one year period' and the LGD as 'the ratio of the loss on an exposure due to the default of a counterparty to the amount outstanding at default' (art. 4(1)(54) and 4(1)(55) Regulation 575/2013 respectively).

[567] Art. 151(6)-(7), 163-164 and 179-181 Regulation 575/2013. For estimating the PD of highly leveraged obligors, which might include borrowers with a loan with a high LTV ratio, the performance of the underlying assets, i.e. the house, shall be taken into account (art. 180(1)(a) Regulation 575/2013). Furthermore, the estimated LGD must be appropriate in an economic downturn and should take into account a potential inability to seize and liquidate a collateral (art. 181(1)(b) and 181(1)(e) Regulation 575/2013).

[568] European Banking Authority (2013), pp. 11, 16, 96; European Banking Authority (2014a), p. 27. The IRB Approach is used for mortgage loans by all but one of the examined banks.

[569] European Banking Authority (2014a), pp. 19, 24-26.

[570] Respectively art. 163(1) and art. 164(4) Regulation 575/2013. This concerns the weighted average LGD of mortgage loans not benefiting from guarantees from central governments.

[571] Basel Committee on Banking Supervision (2016), p. 6.

[572] *Ibidem,* p. 2; Basel Committee on Banking Supervision (2014b), pp. 4-6.

[573] Basel Committee on Banking Supervision (2014b), pp. 4-5.

Indeed, currently the rules on assigning risk-weights under the IRB Approach cannot effectively contribute to prudent lending policies. Firstly, the requirements that the banks' models need to satisfy are general and vague and, therefore, not determinate. Moreover, the rules leave ample room for banks to shape their lending policies and models of assigning risk-weights. So, their completeness cannot be guaranteed. These conclusions are confirmed in the literature: for instance, Admati (2016) states that internal models allow banks to manipulate risk-weights, and often ignore tail risk.[574] Behn et al. (2016), using German loan-level data, conclude that internal models underestimate default risks.[575] Apparently, this type of meta-regulation does not work.

The rules for assigning risk-weights to household loans can be different – both under the Standardised and IRB Approach – when mortgage guarantees are provided, such as common in the Netherlands for a large group of mortgage loans.[576] If a range of conditions is fulfilled, the risk-weight of the loan – under the Standardised Approach – or the LGD and/or PD value of the loan – under the IRB Approach – can be partly or completely replaced by the risk-weight/value related to the guarantee.[577] Usually this leads to lower risk-weights, because a risk-weight of 0% can be assigned to the part of the loan covered by the guarantee.[578] Risk-weights might become very low, especially if the lender bears the first losses, which in certain situations is the case under the Dutch regimes for mortgage guarantees.[579]

3.1.1.2. Increasing risk-weights for household loans

Three options exist to increase risk-weights in a targeted fashion for household loans, in order to reduce potential losses, or to address systemic risks, such as housing bubbles. This is possible by means of rules enshrined in art. 124 and 164 CRR, Pillar 2 measures, or art. 458 CRR, which lists the so-called national flexibility measures. These options differ in terms of determinacy and completeness.

---

[574] Admati (2016), p. R8. Cf. Alexander (2012), pp. 336, 341; Wolf (2015), pp. 132-133; Mészáros (2013), p. 169; Mariathasan & Merrouche (2014). Cf. sub-section 2.1.1.3.
[575] Behn et al. (2016), p. 32. But see Barakova & Palvia (2014).
[576] For more information about the Dutch mortgage guarantee scheme, see Box 4.1 in sub-section 4.1.1.2.
[577] Allen & Overy (2014) explains the system of unfunded credit risk mitigation, which includes rules on guarantees. Cf. art. 4(1)(57)-(59), 108, 192-194, 201-203, 213, 215 and 233-236 Regulation 575/2013.
[578] Cf. Ernst & Young (2015), pp. 40-41, and answers of the Dutch Minister of Finance to questions asked by a member of parliament, available at http://www.rijksoverheid.nl/bestanden/documenten-en-publicaties/kamerstukken/2014/07/10/antwoorden-kamervragen-ecb-toezicht-en-risicogewichten-nederlandse-hypotheekportefeuilles/antwoorden-kamervragen-ecb-toezicht-en-risicogewichten-nederlandse-hypotheekportefeuilles.pdf (last visited 25 February 2015).
[579] Cf. Box 4.1.

Using art. 124 and 164 CRR to increase risk-weights

Under the Standardised Approach, art. 124(2) Regulation 575/2013 allows setting higher risk-weights than 35% for exposures secured by residential property, with a maximum of 150%. In addition, stricter criteria may be set for the four conditions that determine whether a house is fully and completely secured, and is, hence, eligible for the 35% risk-weight. It is possible to set a lower LTV ratio than 80% as dividing line between the part of the loan that qualifies for the lower risk-weight, and the part that does not. Art. 124(2) CRR explicitly allows increasing risk-weights for all residential property in the member state concerned, or only for one or more property segments. This enables differentiation between regions or price segments. Banks are granted a six-month transitional period to comply with the higher risk-weights or stricter criteria, which makes a countercyclical use of this option it difficult.[580]

Comparably, under the IRB Approach, art. 164(5) CRR allows setting a higher minimum value than 10% for the weighted average LGD for loans secured by residential property, where appropriate on the basis of financial stability considerations. Art. 164 CRR does not (explicitly) allow to differentiate between property segments, nor does it provides banks with a transitional period to comply with the higher minimum LGD value. Unfortunately, the rules of art. 164 CRR are manifestly incomplete, since the LGD value is only one factor determining the ultimate risk-weight, while the CRR does not create options to raise or fix other values. If banks change the PD estimation or other elements of the formula for calculating the risk-weight, the minimum LGD value becomes ineffective.[581]

If authorities in a certain member state use art. 124 or 164 CRR to increase risk-weights or the minimum LGD value, all EU banks are obliged to apply these to loans secured by residential property in that member state.[582] This requirement prevents sidestepping the increased risk-weight by lending from another member state, or by lending through a branch of a credit institution established in another member state. However, increasing the risk-weight and the LGD value by means of art. 124 or 164 CRR has no effect to the extent that this risk-weight or LGD value is replaced by the risk-weight belonging to a mortgage guarantee, i.e. when an unfunded credit mitigation technique is used. This is not true for the other two means of increasing risk-weights, which will be discussed below.

Thus far, no supervisor has set higher risk-weights for household loans for banks using the Standardised Approach. In several member states stricter criteria apply – pursuant to art. 124 CRR –

[580] Art. 124(3) Regulation 575/2013; Ausschuss für Finanzstabilität (2015), p. 25.
[581] European Banking Authority (2014b), p. 37.
[582] Art. 124(5) and 164(7) Regulation 575/2013.

to loans for qualifying as fully and completely secured: in Bulgaria, Croatia, Ireland, Hungary, Malta, Poland, and Slovenia.[583] In Ireland one criterion is stricter than the criteria of art. 125(2) CRR: a LTV ratio of 75% instead of 80% applies for determining which part of the loan qualifies for the 35% risk-weight.[584] The Latvian supervisor is the only supervisor that sets a higher minimum LGD value.[585]

Using Pillar 2 measures to increase capital risk-weights

A competent authority has a broad toolbox at its disposal to address risks discovered during the Supervisory Review and Evaluation Process (SREP), an evaluation of the risks of individual banks, including the risks that a bank poses to the financial system.[586] Among other things, it can require a bank to hold capital in excess of the requirements of the CRR and the CRD IV.[587] Moreover, the CRD IV creates the possibility to apply the SREP and the corresponding measures to a group of banks that have similar risk profiles or pose similar risks to the financial system.[588] So, Pillar 2 measures can be used to address risks related to lending to a certain segment of households.[589] However, the Commission proposal for the amendments of the CRD IV removes the option to apply Pillar 2 measures to a group of banks, or to use them for macroprudential reasons, since Pillar 2 measures are considered non-transparent and potentially conflicting with other macroprudential requirements.[590]

Some conditions are attached to the use of Pillar 2 measures. Most importantly, requiring a bank or group of banks to hold capital in excess of the requirements of the CRR and CRD IV is only allowed when the concerned risk, or elements of it, are not completely covered by the capital requirements of the CRR, which are meant for entirely quantifiable, uniform and standardised elements of, among other things, credit risk.[591] Many risks will always contain elements that are not entirely quantifiable,

---

[583] This information needs to be disclosed (see art. 143(1)(b) Directive 2013/36), and is available at http://www.eba.europa.eu/supervisory-convergence/supervisory-disclosure/options-and-national-discretions and https://www.esrb.europa.eu/national_policy/shared/pdf/overview_macroprudential_measures.xlsx (both last visited 29 August 2015).
[584] Central Bank of Ireland (2014a), p. 22. For determining this LTV ratio, the market value of the property is used (*ibidem)*.
[585] *Supra,* footnote 583.
[586] Art. 97(1)(b) Directive 2013/36. Cf. European Systemic Risk Board (2014a), p. 134.
[587] Art. 104(1)(a) Directive 2013/36.
[588] Art. 103(1) Directive 2013/36. In this regard, it is in particular relevant whether banks pose similar risk to the financial system (see art. 103(1) in combination with art. 98(1)(j) and 97(1)(b) Directive 2013/36).
[589] In fact, the ESRB Handbook on operationalising macroprudential policy explicitly mentions this example: 'capital surcharges through (…) increases in risk weights can be implemented on specific segments of the mortgage market, targeting only new credits or specific high-risk segments such as high LTV mortgages.' (European Systemic Risk Board (2014a), p. 138).
[590] European Commission (2016e), pp. 11, 27-28. It proposes removing art. 103 and adding art. 104a(1) CRD IV.
[591] This is at least what a systemic interpretation of art. 104(1)(a) CRD IV in combination with art. 1 CRR seems to suggest, although these provisions are vague. In addition, art. 104(2)(b) Directive 2013/36 lists various

uniform and standardised, especially systemic risks. Therefore, this condition limits the room to apply Pillar 2 measures to address risks related to lending to households, but does not disable their use: if risks can be covered by increasing risk-weights by means of art. 124 and 164 CRR, taking Pillar 2 measures is not permitted; otherwise it is. Another condition is the obligation to assess the necessity of additional capital requirements.[592]

Apart from these rather vague conditions, a wide discretion is enjoyed when using Pillar 2 measures. No pre-defined boundaries or limits exist for increasing risk-weights.[593] This flexibility allows targeting all kind of risks in a tailor-made fashion. The supervisor can design the measure in a way that minimises the possibilities for circumvention. However, there is no mandatory reciprocity of the measures for banks which are supervised by other competent authorities, as is the case when risk-weights are increased by means of art. 124 and 164 CRR. This creates the possibility of regulatory arbitrage, and hampers the completeness of this option to increase risk-weights. The determinacy of Pillar 2 measures depends on the wording of the concrete measure taken.

Since the Pillar 2 measures are part of a directive, national implementation is required, which is done differently in each of the three member states examined in this study. In the Netherlands, the Pillar 2 measures are implemented on two levels, namely partly by primary law and partly by ministerial decree.[594] In Ireland, Directive 2013/36 is implemented by means of secondary legislation, which closely follows the text of the provisions in the CRDI IV on the SREP and Pillar 2 measures.[595] Germany incorporated the Pillar 2 measures in primary law.[596] Generally, the implementation in these three

occasions in which competent authorities at least shall impose additional capital requirements, including the situation that the concerned risk or elements of it are not covered by the rules of the CRR and CRD IV.

[592] Art. 104(3) Directive 2013/36. Systemic risks and the outcome of the SREP must be taken into account.

[593] Cf. European Systemic Risk Board (2014a), p. 138.

[594] Art. 3:18a and 3:111a Wft contain the basics of the SREP, including the risks that need to be evaluated, and the supervisory powers to take Pillar 2 measures applying to individual banks. The possibility to apply a SREP and the Pillar 2 measures to a group of banks having similar risk profiles or posing similar risks to the financial system is implemented differently: a ministerial decree prescribes DNB to apply art. 103(1) Directive 2013/36 when exercising its prudential tasks (art. 1a of the *Regeling taakuitoefening en grensoverschrijdende samenwerking financiële toezichthouders Wft* (Decree on performance of duties and cross-border cooperation of financial supervisors). Provisions of the CRD IV are implemented in the Wft by means of the Implementatiewet richtlijn en verordening kapitaalvereisten, *Staatsblad,* 2014, 253, available at https://zoek.officielebekendmakingen.nl/dossier/33849/stb-2014-253.html. The ministerial decree is based upon art. 1:24(4) Wft, and is available at http://wetten.overheid.nl/BWBR0032529. The inclusion of this article in the ministerial decree was published in the *Staatscourant,* 2013, No. 35108: https://zoek.officielebekendmakingen.nl/stcrt-2013-35108.html (all last visited 25 July 2016).

[595] See in particular regulations 85, 91 and 92 S.I. 158/2014 (available at http://www.irishstatutebook.ie/2014/en/si/0158.html, last visited at 20 July 2016).

[596] § 10 (3)-(4) KWG (*supra,* footnote 212). The German implantation of the supervisory power to impose Pillar 2 measures is more elaborate than the provisions in the CRD IV itself by providing more guidance on the cases

countries does not lead to noteworthy differences compared to the text of the CRD IV. However, one aspect requires attention: the Dutch and the German implementation do not include the condition that the concerned risk or elements of it are not covered by art. 1 CRR. Consequently, Dutch and German supervisors face fewer restrictions when exercising their powers to adopt Pillar 2 measures: they can opt for Pillar 2 measures in situations where increasing risk-weights by means of art. 124 and 164 CRR would suffice as well.

An elucidating example of a supervisor that used Pillar 2 measures to address risks related to household lending is *Finansinspektionen* (FI), the Swedish competent authority. In May 2013, it set a minimum average risk-weight of 15% for Swedish mortgage loans, applying to all banks that are authorised to use the IRB Approach.[597] The reason for setting this risk-weight floor is that FI judged that the risk-weights that banks assigned to their mortgage loans (on average 5%) by means of their internal models, underestimated the actual credit risks.[598] In May 2014, FI increased this minimum average risk-weight for Swedish mortgage loans to 25%.[599] The additional 10 percent point was added to cover for systemic risks, caused by the high indebtedness of Swedish households, which creates vulnerability to rising interest rates and declining house prices, which in turn might lead to reduced consumption, affecting the whole Swedish economy.[600] FI has set the minimum average risk-weight by means of a Pillar 2 measure instead of exercising the discretion of art. 164 CRR to introduce a minimum LGD value, since the pass-through of a minimum LGD value to the risk-weights depends on banks' internal models and would result in uneven risk-weights.[601]

in and the purposes for which these measures can be used. The KWG provides a non-limitative list of ten cases or purposes when additional capital shall at least be required from banks. This includes the situation that a risk is likely understated, although the capital requirements of the CRR are met (section 10(3)(4) KWG). Also, it can be ordered for the purpose of creating a buffer for adverse economic times (section 10(3)(5) KWG). The KWG explicitly allows using Pillar 2 measures for macroprudential aims (see in particular section 10(4) KWG).

[597] Finansinspektionen (2013a), pp. 25-26.

[598] Finansinspektionen (2013a), pp. 17-18; Finansinspektionen (2013b), p. 2.

[599] Finansinspektionen (2014), pp. 57-58.

[600] *Ibidem,* pp. 52-55.

[601] *Ibidem,* p. 52.

Using national flexibility measures to increase risk-weights

Art. 458 CRR enables taking so-called national flexibility measures for all or a subset of domestically authorised banks.[602] These measures include increasing risk-weights in order to target asset bubbles in the residential property sector.[603]

These measures can only be applied to domestically authorised banks. Designated authorities of other member states are allowed, but not required, to recognise the increased risk-weights, and apply them to branches of banks located in their country operating in the member state which increased the risk-weights (cross-border supply of credit is not explicitly mentioned).[604] Art. 458(8) CRR partly eases the absence of mandatory reciprocity: it allows the member state concerned to 'ask the ESRB to issue a recommendation as referred to in art. 16 Regulation (EU) No 1092/2010 to one or more Member States which do not recognise the measure.' In 2015, the ESRB issued a general recommendation on reciprocity of national flexibility measures (and some capital buffers included in the CRD IV).[605] When an authority adopts a measure, the ESRB adds it to this recommendation, and recommends authorities in other member states to apply the measure to banks supplying services, across borders or through a branch, in that member state.[606] The recommended reciprocity is subject to a *de minimus* threshold: banks with limited exposures in the member state concerned may be exempted.[607] A recommendation of the ESRB is subject to a comply-or-explain principle, so other member states face some pressure to recognise the measure, but are still free to decide otherwise.[608] Hence, this restricted scope of art. 458 CRR creates a gap, enabling leakage.

Until now, only two supervisors have used art. 458 CRR to increase risk-weights for loans secured by residential immovable property: the National Bank of Belgium and the Finnish supervisor.[609] The Belgian central bank imposed a 5 percentage point add-on to the risk-weights for Belgian banks using

[602] Art. 458(1)-(2) Regulation 575/2013. In the Netherlands, DNB is designated as authority for taking national flexibility measures (art. 3:66 Wft; *supra* footnote 979). In Ireland, the Central Bank of Ireland is designated as the authority in charge of applying art. 458 CRR (regulation 3 S.I. 159/2014, available at http://www.irishstatutebook.ie/2014/en/si/0159.html, last visited at 25 July 2016). In Germany, BaFin is authorised to apply national flexibility measures (section 6(1) KWG; *supra,* footnote 596).
[603] Art. 458(2)(d) Regulation 575/2013.
[604] Art. 458(5) Regulation 575/2013. Art. 458(6)-(7) regulates some procedural issues for this recognition.
[605] Recommendation C in section 1 of European Systemic Risk Board Recommendation 2015/2 of 15 December 2015, OJ 2016, C 97/9.
[606] See e.g. European Systemic Risk Board Recommendation 2016/4 of 24 June 2016, OJ 2016, C 290/1.
[607] Art. 2(1) in section 2 of European Systemic Risk Board Recommendation 2015/2.
[608] Art. 16 Regulation 1092/2010.
[609] See https://www.esrb.europa.eu/national_policy/other/html/index.en.html and https://www.eba.europa.eu/documents/10180/657547/EBA-Op-2014-02+Opinion+on+measures+to+address+macroprudential+or+systemic+risk.pdf (both last visited 25 July 2015).

the IRB approach, while the Finnish supervisor imposed a minimum level of 10% for the average risk weight on housing loans for banks using the IRB approach. The Dutch supervisor reciprocated the measure for branches of banks that provide mortgage loans to Belgian households, whereas the French supervisor reciprocated it for loans of French banks secured on Belgian houses.[610]

3.1.1.3. Evaluating the determinacy and completeness of sectoral risk-weighted capital requirements

The discussions in the previous sub-sections revealed that the rules of the Standardised Approach are reasonably determinate and complete, albeit that certain conditions are somewhat vague, as discussed in section 3.1.1.1. This concerns especially the unspecified requirement for banks to use LTI ratios, and the possibility to switch between exposure classes in order to obtain favourable risk-weights. The latter problem will be solved if the proposed amendments to the Basel standards becomes EU law. Moreover, the rules will then become more sensitive to actual risks and LTV ratios. Hence, the proposed amendments have to be welcomed. Also, the possibility to increase risk-weights based on art. 124 CRR is mostly complete, due to the possible differentiation and the mandatory reciprocity, which prevents regulatory arbitrage between member states. However, an important caveat is the problem that banks can freely choose to assign loans to the class of retail exposures. So, *de facto* an increase of risk-weights above 75% - which is the risk-weight for retail exposures – is ineffective.[611] Moreover, the increase does not affect exposures benefitting from mortgage guarantees.

On the contrary, the requirements of the IRB Approach are too general and vague, and thus indeterminate. Furthermore, internal models often underestimated default risks.[612] Moreover, the possibility to require a minimum LGD value is incomplete, since other parameters for calculating the risk-weights are uncovered. This problem can be addressed by setting a minimum risk-weight floor or a risk-weight add-on by means of respectively Pillar 2 and national flexibility measures. However, the problem with these two options is that reciprocity is not mandatory (and the possibility to use Pillar 2 measures for macroprudential reasons is removed in the proposed amendments to the CRD IV[613]).

[610] See https://www.esrb.europa.eu/national_policy/other/html/index.en.html, www.esrb.europa.eu/pub/pdf/other/150107_DNB_notification_of_Belgium_reciprocity.pdf and http://www.esrb.europa.eu/pub/pdf/other/2016-03-18_haut_conseil.pdf?c1dc47ad6ecd45bc5fd2a60cea315b8e (all last visited 25 July 2015).
[611] Ausschuss für Finanzstabilität (2015), p. 9.
[612] Cf. sub-section 3.1.1.1.
[613] *Supra,* footnote 590.

The completeness of these rules depends not only on these rules themselves, but also on the scope of the CRR and CRD IV, which is limited to credit institutions and investment firms. Hence, not all possible lenders are subject to these rules: for instance, insurance undertakings are not. Although insurance undertakings are subject to other capital requirements, based upon the Solvency II Directive,[614] this legal act does not provide for increasing risk-weights of capital requirements, and contains no explicit macroprudential instruments.[615] Secondly, the definition of a credit institution excludes some semi-bank lenders from the scope of the CRR and CRD IV, such as lenders that do not take deposits from the public, but from professional parties, for instance, "shadow banks".[616] This creates the possibility of regulatory arbitrage. In the Netherlands, banks are reducing their portfolio of mortgage loans on their balance sheet, due to increased capital requirements, while insurance undertakings and pension funds are increasing the amount of mortgage loans on their balance sheets.[617] Thirdly, the material scope of the rules governs bank capital, instead of household loans. Hence, the effect of capital requirements on lending depends on a transmission mechanism. Effects can leak away, as shown in figure 3.1, which depicts the transmission channels of increased sectoral risk-weighted capital requirements.[618]

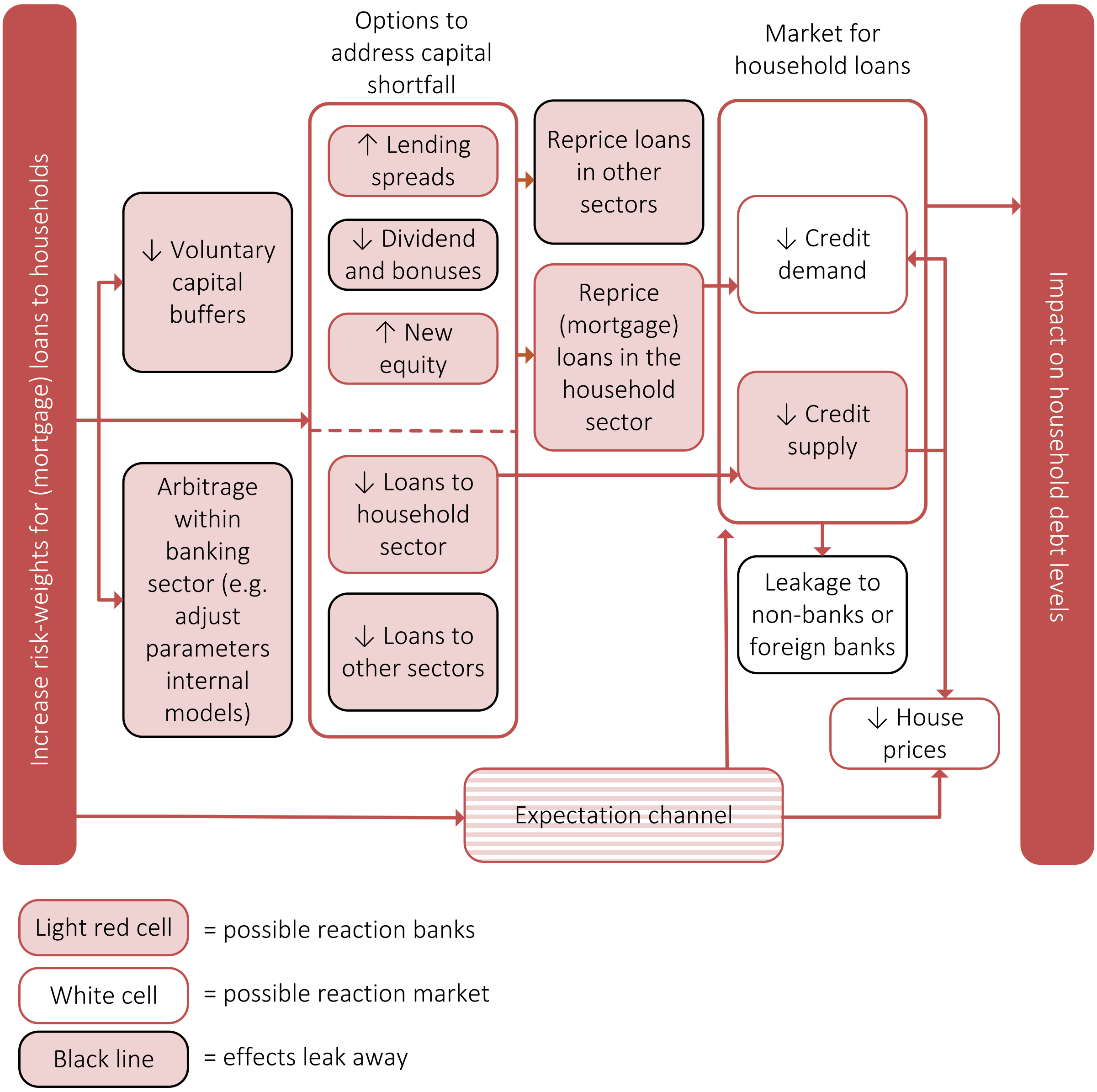
Figure 3.1 shows the various possible responses of banks to an increase in risk-weights for (mortgage) loans to households. It has no impact on lending to households, if banks reduce the capital buffer which they hold in excess of the minimum requirements or try to circumvent the increase – for instance, by adjusting their internal models used under the IRB Approach. Alternatively, banks can pick one or more of the five listed options to address the need for extra capital. Some of these responses – lending spreads or raising equity – lead to repricing of loans to the household or other sectors. This affects the demand for credit by households. However, insofar as non-household loans are repriced, the effect of increasing the risk-weights on lending to households leaks away.[619] Banks can also reduce the amount of household loans or other loans on their balance sheet, which leads to curtailed credit supply.[620]

---

[614] Directive 2009/138 of the European Parliament and of the Council of 25 November 2009, OJ 2009, L 335/1. Cf. art. 191 of Commission Delegated Regulation 2015/35 of 10 October 2014, OJ 2015, L 12/1.
[615] European Systemic Risk Board (2016b), p. 22. Still, although not explicitly meant for macroprudential use, art. 37 Directive 2009/138 enables supervisors to set a capital add-on for an insurance or reinsurance undertaking, after the supervisory review process, in order to address certain risks.
[616] Theissen (2013a), pp. 176, 188 (cf. pp. 178-184). Cf. Theissen (2013b), pp. 151-161.
[617] Battes (2015b).
[618] Based upon Figure 3.1 in European Systemic Risk Board (2014a) and Graph 3.1 of Committee on the Global Financial System (2012). For a general discussion of transmission and potential spillover mechanisms with respect to macroprudential instruments, see European Central Bank (2015a), pp. 124-133.
[619] This reduces credit demand in these other sectors, which is not shown in this figure (but see Figure 3.1 in European Systemic Risk Board (2014a) and Graph 3.1 of Committee on the Global Financial System (2012)).
[620] The latter effect is not shown in this figure, but see Figure 3.1 in European Systemic Risk Board (2014a) and Graph 3.1 of Committee on the Global Financial System (2012).

Insofar as credit supply to other sectors is reduced, the aim of the increased risk-weights is impaired. In addition, effects of increased risk-weights on credit supply and demand may partly be offset by leakage to the non-banking or foreign banking sector. Finally, this figure shows the interaction with house prices and the working of the expectation channel. The latter means that banks and the market might already anticipate expected increases of risk-weights: so, the measure can have effect before being implemented.[621]

Figure 3.1: Transmission channels of increased risk-weights for (mortgage) loans to households



[621] European Systemic Risk Board (2014a), p 53; Committee on the Global Financial System (2012), pp. 21-22. Cf. Grace et al. (2014), p. 94.

The situation in the Dutch mortgage market demonstrates how increased risk-weights can be transmitted. As a response to higher risk-weights, Dutch banks, especially Rabobank, removed mortgage loans from their balance sheets.[622] They also expect to increase lending rates in the future.[623] Furthermore, more credit is supplied by entities which are subject to lower or no capital requirements, such as shadow banks, insurance undertakings and pension funds.[624]

Therefore, an increase in sectoral risk-weighted capital requirements will probably have effects on household debt levels, but part of the effect will – most likely – be lost due to the transmission process. The final effect on household debt levels partly depends on the legal possibilities to minimise circumvention and leakage. The extent to which leakage occurs, remains an issue for empirical research.

3.1.2. The countercyclical capital buffer and the leverage ratio

3.1.2.1. The countercyclical capital buffer

The countercyclical capital buffer (CCB) – included in the CRD IV[625] – is an additional capital buffer on top of existing capital requirements, with a rate between 0% and, normally, 2.5% of a bank's total amount of risk-weighted exposures.[626] If the CCB is set above zero, a bank needs to hold additional capital for all its assets in the respective member state, not only specifically for household loans. The buffer is meant to protect the banking sector from periods of excessive credit growth, while leaning against the build-up of excessive credit is a positive side effect.[627] So, the CCB is not intended to manage debt levels in general, nor household debt levels in particular. However, when the causes of increasing household debt levels are those underlying a (general) credit boom, activating the CCB helps to counteract soaring household debt levels.

The magnitude of the CCB is based upon the credit cycle, and the presence of risks arising from excess credit growth.[628] Especially deviations from a member state's long-term credit-to-GDP ratio, but also

[622] Het Financieele Dagblad (2016), Keuning (2016), De Horde (2016).
[623] Lalkens & Bökkerink (2015).
[624] Koelewijn (2015), Battes (2015b), Battes & Bökkerink (2015).
[625] Art. 130, 135-140 and 160 Directive 2013/36. The buffer applies at both individual and consolidated level (art. 130 Directive 2013/36).
[626] Art. 136(4) and 130(1) Directive 2013/36.
[627] Basel Committee on Banking Supervision (2010), p. 1. Cf. recital 80 of the preamble of Directive 2013/36.
[628] Art. 136(2) Directive 2013/36.

changes in other indicators, underlie decisions on setting the countercyclical capital buffer.[629] The CCB may be set higher than 2.5% if justified by the long-term credit-to-GDP ratio and other indicators.[630] When a supervisor increases the CCB rate, it shall simultaneously set the date at which banks need to comply with the increased rate.[631] The standard and maximum term for compliance is one year, but a shorter deadline may be 'justified on the basis of exceptional circumstances'.[632] Although a bank will probably start with increasing capital before the deadline, this long compliance period might seriously impede the effectiveness of the CCB, and hurts its countercyclical working.[633] A reduction of the CCB rate can take immediate effect, and the supervisor shall indicate a non-binding period in which no increase is expected.[634] After a supervisor has taken a decision, the rules are likely determinate for the banks, but prior to that, it might not be completely clear whether the rate will be increased, although banks can partly predict it, based upon the credit-to-GDP ratio.[635]

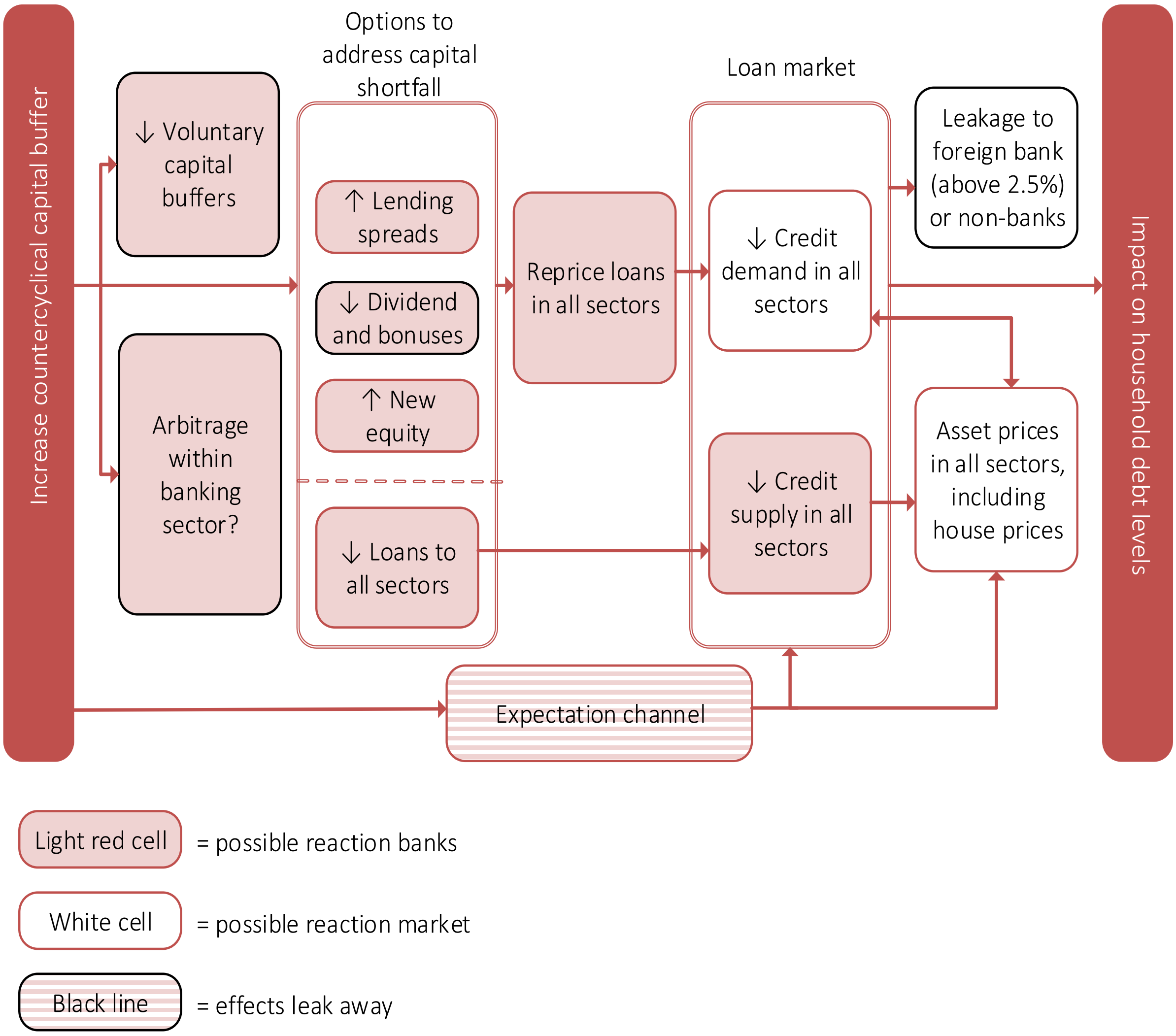
Up to a rate of 2.5%, a countercyclical capital buffer set in a member state automatically applies to all exposures ofEU banks in that member state. This reduces the room for regulatory arbitrage. Above 2.5% reciprocity is not mandatory, but depends on recognition by the national supervisors.[636] If a supervisor does not recognise the CCB in another member state above the rate of 2.5%, banks shall apply a rate of 2.5%.[637] If a bank operates in various member states, it shall hold a CCB which is a weighted average of the countercyclical capital buffers in each member state.[638] Small and medium-sized investment firms can be exempted from holding a CCB if this does not threaten financial stability.[639] A decision to exempt these investment firms needs to contain their exact definition.[640] This is the only exception to the CCB, which is relatively limited. All in all, the rules are fairly complete.

Transitional provisions apply to the maximum countercyclical capital buffer from 2016-2018: in these years, the maximum rate is respectively 0.625%, 1.25% and 1.875%.[641] Member States can opt for a

[629] Art. 136(2)(a) Directive 2013/36.
[630] Art. 136(4) Directive 2013/36.
[631] Art. 136(5) Directive 2013/36.
[632] *Ibidem.*
[633] Cf. McDonnell (2013), pp. 137-138.
[634] Art. 136(5) Directive 2013/36.
[635] Cf. sub-section 3.3.2.1.
[636] Art. 137 Directive 2013/36.
[637] Art. 140 Directive 2013/36.
[638] Art. 130(1) and 140(1) Directive 2013/36.
[639] Art. 130(2) Directive 2013/36. On the definition of investment firms, see Box 3.1. Whether an investment firm is small or medium-sized is determined in accordance with Recommendation 2003/361/EC (art. 130(4) Directive 2013/36.
[640] Art. 130(2) Directive 2013/36.
[641] Art. 160 Directive 2013/36.

shorter transitional period, but neither the Netherlands, nor Ireland and Germany have done so.[642] Also for other aspects, the implementing legislation in these three member states contains no relevant differences with the provisions on the CCB in the CRD IV.

Figure 3.2: Transmission channels of increasing the countercyclical capital buffer



[642] Then, the application of the higher rates by foreign banks is not mandatory, but subject to recognition of the shorter transitional period by their supervisor (art. 160(6) Directive 2013/36). The Netherlands implemented the provisions on the CCB in primary and secondary law, in art. 3:62a Wft (*supra,* footnote 594) and art. 105 and 105b *Besluit prudentiële regels Wft* (available at http://wetten.overheid.nl/BWBR0020420). Ireland implemented these provisions by means of regulations 115-116, 118-120, 125-128 S.I. 158/2014 (*supra,* footnote 595). Germany implemented these provisions in sections 10d and 64r KWG (*supra*, footnote 596), as well as in the sections 33-36 *Solvabilitätsverordnung* (BGBl. I, 2013, 4168, available at http://www.gesetze-im-internet.de/solvv_2014).

The transmission mechanisms of an increased rate of the countercyclical capital buffer – as shown in figure 3.2[643] – are largely comparable to those of increased risk-weights for household loans. Yet, a first important difference is that the CCB is not specifically targeted at household loans. Therefore, the effect of an increase of the CCB rate on household loans depends on how the bank obtains the required additional capital, which not necessarily results in adjusting the price and/or the supply of household loans. In addition, figure 3.2 confirms that the CCB cannot appropriately be used if there is only excessive credit supply in the household sector and not in other sectors, since this would lead to negative side effects to these other sectors. An advantage of the CCB, compared to the options to increase risk-weights for household loans, is that regulatory arbitrage within the banking sector is more difficult, because the CCB is a broad measure, and reciprocity is mandatory up to a rate of 2.5%. Yet, it should be noted that this does not cover non-banks.

The CCB is based upon the system of risk-weighting by requiring banks to hold an additional buffer vis-à-vis their risk-weighted exposures. Consequently, if banks assign very low risk-weights to household loans by means of their internal models, the CCB will barely have effect. To be effective in this sector, it might be necessary to complement the use of the CCB with measures that create a minimum risk-weight floor.

3.1.2.2. The leverage ratio

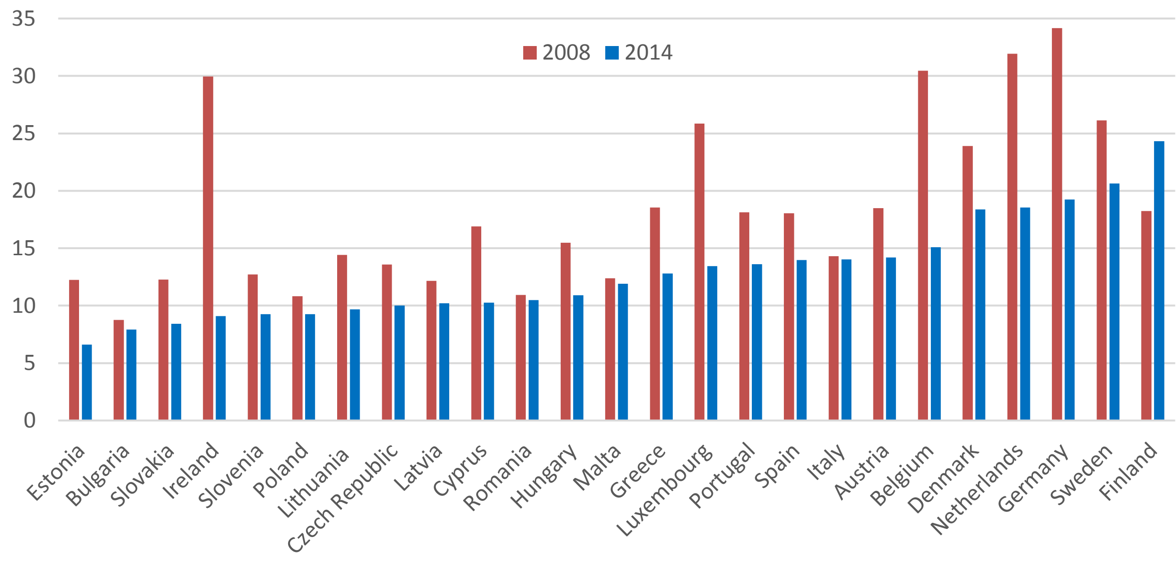
Apart from complementing the CCB with minimum risk-weights, supervisors can use another instrument, the leverage ratio. This tool does not build on risk-weights, either these applying under the Standardised Approach, or those set by banks' own models, which are criticised in the literature for being flawed and vulnerable to manipulation.[644] Instead, the leverage ratio requires banks to hold a minimum level of Tier 1 capital for their unweighted exposures.[645] As the ESRB clarifies, 'in a framework with both a leverage ratio and risk-weighted requirements, banks with low average risk weights will be constrained by the leverage ratio, while banks with high average risk weights will be constrained by the risk-weighted requirement.'[646] A harmonised EU-wide minimum leverage ratio is

[643] Figure 3.2 is based upon Figure 2.1 in European Systemic Risk Board (2014a) and Graph 3.1 of Committee on the Global Financial System (2012).
[644] Admati (2016), p. R8; Alexander (2012), pp. 336, 341; Wolf (2015), pp. 132-133; Mészáros (2013), p. 169. Cf. European Systemic Risk Board (2015), pp. 13, 24.
[645] Art. 429 Regulation 575/2013, as replaced by art. 1 Commission Delegated Regulation 2015/62 of 10 October 2014, OJ 2015, L11/37 (adopted based upon art. 456(1)(j) CRR). Cf. Schoenmaker (2015), pp. 477-478.
[646] European Systemic Risk Board (2015), p. 15. Cf. Wolf (2015), p. 243; Kiema & Jokivuolle (2014), p. 250.

expected to be in place as of 2018.[647] Its effect will depend on its exact level; currently there are large differences in the average leverage of banks in EU member states, as shown in graph 3.1.[648] Currently, banks are only required to disclose their actual leverage, but not to meet a binding requirement.[649]

The leverage ratio and its transmission channels exhibit a lot of similarities with the CCB and its transmission channels. Comparable to the CCB, the leverage ratio can be used to address overall credit expansion, but it is not suitable to restrict lending towards only one sector, such as the household sector. A notable difference is that the leverage ratio, if correctly calibrated, can be expected to be more restrictive than a CCB, because it is not based upon on banks' own risk-weights.[650] On the contrary, the absence of mandatory reciprocity increases the risk of leakage for the leverage ratio. The leverage ratio is not explicitly countercyclical.

Graph 3.1: Average leverage of banks (total assets / total equity)



[647] Recital 18 (and 93) of the preamble of the CRR. Cf. European Systemic Risk Board (2015), p. 10; European Central Bank (2015b), p. 122.
[648] Graph 3.1 is based upon data from the Statistical Data Warehouse of the ECB: http://sdw.ecb.europa.eu/browse.do?node=9689428 (retrieved 5 July 2016).
[649] Only the UK already implemented the leverage ratio for some banks. See https://www.esrb.europa.eu/national_policy/other/html/index.en.html (last visited 17 September 2016).
[650] As the European Systemic Risk Board (2015) writes: 'Compared with risk-weighted capital requirements, leverage requirements have a more dampening effect on credit growth during credit booms when risk weights tend to fall, reducing the probability and severity of adverse shocks.' (p. 31).

3.1.3. The use of LTV ratios in funding-based instruments

Since banks need to fund all credit which they extend, linking LTV ratios with eligibility for certain types of funding provides banks with incentives to reduce loan-to-value ratios. The main types of funding for mortgages are deposits, covered bonds, mortgage-backed securities (MBS), and wholesale funding. In a system of deposit-financed lending – the traditional means of funding mortgage lending – the originator (mortgage lender) issues deposits to finance the loans.[651] In a securitised mortgage system, lending is financed by so-called mortgage-backed securities (MBS). This is the most complex system of financing, in which up to several thousand mortgage loans are packed together in a MBS to disperse risks.[652] A MBS often exists of several tranches, varying in seniority of their claims on the cash flow from the pool of mortgage loans.[653] MBS are sold and are, in principle, removed from the originator's balance sheet. In practice, the risks do not completely disappear for the originator, since it often holds some MBS, or provides guarantees.[654] For financing mortgage lending with covered bonds, the originator issues bonds that have been secured on a cover pool with mortgage loans. The mortgage loans remain on the balance sheet of the originator, incentivising him to care about repayments prospects. The buyer of the covered bonds enjoys dual protection: not only a claim on the issuer of the covered bonds, but also a preferential claim on the mortgage loans in the cover pool and their cash flows, if the issuer would become insolvent.[655] Since the mortgage loans function as guarantee for the buyer of the bonds, these mortgage loans must fulfil various requirements and eligibility criteria, including criteria on LTV ratios and property valuation.[656] Wholesale funding is a broad concept that covers various types of funding from other participants on the financial market.[657] In EU legislation and the laws of the examined member states, LTV ratios are applied to only one of these three funding

[651] For a brief summary of the advantages and disadvantages of deposit-financed lending in terms of incentives to manage risks, see Campbell (2012), p. 17.
[652] Crotty (2009), p. 566.
[653] The cash flow 'is used first to pay interest and the principal to the tranche with the highest and most senior status; the remaining cash is then used to pay the holders of a second tranche, with lower status; what is left is paid to a third tranche, and so on.' (European Economic Advisory Group (2009), p. 64. Cf. Lehnert (2010), pp. 583-584). So, if borrowers default, less or no money is received from the lowest tranches. For a more extensive introduction to securitisation, see e.g. Marques Ibanez & Scheicher (2010).
[654] Originators often hold MBS, 'as inventory for their MBS distribution business or because bank capital regulation favors these investments.' (Campbell (2012), p. 18. Cf. Crotty (2009), p. 569). Nevertheless, due to the transfer of risks from the originator to the buyer of the securities, problems with information asymmetries and incentives appear (cf. Mian & Sufi (2015), pp. 101-103).
[655] European Commission (2006), p. 45; Avesani (2007), p. 4. Cf. Spangler & Werner (2014), p. 2. Commonly, an individual covered bond has no claim on an individual mortgage loan, but on the whole pool (Avesani (2007), p. 4; European Commission (2006), p. 25). The originator 'must replenish the collateral pool when individual mortgages in the pool default.' (Campbell (2012), p. 18-19).
[656] Campbell (2012), p. 18-19; Avesani (2007), p. 4.
[657] For an introduction to wholesale funding, see Beau et al. (2014).

systems, namely to covered bonds.[658] This already shows that these rules are incomplete in at least one aspect: they can be avoided by using another means of funding.

3.1.3.1. LTV requirements in EU and national covered bonds legislation

The CRR includes rules on assigning risk-weights to covered bonds. Under the Standardised Approach, banks can benefit of a preferential treatment for assigning risk-weights, if certain conditions are fulfilled.[659] One of them is that loans secured on residential property can only serve as collateral for covered bonds up to the lowest of either 'the principal amount of the liens that are combined with any prior liens' and 80 % of the house value.[660] Alternatively, residential mortgage backed securities which are composed of at least 90% of mortgage loans up to a LTV ratio of 80% are eligible as collateral for the cover pool.[661] Because the part of the loan above 80% of the house value cannot serve as collateral for covered bonds, other funding is necessary above this threshold. In addition, houses serving as collateral for the covered bonds must meet the valuation requirements of art. 208 and 229(1) CRR.[662]

National laws may impose additional LTV and valuation requirements. In the Netherlands, the issuance of covered bonds is regulated at three levels, namely by a parliamentary act, a general implementing decree and a ministerial decree.[663] These rules require that for covered bonds backed by loans secured on residential real estate, the value of the mortgage loans up to the LTV ratio of 80% shall be at least equal to the value of the covered bonds.[664] The valuation requirements of art. 208 and 229(1) CRR must be met and the houses serving as collateral must be revalued at least yearly.[665]

---

[658] For an introduction to the regulatory regime for securitisation and covered bonds in the CRR, see Theissen (2013a), pp. 484-507. Note that the European Commission (2015e,f) proposed a new regulation on securitisation, as well as a regulation with amendments of the provisions on securitisation in the CRR.

[659] Art. 129(1),(4)-(5) CRR. The European Commission considers creating a common EU framework on covered bonds: see http://ec.europa.eu/finance/bank/covered-bonds/index_en.htm (last visited 10 August 2016).

[660] Art. 129(1)(d)(i) Regulation 575/2013.

[661] Art. 129(1)(d)(iI) Regulation 575/2013. Cf. EBA (2014c), p. 151. For the rules for the situation when additional guarantees are provided, see art. 129(1)(e) Regulation 575/2013. In addition, art. 129(1) CRR refers to art. 52(4) Directive 2009/65, which imposes some additional requirements.

[662] Art. 129(3) Regulation 575/2013. For a discussion of these requirements, see section 3.1.1.1.

[663] Art. 1:107(3)(n), 3:33a and 3:33b Wft, art. 40d-40k *Besluit prudentiële regels Wft* (*supra,* footnote 642) and art. 20a-20i *Uitvoeringsregeling Wft* (available at http://wetten.overheid.nl/BWBR0020537) (last visited 19 July 2016). For an introduction to the Dutch legislation on covered bonds, see Scheltema (2015).

[664] Art. 40f(2) *Besluit prudentiële regels Wft.* This follows from the obligation to comply with the requirements of art. 129 CRR, as introduced in 2015 (Ministerie van Financiën (2015), p. 2; Scheltema (2015), p. 180) by means of the *Wijzigingswet financiële markten 2015* and the *Wijzigingsbesluit financiële markten 2015*, respectively available at https://zoek.officielebekendmakingen.nl/dossier/33918/stb-2014-472 and https://zoek.officielebekendmakingen.nl/dossier/33918/stb-2014-524 (both last visited 21 July 2015).

[665] Art. 20(d)(4)-(5) *Uitvoeringsregeling Wft.*

In Ireland, covered bonds are named "asset covered securities" and regulated by the Asset Covered Securities Act 2001, the Asset Covered Securities (Amendment) Act 2007 and Statutory Instruments (S.I.) based on these acts.[666] Under this framework, for individual household mortgage loans, any value above a maximum LTV ratio of 75% has to be disregarded for calculating the value of the cover pool.[667] When the total outstanding amount of a mortgage loan falls below 75% of the prudent market value of the house – due to redemption – the maximum amount which is allowed to be included in the cover asset pool is 100% of the amount of the mortgage loan.[668] So, while loans are allowed to exceed a LTV ratio of 75%, the part above this threshold cannot be funded by means of covered bonds. However, the total amount of the mortgage loans of a bank is not allowed to exceed 100% of the prudent market value of the houses.[669]

In Germany, the issuance of covered bonds, called *Pfandbriefe*, is governed by the *Pfandbriefgesetz* (PfandBG), in force since 2005.[670] §§ 12-19 of this act stipulate criteria for the eligibility of loans as cover.[671] § 14 PfandBG rules that it is only allowed to use mortgages as cover up to the first 60% of the mortgage lending value, as established in accordance with § 16 PfandBG. Loans with a higher LTV ratio are not completely ineligible for the cover pool: only the part above this limit is ineligible.[672] The remainder of the loan can be funded through other means. In fact, currently only a small part of issued mortgage loans for German households is secured by covered bonds: in 2014 around 10% of mortgage loans for household issued by German banks.[673] § 16 PfandBG sets the basic conditions for determining the mortgage lending value, which shall be done by a valuer who is not involved in the loan decision.[674] The *Beleihungswertermittlungsverordnung* (BelWertV) (Regulation on the determination of the mortgage lending value), adopted by the Ministry of Finance, in consultation with the Ministry of

---

[666] These acts are available at respectively http://www.irishstatutebook.ie/2001/en/act/pub/0047/ and http://www.irishstatutebook.ie/2007/en/act/pub/0013/ (both last visited 20 July 2015).

[667] Sections 32(8)(b), 32(11) and 32(13)(a) of the Asset Covered Securities Act 2001.

[668] Art. 9 of the Regulatory Notice of the Central Bank of Ireland, adopted on the basis of section 41(1) and 41A(7) of the Asset Covered Securities Act, available at https://www.centralbank.ie/docs/default-source/Regulation/industry-market-sectors/credit-institutions/regulatory-requirements/gns-4-4-3-2-regulatory-notice-(section-41(1)-41a(7)-and-41b)-2008).pdf?sfvrsn=0 (last visited 29 April 2017).

[669] Section 31(1) of the Asset Covered Securities Act 2001 in combination with regulation 3 S.I. 123/2012 (latter available at http://www.irishstatutebook.ie/2012/en/si/0123.html (last visited 21 July 2015)).

[670] The PfandBG, BGBl. I, 2005, 1373, is available at http://www.gesetze-im-internet.de/pfandbg/, whereas an English translation is available via https://www.pfandbrief.de/cms/_internet.nsf/tindex/en_111.htm. For an introduction to the German system of covered bonds, see Spangler & Werner (2014), as well as the website of the *Verband Deutsche Pfandbriefbanken* (VDP) (Association of German Pfandbrief Banks): https://www.pfandbrief.de/cms/_internet.nsf/tindex/en.htm (all last visited 17 July 2015).

[671] For a brief discussion of these criteria, see e.g. Quirk (2010), pp. 1337-1339; Spangler & Werner (2014), p. 7.

[672] Cf. Spangler & Werner (2014), p. 7.

[673] Ausschuss für Finanzstabilität (2015), p. 10.

[674] Section 16(1) PfandBG.

Justice, based upon § 16(4), regulates the details of assessing the mortgage lending value.[675] The mortgage lending value is not allowed to exceed the market value, nor the value resulting from a prudent assessment of the future marketability of the house, when its long-term sustainable aspects are taken into account and speculative elements and temporary value fluctuations are disregarded.[676]

3.1.3.2. Evaluating the determinacy and completeness of the LTV ratios in covered bonds legislation

The LTV requirements imposed by EU and national legislation on covered bonds are determinate: although the rules are certainly technical, they are not vague, ambiguous or general. In itself the rules are complete as well: in all three examined member states, the rules apply to all licensed banks, while banks need a license to issue covered bonds.[677] Moreover, the respective LTV limit in each member state applies to all banks, without exceptions.

However, although the rules are determinate and complete, they are ill-suited for addressing household debt levels. First of all, the LTV ratios are not binding: it is allowed to provide loans with higher LTV ratios, and to issue covered bonds for these loans, albeit that the part above the LTV threshold cannot serve as collateral for the covered bonds. This part can be funded differently. Moreover, the whole loan can be funded via others means.

Nevertheless, these LTV ratios – which determine whether mortgage loans are eligible as collateral for covered bonds – can have some impact, as shown in figure 3.3. Banks face three options when confronted with LTV ratios that limit collateral eligibility for covered bonds. Firstly, they can increase funding through deposits. Then, the effect of the LTV limit will partly leak away. However, often deposits need to be available locally: this might limit mortgage supply.[678] In addition, funding costs are probably higher for deposits than for covered bonds, due to preferential capital requirements and low interest rates for the latter. So, not all effects will leak away. Secondly, banks can choose to constrain lending. Thirdly, banks can create MBS. This type of funding is possibly as cheap as funding with covered bonds. With this option, banks have fewer incentives to take repayment prospects into account – since most risks disappear from their balance sheet. Hence, choosing this option might lead to adverse effects, namely less prudent lending. Nevertheless, notwithstanding all these limitations of

---

[675] The BelWertV, BGBl. I, 2006, 1175, is available at http://www.gesetze-im-internet.de/belwertv/index.html, and an English translation at https://www.pfandbrief.de/cms/_internet.nsf/tindex/en_111.htm (both last visited 17 July 2015).

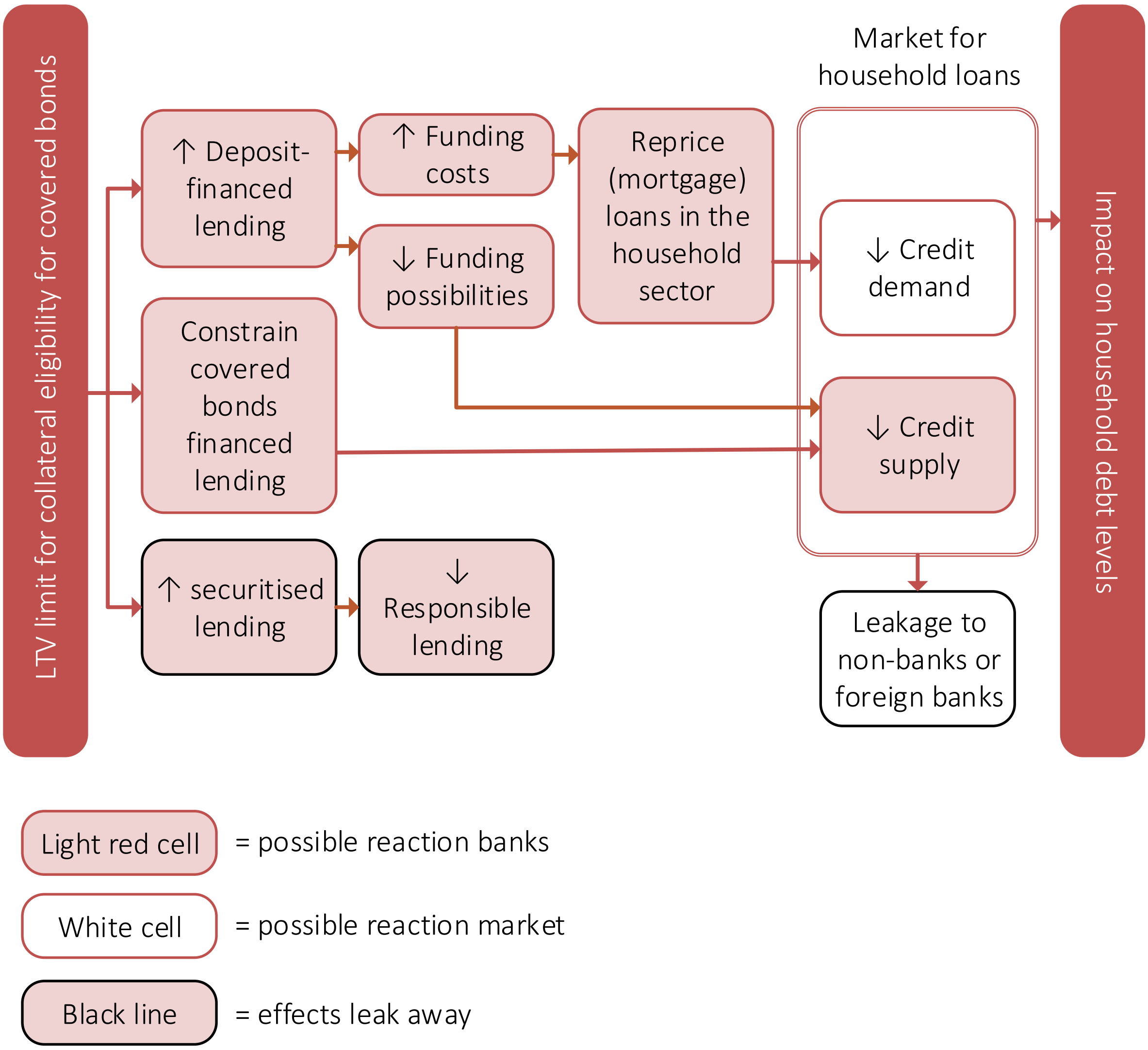
[676] Section 16(2) PfandBG and 3(1) BelWertV. For more details on (determining) the mortgage lending value, see in particular sections 3, 4(1), 4(3)-(4), 14-19, 24 and 26 BelWertV.

[677] NL: art. 3:33a Wft. IE: section 3(1) of Asset Covered Securities Act 2001. DE: sections 1-2 PfandBG.

[678] Campbell (2012), p. 17.

LTV limits on collateral eligibility, they prevent at least that the consequences of household defaults will spread to the holders of covered bonds.

Figure 3.3: Transmission channels of LTV ratios determining collateral eligibility for covered bonds



3.2. The possibility of proportionate and dissuasive enforcement of capital- and funding-based instruments

While the CRD IV contains several requirements for measures to enforce financial regulation, most of the details of the enforcement regime are left to the member states.[679] On top of that, Regulation 1024/2013 grants specific enforcement powers to the ECB for carrying out its tasks within the Single

[679] These requirements are in particular included in Title VIII, Chapter 1, Section IV of the CRD IV, which are the art. 64-72.

Supervisory Mechanism (SSM).[680] The availability of enforcement measures for violations of financial regulation differs between the various national supervisors and the ECB, the most important supervisor within the Single Supervisory Mechanism (SSM). Before discussing the national rules on enforcement, the provisions on enforcement in the CRD IV, as well as the working of and enforcement within the SSM require explanation.

3.2.1. Rules on enforcement in EU legislation

3.2.1.1. Basic requirements on enforcement in the CRD IV

Directive 2013/36 contains several general and specific requirements on sanctions for breaches of the CRR and the CRD IV. Art. 70 CRD IV seeks to guarantee the proportionality and dissuasiveness of penalties. It obliges member states to ensure that competent authorities must, when imposing sanctions, take into account the gravity and duration of the breach, as well as, among other things, the losses caused by the breach.[681] Furthermore, they must consider recidivism and the financial strength of the offender.

Moreover, the CRD IV contains specific requirements on sanctions, although not particularly for breaching capital requirements. Firstly, member states must provide competent authorities with all necessary powers to intervene in banking activities, including the possibility to withdraw an authorisation and to impose Pillar 2 measures, such as restricting business or requiring banks to hold additional capital.[682] Secondly, when sanctions can be imposed upon a bank due to a breach of a rule of the CRR or CRD IV, member states must ensure that administrative sanctions may be applied to 'the members of the management body and to other natural persons who under national law are responsible for the breach.'[683] Thirdly, publication of administrative sanctions is mandatory if appeal is not possible anymore.[684] The sanction, 'including information on the type and nature of the breach and the identity of the natural or legal person on whom the penalty is imposed'[685], must be published at the official website of the competent authority, without undue delay after having informed the recipient. However, publication must be anonymous, if the stability of the financial markets would otherwise be jeopardised, or if publication would cause disproportionate damage to the legal or

[680] Art. 18 Regulation 1024/2013.
[681] Art. 70 Directive 2013/36.
[682] Art. 64(1) Directive 2013/36.
[683] Art. 65(2) Directive 2013/36.
[684] Art. 68(1) Directive 2013/36.
[685] *Ibidem.*

natural person involved.[686] Finally, art. 67 CRD IV lists some sanctions which at least should be available for certain violations, including fines up to 10% of total annual net turnover and up to twice the profits gained or losses avoided, withdrawal of authorisation, and fines up to € 5 million for natural persons. However, these particular sanctions are not directly linked with violations of sectoral capital requirements.[687]

The CRD IV creates a specific measure for enforcing the countercyclical capital buffer and other buffers: if a bank does not meet the combined requirements of these buffers, member states must impose restrictions on the distribution of capital.[688] In addition, within five days after identifying that it fails to meet these requirements, a bank must submit a capital conservation plan that indicates how the requirements will be met.[689]

3.2.1.2. Enforcement within the Single Supervisory Mechanism

The working of the Single Supervisory Mechanism

The SSM – operational since November 2014 – is a mechanism in which the *execution* of the supervision of credit institutions is shared between the ECB and national competent authorities of participating member states.[690] Participating member states are all the euro area member states, as well as the non-euro area member states that have chosen and were permitted to participate in the SSM by means of 'close cooperation' agreement with the ECB.[691] The latter is provided with the exclusive competence to carry out the listed microprudential supervisory tasks – which are the usual tasks for banking supervision, including enforcement – within the framework of art. 6 of this regulation.[692] Tasks not conferred on the ECB remain with national supervisors.[693] The ECB has the demanding duty to apply both the CRR and national law implementing the CRD IV, as well as the vast amounts of technical standards adopted based upon these acts.[694] This includes applying the national

[686] Art. 68(2) Directive 2013/36.
[687] Art. 67(1) Directive 2013/36.
[688] Art. 141 Directive 2013/36.
[689] Art. 142 Directive 2013/36.
[690] Art. 1 and 4(1) Regulation 1024/2013. Cf. Wymeersch (2014), p. 21. For the date that the SSM became operational, see art. 33(2) Regulation 1024/2013.
[691] Art. 2(1) and 7 Regulation 1024/2013.
[692] Art. 4 Regulation 1024/2013. Cf. Wymeersch (2014), pp. 38-39.
[693] Art. 1 Regulation 1024/2013. Recital 28 lists several tasks not conferred on the ECB.
[694] Joossen (2015) estimates that the technical standards will consists of approximately 6000 pages (p. 121). All the national rules will come on top of this. In addition, at least for Germany, it is argued that there are constitutional problems when the ECB, as an EU institution, applies national law, because it might deprive banks from their rights of an effective remedy under national law (Peuker (2014), pp. 768-769). For applying its tasks, the ECB shall adopt guidelines and recommendations, and take decisions (art. 4(3) Regulation

law detailing the options and discretions as granted by the CRR.[695] The ECB needs to conduct its tasks 'with a view to contributing to the safety and soundness of credit institutions and the stability of the financial system within the Union and each Member State'.[696]

For microprudential supervision, a two-layered system is created, in which the European Central Bank directly supervises banks meeting criteria regarding (i) size, (ii) significance for the economy of a member state or (iii) cross-border activity, as well as at least the three most significant banks in a member state, while national authorities keep supervising the less significant banks, but under guidance of the ECB.[697] Hence, national competent authorities execute part of the supervisory tasks, including enforcement for less significant banks. To guide the supervision by national authorities, the ECB is authorised to issue regulations, guidelines or general instructions setting forth how supervisory decisions are adopted and how the microprudential supervisory tasks that fall within its competence, must be performed.[698] In addition, the ECB may at any time, when necessary to ensure consistent application of high supervisory standards, 'on its own initiative after consulting with national competent authorities or upon request by a national competent authority, decide to exercise directly itself all the relevant powers'[699] for one or more banks that in principle falls under the supervision of this national authority.

Conducting macroprudential policy remains, in the first instance, the task of national supervisors, but the ECB receives some tasks and powers as well.[700] The ECB has no role in the use of macroprudential tools that are not provided for by the CRR and CRD IV. However, when a national supervisor of a participating member state takes a macroprudential measure that is included in the CRR or CRD IV, it must inform the ECB ten working days in advance. The ECB is allowed to provide a reasoned, but non-

10241/2013). Indeed, the ECB has adopted a regulation which sets forth how some options and discretions in the CRR are exercised, but this does not cover the options and discretions relevant for this study. The regulation only applies to significant institutions (art. 1 Regulation 2016/445 of the European Central Bank of 14 March 2016, OJ 2016, L 78/60).

695 Art. 4(3) Regulation 1024/2013.

696 Art. 1 Regulation 1024/2013.

697 Art. 6(3)-(7) Regulation 1024/2013. In addition, the ECB also supervises banks 'for which public financial assistance has been requested or received directly from the EFSF or the ESM', and banks, which must fulfil some conditions related to cross-border activity, which considers the ECB on its own initiative significant (art. 6(4) Regulation 1024/2013).

698 Art. 6(5)(a) Regulation 1024/2013. In 2014 the ECB issued the SSM Framework Regulation, a comprehensive regulation covering these issues: Regulation 468/2014 of the European Central Bank of 16 April 2014, OJ 2014, L 141/2.

699 Art. 6(5)(b) Regulation 1024/2013.

700 Art. 5(1) Regulation 1024/2013.

binding objection within five working days.[701] Moreover, if the ECB deems it necessary, it can apply higher requirements for capital buffers – including the CCB – than the concerned national authority does.[702] If deemed necessary, the ECB can also apply more stringent macroprudential measures that are effectuated at the level of individual banks, in the cases specifically set out in, and in accordance with the procedures of, relevant EU law – i.e. the CRR and CRD IV.[703] So, for credit institutions, the ECB can increase risk-weights by means of art. 124, 164 or 458 CRR or through Pillar 2 measures. When it intends to apply a macroprudential measure, it must closely cooperate with the concerned national designated authorities and inform them ten working days in advance. These authorities are allowed to provide a reasoned, but non-binding objection within five working days.[704]

Enforcement powers of the ECB within the Single Supervisory Mechanism

The European Central Bank is vested with sufficient powers to perform its tasks: for the exclusive purpose of carrying out the tasks conferred on it, the ECB is the competent or designated authority in the participating member states and has all the accompanying powers under EU law, unless provided otherwise by Regulation 1024/2013.[705] Moreover, the ECB is allowed to require national supervisors to use their powers, to the extent necessary for performing its tasks.[706] The regulation lists some particular powers of the ECB as well, which it, thus, can exercise by relying on this regulation instead of on the national transposition of Directive 2013/36.[707] These include enforcement powers, and especially here it becomes complicated.[708]

The European Central Bank receives the usual Pillar 2 supervisory powers, which can be exercised when a bank fails to comply with or is likely to breach requirements of the CRR and CRD IV.[709] Pillar 2 measures are not sanctions, but can be used to dictate compliance. These powers namely include the

[701] *Ibidem.* Art. 5(1) Regulation 1024/2013 states that '[t]he concerned authority shall duly consider the ECB's reasons prior to proceeding with the decision as appropriate.'
[702] Art. 5(2) Regulation 1024/2013.
[703] Art. 5(2) Regulation 1024/2013 allows the ECB to 'apply more stringent measures aimed at addressing systemic or macroprudential risks *at the level of credit institutions*', in accordance with the procedures of the CRR and CRD IV. The position of this adverbial clause in italics creates interpretational difficulties, but, most likely, it intends to limit the scope of the ECB's macroprudential powers to the banking sector, because the ECB received only powers to supervise credit institutions. This interpretation corresponds with comments of the Advisory Scientific Committee of the European Systemic Risk Board (2013), para. 17.
[704] Art. 5(4) Regulation 1024/2013. Regarding dealing with the objection, this article states that '[t]he ECB shall duly consider those reasons prior to proceeding with the decision as appropriate.'
[705] Art. 9(1) Regulation 1024/2013.
[706] *Ibidem.*
[707] Art. 9(1) and 10-18 Regulation 1024/2013. Cf. Wymeersch (2014), pp. 38-39.
[708] Cf. Schneider (2014), Gortsos (2015) and Kraaijeveld & Ter Kuile (2015).
[709] Art. 16 Regulation 1024/2013. Cf. art. 102 and 104(1) Directive 2013/36.

possibility to oblige banks to hold capital requirements in excess of the normal requirements of the CRR and CRD IV, to present a plan for restoring compliance or to use profits to strengthen bank capital, and the possibilities to restrict business and remove management board members who do not fulfil their requirements. The ECB can exercise these powers with respect to the banks it supervises, i.e. the significant banks.

Art. 18(1) Regulation 1024/2013 allows the ECB to impose penalties on banks, subject to several restrictions. Firstly, it exercises its powers only vis-à-vis significant banks, whereas national supervisors are responsible for enforcing financial regulation regarding less significant banks.[710] Secondly, the ECB can only punish violations of directly applicable EU law, meaning the CRR, and not violations of the national implementation of the CRD IV.[711] Hence, the ECB cannot impose a penalty for not meeting the CCB. Thirdly, the European Central Bank cannot sanction individuals.[712] However, the ECB can require national supervisors to use their powers, among other things, to sanction individuals and to enforce national law that implements the CRD IV.[713]

For penalising violations of the CRR by banks, the ECB can use the powers created by art. 18 Regulation 1024/2013, as well as the sanctioning powers that it has acquired through Council Regulation 2532/98, as amended by Council Regulation 2015/159.[714] Consequently, the ECB can punish violations of the CRR and of its own regulations and decisions with fines of up to 10% of a bank's annual turnover, or up to twice the amount of the profits gained or losses avoided.[715] Also, the ECB can inflict periodic penalty payments up to 5 % of the average daily turnover per day of infringement, for a maximum of six months, for violations of its regulations and decisions – but not for violations of the CRR.[716] The imposition of a fine or a periodic penalty payment must always be published on the website of the ECB, without undue delay, whether it has been appealed or not.[717] This obligation goes further than that of art. 68(1) CRD IV, because in the latter case, publication is only mandatory if appeal is not possible anymore. While postponing publication until this moment may hurt the timeliness of the

[710] Cf. art. 134-135 Regulation 468/2014; Schneider (2014), pp. 19-20; Gortsos (2015), p. 27; Kraaijeveld & Ter Kuile (2015), p. 238.
[711] Art. 18(1) Regulation 1024/2013. Cf. Schneider (2014), p. 19; Kraaijeveld & Ter Kuile (2015), p. 233.
[712] Art. 18(5) in combination with recital 53 of the preamble Regulation 1024/2013. Cf. Lo Schiavo (2014), p. 130; Gortsos (2015), p. 27; Kraaijeveld & Ter Kuile (2015), p. 238.
[713] Art. 18(5) Regulation 1024/2013 and art. 134 Regulation 468/2014.
[714] Art. 18(7) Regulation 1024/2013. Art. 120-137 Regulation 468/2014 (the SSM Framework Regulation) repeat and further detail the sanctioning powers of the ECB.
[715] Art. 18 (1) Regulation 1024/2013 and art. 4a(1)(a) Regulation 2532/98.
[716] Art. 4a(1)(b) and 1(6) Regulation 2532/98.
[717] Art. 18(6) Regulation 1024/2013, art. 1a(3) Regulation 2532/98 and art. 132 Regulation 468/2014.

publication and the resulting deterrent effects, it offers more protection of the rights of the offender. Under some circumstances, publication must be anonymous.[718] Another power, exclusively possessed by the ECB for all credit institutions, is the possibility to withdraw authorisation, under some procedural conditions.[719] Still, national authorities can block this withdrawal of authorisation, as long as they remain competent to resolve credit institutions, if withdrawal would prejudice actions necessary for resolution or for maintaining financial stability.[720]

In principle, these powers enable the ECB to enforce the rules of the CRR dissuasively, since threatening fines, which are larger than the obtained benefits, can be imposed, and publication of these fines is mandatory. However, it depends on national law whether and how managers can be sanctioned. Moreover, the ECB is dependent on the cooperation of national supervisors for penalising individuals, for enforcing obligations included in the CRD IV, and for imposing the heavy punishment of withdrawal of authorisation. This creates additional hurdles, and may reduce the likelihood that these sanctions are imposed, which decreases their dissuasiveness. Practice needs to show how cooperation between the ECB and national authorities takes place. The ECB cannot initiate criminal proceedings.[721]

It is possible for the ECB to enforce with proportionate means, because it can impose all kinds of Pillar 2 measures, and can vary the magnitude of the fine.[722] However, the enforcement pyramid seems incomplete, especially when compared to powers under national law, because the ECB lacks non-pecuniary sanctions, and needs to involve national supervisors to impose these. Still, this means that the ECB is able to use such penalties indirectly.

[718] Art. 132(1) Regulation 468/2014 and art. 1a(3) Regulation 2532/98. Cf. art. 68(2) CRD IV; sub-section 3.2.1.1.
[719] Art. 14(5) Regulation 1024/2013 in combination with art. 18(d) Directive 2013/36. Cf. Theissen (2013a), pp. 224-224.
[720] Art. 14(6) Regulation 1024/2013.
[721] Yet, it must, if it with reason suspects that a criminal offence might have been committed, request national supervisors 'to refer the matter to the appropriate authorities for investigation and possible criminal prosecution, in accordance with national law.' (art. 136 Regulation 468/2014).
[722] It is another question of whether actually imposed sanctions are proportionate.

3.2.2. Enforcement measures in national law

3.2.2.1. The possibility of proportionate and dissuasive enforcement of capital- and funding-based instruments in Dutch law

In the Netherlands, the Wft provides the prudential supervisor, DNB, with several administrative powers to enforce financial legislation.[723] Some of these powers have also been granted to the ECB, when acting as supervisor within the SSM. Most available sanctions are of administrative nature, but lenders who violate rules related to capital requirements can face criminal sanctions as well. Apart from resorting to enforcement measures, DNB can take Pillar 2 measures, such as restricting business or requiring banks to hold additional capital, if a bank does not meet the capital requirements.[724] If a bank does not meet the requirements of the CCB, it must submit a capital conservation plan, which indicates how the requirements will be met, within five working days after identifying that it fails to meet these requirements.[725] DNB can approve this plan, or impose restrictions on the distribution of capital.[726] These measures are no sanctions, but can put pressure on banks to comply with financial regulation.

Administrative sanctions

If DNB intends to impose a sanction, it needs to respect provisions of general administrative law, in particular the general framework for administrative sanctions, as provided by Chapter 5 of the *Algemene wet bestuursrecht* (Awb) (General administrative law act).[727] Art. 5:46(2) Awb applies the principle of proportionality to sanctions, by requiring to tune the magnitude of the fine to the seriousness of the offence, and to other relevant circumstances.[728] Case law shows that relevant circumstances are the duration, character and scale of the offence, as well as the intent, size and financial capacity of the offender. It also matters whether the offender is a reoffender, has harmed consumers, or has obtained an advantage due to the offence.[729]

[723] See chapter 1.4 and 1.5 of the Wft, which lists the enforcement powers of the AFM and DNB.
[724] Art. 3:111a Wft.
[725] Art. 3:62a(3)-(5) Wft and art. 105i *Besluit prudentiële regels Wft* (*supra,* footnote 642). Cf. art. 142 CRD IV.
[726] Art. 3:62a(6) Wft.
[727] The Awb is available at http://wetten.overheid.nl/BWBR0005537.
[728] Art. 5:46(2) Awb. This provision specifically concerns sanctions. See also art. 3:4(2) Awb, which codifies the proportionality principle, as applying to all decisions of administrative organs. Art. 5:46(3) Awb obliges reducing the fine if the offender reasonably shows that special circumstances justify this.
[729] These circumstances are discussed, with reference to case law, in Van Emmerink & Saris (2014), pp. 158-165.

Before using its formal powers, DNB often uses informal measures: a warning letter or a conversation aimed at transmitting the norms.[730] These two measures – which in fact are similar, apart from the form – are a top-down communication that certain behaviour is not allowed, and function as a last warning.[731] These informal measures are neither mentioned in the Wft, nor defined in the enforcement policy of DNB and the AFM, the conduct of business supervisor.[732] Nevertheless, they are implicitly recognised as enforcement instruments in several court cases.[733] At the same time there is no obligation to use these informal measures before taking formal measures, as has been made clear by the District Court of Rotterdam in a case concerning excessive credit supply.[734]

The formal enforcement powers include measures aimed at recovery rather than at punishment. Firstly, an instruction to adhere to a particular line of conduct within a reasonable term can be issued.[735] This power is also provided to the ECB, within its supervisory competences.[736] Secondly, DNB can impose an order for incremental penalty payments. The payment will be forfeited if the violating behaviour does not cease.[737]

Furthermore, DNB can punish the breaching of capital requirements with an administrative fine of the third category, the highest category in the Netherlands.[738] The standard fine for a violation of the third

---

[730] Palm-Steyerberg (2009), p. 44; Voerman & Bast (2011), p. 114; Mein (2015b), p. 274.
[731] Sachse (2013), pp. 395-396.
[732] *Ibidem,* p. 395.
[733] See e.g. Rb Rotterdam 3 September 2008, NL:RBROT:2008:BF1175, *JOR* 2008/274 or *AB* 2008/346 or *RF* 2008/94; Rb Rotterdam 2 July 2009, NL:RBROT:2009:BJ1746, *JOR* 2009/262 or *JONDR* 2009/490; Rb Rotterdam 16 December 2010, NL:RBROT:2010:BP0011, *JOR* 2011/83 or *RF* 2011/27 or *JONDR* 2011/164; Rb Rotterdam 5 April 2007, NL:RBROT:2007:BA3126*, PJ* 2007/76 and CBb 1 April 2008, NL:CBB:2008:BC8271, *PJ* 2008/42 or *RF* 2008/65 or *AB* 2010/142.
[734] Rb Rotterdam 4 May 2011, NL:RBROT:2011:BQ3835, *JONDR* 2011/148, para. 2.12. Cf. Sachse (2013), pp. 404-405.
[735] Art. 1:75 Wft. An instruction should only prescribe the necessary conduct for ceasing the norm-violating behaviour (Palm-Steyerberg (2009), p. 44; Jansen (2013), p. 183).
[736] Art. 1:75(1) Wft.
[737] Art. 1:79(1)(a) Wtf. For a brief explanation of this power, see Palm-Steyerberg (2009), p. 45. This power can only be exercised regarding violations of rules enshrined in or arising from specific provisions listed in the attachment to art. 1:79(1)(a) Wft. Art. 3:57 Wft in combination with art. 59 of the *Besluit prudentiële regels Wft* (Decree on prudential rules Wft) requires banks to upheld the capital requirements of the CRR. For art. 59 Besluit prudentiële regels Wft, see http://wetten.overheid.nl/BWBR0020420/Hoofdstuk10/101/Artikel59. Art. 3:57 Wft is listed in the attachment to art. 1:79(1)(a) Wft: wetten.overheid.nl/BWBR0020368/Bijlage_2. In addition, an order for incremental penalty payments can directly be imposed for violations of the system of assigning risk-weights as stipulated by the CRR, by means of art. 4 and attachment 1 of *Besluit uitvoering EU-verordeningen financiële markten* (Decree execution EU regulations financial markets), which is available at http://wetten.overheid.nl/BWBR0032230 (all last visited 19 July 2016).
[738] Art. 1:80(1)(a) Wft. This power can only be exercised regarding violations of rules enshrined in or arising from specific provisions listed in the attachment to art. 1:80(1)(a) Wft. Art. 3:57 Wft (which requires banks to upheld the capital requirements of the CRR; *supra,* footnote 737) is listed in the attachment to art. 1:80(1) Wft: http://wetten.overheid.nl/BWBR0020368/Bijlage_3. A breach of art. 3:57(1)-(2) Wft can be punished with a

category is € 2.5 million, but this amount can be decreased or increased with a maximum of 50%, if justifiable depending on the severity or duration of the violation. Moreover, it can be increased with a maximum of 50% considering the degree of culpability of the lender.[739] In principle, the maximum fine for violating capital requirements is € 5 million, or, if this amount is higher, a maximum of 10% of a bank's last year's revenue.[740] Also the manager who was responsible for the breach, can receive a fine up to this amount.[741] Breaching the LTV ratios related to covered bonds can be punished with a fine of the second category, with as maximum fine € 1 million.[742] However, in all cases, irrespective of the fine category and the corresponding maximum, the fine can be raised to three times the amount of the obtained benefit.[743]

Various other severe penalties can be applied as well. Firstly, the manager who was responsible for the breach can be prohibited to exercise a function at a bank for maximum a year, with the possibility to extend this prohibition with another year.[744] Both DNB and the ECB are empowered to apply this measure.[745] Secondly, a custodian can be appointed for some or all organs or persons of a bank, if it – partly or completely – fails to comply with an issued instruction.[746] This far-reaching measure can only be taken if the interests of consumers are in severe danger.[747] Finally, withdrawing authorisation is possible if a lender does not, or insufficiently so, comply with an issued instruction relating to its

fine of the third category (cf. art. 1:81 Wft), according to art. 10 of the *Besluit bestuurlijke boetes financiële sector* (Decree administrative fines financial sector), available via: http://wetten.overheid.nl/BWBR0026204 (all last visited 19 July 2016). In addition, administrative fines of the third category can directly be imposed for violations of the system of assigning risk-weights as stipulated by the CRR by means of art. 5(1) and attachment 2 *Besluit uitvoering EU-verordeningen financiële markten* (*supra,* footnote 737). Cf. Van de Vijver (2014).

739 Art. 1:81(2) Wft and art. 2 *Besluit bestuurlijke boetes financiële sector.* The fine can also be adjusted to the offender's financial capacity (art. 4 *Besluit bestuurlijke boetes financiële sector*). These two times 50% of the standard amount can be cumulated, leading to the extreme ends of € 0 and € 5.000.000 (cf. Van Es & Verrest, 2013, p. 106).

740 Art. 1:81(1) and 1:82(1) Wft. However, in case of recidivism within five years, the maximum amount can be doubled (art. 1:81(4) Wft and art. 3 *Besluit bestuurlijke boetes financiële sector*).

741 This is possible, since art. 5:1(3) Awb (*supra,* footnote 727) states that violations can be committed by both legal and natural persons. Cf. point 3 in the explanatory memorandum of the Act for amending the penalty system for financial legislation: https://zoek.officielebekendmakingen.nl/kst-31458-3.html (both last visited 22 June 2015); Bierman et al. (2015), p. 433.

742 Art. 1:81(2) Wft in combination with art. 10 *Besluit bestuurlijke boetes financiële sector.*

743 Art. 1:83 Wft.

744 Art. 1:87 Wft.

745 Art. 1:87(1) Wft. The ECB may apply this measure, insofar as it is the competent to exercise supervision pursuant to art. 4 and 6 Regulation 1024/2013.

746 Art. 1:76(1) Wft.

747 Art. 1:76(2)(c) Wft. The legislator acknowledges the far-reaching impact of a custodian. The legislative history shows that supervisors must use proportionate enforcement instruments, and that a custodian thus must only be appointed if the necessary goal cannot sufficiently be achieved with an instruction, order for incremental penalty payments or an administrative fine (see *Kamerstukken II* 2005/06, 29708, pp. 410-411, as cited in De Vries (2013), p. 285).

operations or its financial situation.[748] This last sanction is not directly related to violating capital requirements, but to the operations or the financial situation of a bank in general. For credit institutions DNB can only propose to the ECB to withdraw authorisation; for other financial institutions, DNB is competent to withdraw authorisation.[749]

In principle, since 2016 any administrative sanction is published after it became irreversible.[750] Prior to 2016, this was only the case for of a fines of the third category and an incremental penalty payments which are forfeited.[751] These two sanctions are still published earlier, namely after five days.[752] However, DNB can opt for delaying a publication, abstaining from publication or for an anonymous publication if otherwise there would be disproportionate damage for the parties concerned, or the stability of the financial system would be endangered.[753] DNB often opts for anonymous publication.[754] Publication is officially not a punitive sanction, but some argue that it has punitive elements, due to the intention to name and shame.[755] Because publication is not an official sanction, it is not surrounded with the same legal procedural safeguards as a sanction. Still, it is possible to start a procedure to object to the publication.[756] Moreover, the imposition of an administrative sanction that is being published is surrounded with safeguards. A supervisor can also name-and-shame a bank that breaches capital requirements by issuing a public warning pursuant to art. 1:94 Wft. A public warning is neither a sanction, nor meant to come in lieu of enforcement.[757] If LTV requirements for covered bonds are breached, it can be mentioned in the register that the bonds do not comply with art. 129 CRR.[758]

Criminal sanctions

Apart from administrative sanctions, banks violating rules related to capital requirements can face criminal sanctions. Criminal sanctions are mainly intended as an *ultimum remedium,* for severe violations, in particular where the offender willingly and knowingly damages the integrity of the

[748] Art. 1:77(1) Wft.
[749] Art. 14(5) Regulation 1024/2013.
[750] Art. 1:97(1)Wft and art. 1:98 Wft. A fine is irreversible if it cannot anymore be challenged for the court (for more on challenging administrative fines, see Voerman & Bast (2011), pp. 118-122). For more about procedural aspects of the administrative fine, see Hartmann (2013), p. 238.
[751] Cf. Russchen & Zwinkels (2017), pp. 291-293.
[752] Art. 1:97(3)-(4) and 1:99(1) Wft.
[753] Art. 1:98 Wft.
[754] Roth (2013), pp. 253-254; Mein (2015a), pp. 237,240-241, 278-279. Cf. Schermer (2012), pp. 466-468; Mein (2015b), pp. 273-274; Beijering-Beck (2012), p. 59.
[755] See e.g. Albers (2014), p. 59. Cf. Beijering-Beck (2012), pp. 63-68; Blomberg (2013), pp. 138-139.
[756] For a discussion of the existing procedural safeguards, as well as their shortcomings, see e.g. Beijering-Beck (2012), pp. 73-108; Aelen (2013).
[757] Cf. Roth (2006); Michiels (2007); Beijering-Beck (2012), p. 58.
[758] Art. 3:33a(3) Wft. Cf. Scheltema (2015), p. 184.

financial system.[759] For other offences, administrative sanctions are considered more efficient, in terms of both time and costs.[760] The so-called *una via*-principle prohibits imposing both an administrative and a criminal sanction for the same offence.[761]

The *Wet op de Economische Delicten* (WED) (Act on Economic Offences) penalises breaches of a range of provisions of the Wft.[762] These include art. 3:57 Wft, which requires banks to upheld the capital requirements of the CRR.[763] It does not include provisions on covered bonds requirements. DNB can report a breach of these requirements to the Public Prosecution Service, which can start proceedings. If intent can be proven, the maximum sanction for breaching rules regarding capital requirements is imprisonment for two years, a community service, or a fine of € 82,000.[764] If conducting this offence has become a habit, the maximum sanctions are imprisonment for four years, a community service, or a fine of € 820,000.[765] If no intent can be proven, the maximum sanction is imprisonment for a year, a community service, or a fine of € 82,000.[766] Other possible sanctions include taking away the benefits of the offence, closing the bank up to a year, or appointing an administrator for three years.[767] However, temporary closing a bank is only realistic if the bank is not systemically important.

The possibility of proportionate and dissuasive enforcement

Proportionate enforcement is possible, since a whole range of enforcement measures is available, from light to severe sanctions.[768] So, the enforcement pyramid can be applied. However, Dutch law grants only some of the enforcement powers to the ECB, which lacks certain instruments in this pyramid, such as the order for incremental penalty payments. Nevertheless, in combination with its

[759] Leliveld (2009), p. 219; Mein (2015c), p. 258.
[760] Hartmann & Kraaijveld (2013), pp. 52-53; Mein (2015c), pp. 257-258.
[761] Art. 5:44(1) Awb (*supra,* footnote 741). Cf. Bierman et al. (2015), p. 433.
[762] Art. 1(2) *Wet op de Economische Delicten* (WED), available at http://wetten.overheid.nl/BWBR0002063. For a discussion of the rationale behind the WED, see De Rijck (2016), and for a discussion of the choice between criminal and administrative sanctions for punishing violations, see Albers (2014) and Mein (2015a), pp. 72-92.
[763] *Supra,* footnotes 737 and 738.
[764] Art. 6(1) and 2(1) WED in combination with art. 23(4) and 23(9) Wetboek van Strafrecht (Criminal Code) (available at http://wetten.overheid.nl/BWBR0001854) and art. I of *Besluit van 10 november 2015 tot wijziging van de bedragen van de categorieën, bedoeld in artikel 23, vierde lid, van het Wetboek van Strafrecht,* available at https://zoek.officielebekendmakingen.nl/stb-2015-420.html. The initial maximum fine of 20,500 can be raised till € 82,000, if the bank profited more than € 5,125 from the offence.
[765] *Ibidem.* The initial maximum fine of 82,000 can be raised till € 820,000, if the bank profited more than € 20,500 from the offence.
[766] *Supra,* footnote 765.
[767] Art. 7-8 WED.
[768] Whether sanctions will be imposed proportionately in individual cases is another question. According to Mein (2015a), DNB takes the severity of the violations into account when deciding to impose a fine, as well as when deciding the magnitude of the fine (pp. 255-277).

powers as granted under EU law, such as the possibility to impose periodic penalty payments, the ECB has almost all enforcement powers at its disposal when supervising Dutch banks, including the possibility to sanction individuals.

Dissuasive enforcement is an option as well, because all conditions are reasonably fulfilled: (1) the most severe sanctions are threatening, (2) financial penalties up to several million euros and up to 10% of annual turnover can be imposed, (3) publication of sanctions, including the administrative fine, is mandatory and (4) both the banks and the individuals can be punished, and (5) the possibility of imprisonment as a sanction of last resort, at the top of the enforcement pyramid, adds to the dissuasiveness of the enforcement regime. Nevertheless, improvements are possible. Most importantly, requiring publication in a manner that reaches consumers will enhance its effectiveness as a naming-and-shaming device, which currently is sub-optimal.[769] In addition, the system can be improved by obliging publication of all sanctions imposed for breaches of capital requirements. In its supervisory strategy of 2014-2018, DNB acknowledges that it can improve its transparency in the publication of sanctions in order to increase general prevention.[770] Moreover, Mein (2015a), who investigated the practice of imposing fines by the two financial supervisors in the Netherlands, found that DNB is reluctant to impose administrative fines for violations of prudential requirements.[771] Generally, it prefers informal enforcements measures, out of fear to damage the working relation with the supervised banks. This reluctance means that the chance that banks actually face fines is relatively low, which might hurt the dissuasiveness of the regime. Nevertheless, according to several lawyers interviewed by Mein (2015a), it seems that the culture within DNB is changing, leading to a more stringent enforcement style.[772]

3.2.2.2. The possibility of proportionate and dissuasive enforcement of capital- and funding-based instruments in Irish law

The Irish competent authority, the Central Bank of Ireland (CBI) can take Pillar 2 measures, such as restricting business, or requiring banks to hold additional capital, if a bank does not meet the capital requirements.[773] If a bank does not meet the requirements of the CCB, it faces restrictions on the distribution of capital, and it must submit a capital conservation plan indicating how the requirements

[769] Cf. Van Erp (2010), pp. 420, 427-429; Van Erp (2011), pp. 289-290, 296: Mein (2015a), pp. 143-144.
[770] De Nederlandsche Bank (2014a), p. 24.
[771] Mein (2015a), pp. 245-247.
[772] *Ibidem,* pp. 253-254.
[773] Regulation 92 S.I. 158/2014 (*supra,* footnote 595).

will be met, within five working days after identifying that it fails to meet these requirements.[774] These measures are not sanctions, but put pressure on banks to comply with financial regulation.

As is common in the Irish regulatory system, the Central Bank of Ireland possesses the power to impose administrative sanctions, but subject to some form of appeal to or review by a court.[775] This construction was not without questions; it has been discussed whether imposing high administrative financial penalties – also called civil penalties or civil financial sanctions – by regulators is constitutionally allowed, or whether their seemingly punitive character would require infliction by a criminal court.[776] However, the Supreme Court allows the imposition of civil penalties, unless certain indicia, which reveal the criminal character of the penalty, are fulfilled, and unless sanctions are excessive and disproportionate in relation to the administrative objective.[777] Hence, administrative sanctions can be imposed by the Central Bank of Ireland, if they are proportionate. All administrative enforcement powers that have been granted to the Central Bank of Ireland, can be exercised as well by the ECB, insofar necessary for performing its function within the SSM.[778]

The Central Bank Act 1942 allows imposing various sanctions on a regulated financial service provider which is committing or has committed a prescribed contravention, such as not complying with capital requirements and LTV limits related to covered bonds.[779] Instead of imposing sanctions, the Central Bank Act 1942 also permits settlement by means of a written agreement.[780] The terms of the

---

[774] Regulations 129-130 S.I. 158/2014.

[775] Law Reform Commission of Ireland (2016), p. 19. Decisions of the CBI can be appealed to the Appeals Tribunal and subsequently to the High Court (sections 33AW and Part VIIA of the Central Bank Act 1942). A consolidated version of the Central Bank Act 1942 is available at http://revisedacts.lawreform.ie/eli/1942/act/22/front/revised/en/html.

[776] Law Reform Commission of Ireland (2016), pp. 19, 22-24.

[777] *Ibidem.* Cf. McGrath (2015), pp. 19-22. On the indicia, see the case *McLoughlin v. Tuite* [1989] IR 82, referring to the indicia as identified in *Melling v. Ó Mathgamhna* [1962] IR 1. These cumulative indicia are that (1) an offence is treated as committed against the community rather than particular individuals, (2) a sanction is inflicted and (3) an element of intention or knowledge (*mens rea*) was demanded. On the required proportionality, see *Registrar of Companies v. Judge David Anderson* [2004] IESC 103.

[778] Art. 3 S.I. 495/2014, available at: http://www.irishstatutebook.ie/2014/en/si/0495.html (last visited 22 July 2015).

[779] According to section 33AQ Central Bank Act 1942, sanctions can be imposed for prescribed contraventions (cf. art. 33AN Central Bank Act 1942) of designated enactments, including the statutory instruments based upon these enactments (section 2 Central Bank Act 1942), and designated statutory instruments. The CRR qualifies as a designated enactment (section 2(2A)(f) Central Bank Act 1942). S.I. 158/2014, which implements the CRD IV, is a designated Statutory Instrument (Schedule 2, Part 2 of the Central Bank Act 1942). The Asset Covered Securities Act 2001 is a designated enactment too (Schedule 2, Part 1 of the Central Bank Act 1942). Imposing sanctions is only possible after an inquiry, or after a regulated financial service provider acknowledged committing the prescribed contravention (sections 33AQ and 33AR Central Bank Act 1942).

[780] Section 33AV Central Bank Act 1942.

settlement agreement may include the imposition of the sanctions provided for in the act.[781] This agreement is binding for both the CBI and the offender.[782]

This act provides for light sanctions such as cautions and reprimands, and the obligation to refund the sum charged for the provision of a service.[783] Also monetary penalties can be imposed; up to € 1 million, if the financial service provider is a natural person, and the greatest of either € 10 million or 10% of the turnover, if the financial service provider is a body corporate or an unincorporated body.[784] Another severe sanction is the suspension of authorisation for up to one year or even a withdrawal of its authorisation.[785] For credit institutions, the CBI can only propose to the ECB to withdraw authorisation, while for other financial institutions, the CBI is competent to withdraw authorisation.[786] The Central Bank (Supervision and Enforcement) Act 2013 added new enforcement measures to the arsenal of the CBI, *inter alia* wide powers to issue a direction in writing to a financial service provider which has failed to comply with, is failing to comply with or is likely to fail to comply with financial services legislation, in order to require certain actions.[787] The act provides a limitative, but comprehensive, list of actions, which the CBI may require a financial service provider to take. This includes the suspension of the provision of any financial service up to 12 months, raising capital or modifying business practices.[788]

[781] Section 33AV(2) Central Bank Act 1942. Cf. Law Reform Commission of Ireland (2016), pp. 29-31; sub-section 3.3.3.
[782] Section 33AV(2) Central Bank Act 1942. Cf. Murphy (2013), p. 257.
[783] Section 33AQ(3)(a)-(b) Central Bank Act 1942.
[784] Section 33AQ(3)(c) and 33AQ(4) Central Bank Act 1942. However, it is not allowed to impose a sanction that likely causes the financial service provider to cease business (section 33AS(1) Central Bank Act 1942).
[785] Section 33AQ(ca)-(cd) Central Bank Act 1942. Note that a specific measure for enforcing the LTV ratios for covered bonds is asking the High Court to prohibit a person to breach these ratios, or oblige a person to comply with these ratios, under the conditions which the High Court deems necessary (section 96 Asset Covered Securities Act 2001).
[786] Art. 14(5) Regulation 1024/2013.
[787] Section 45(1) Central Bank (Supervision and Enforcement) Act 2013, available at http://www.irishstatutebook.ie/2013/en/act/pub/0026/index.html, and a consolidated version at http://revisedacts.lawreform.ie/eli/2013/act/26/front/revised/en/html. This act not only introduced some new enforcement powers, but also significantly changed some existing powers, that are included in the Central Bank Act 1942. Cf. Murphy (2013), pp. 255-256. Financial services legislation includes the CRR (section 3(1) Central Bank (Supervision and Enforcement) Act 2013 in combination with section 2(2A)(f) Central Bank Act 1942). Moreover, section 47(1) Central Bank (Supervision and Enforcement) Act 2013 allows the CBI to apply to the High Court for an order to restrain a natural or legal person from engaging in the conduct that does not comply with financial services legislation.
[788] Section 45(3) Central Bank (Supervision and Enforcement) Act 2013. Some far-reaching directions require prior approval of the High Court, but this is not the case in any of the examples mentioned in the main text, or any direction which is directly relevant for ensuring compliance with capital requirements (section 46 Central Bank (Supervision and Enforcement) Act 2013).

Besides sanctions for banks, the Central Bank Act 1942 provides for the imposition of sanctions on persons in the management of the financial service providers, if they participated in the breach. This includes a caution or reprimand, but also a monetary penalty of maximum € 1 million, and a disqualification from being concerned in the management of a regulated financial service provider for a certain period.[789]

Publication of administrative sanctions is mandatory. Regulation 56 Statutory Instrument (S.I.) 158/2014, which implements the CRD IV, repeats – almost literally – art. 68(1) Directive 2013/36.[790] Hence, publication of any administrative penalty imposed for violating of capital requirements need to be published under the conditions mentioned in that provision, without undue delay after the offender is informed of those sanctions.[791] The Central Bank of Ireland must publish details of violations of LTV limits related to covered bonds which it encounters in an inquiry as well as details of imposed sanctions in a form and manner which it considers appropriate.[792]

All in all, it can be concluded that the measures to enforce capital requirement enable proportionate enforcement by either the CBI or the ECB, because the enforcement pyramid can duly be applied with a range of measures available, from light sanctions as cautions and reprimands, to severe sanctions like fines and the suspension of the right to provide loans.[793] Even though criminal enforcement is not possible for violations of capital requirements, dissuasive enforcement is achievable, since all four conditions for administrative sanctions are largely fulfilled. Indeed, the IMF judges as well that the CBI 'is equipped with sufficient discretionary enforcement powers to address areas of weaknesses in banks or their non-compliance with applicable laws, regulations or supervisory instructions.'[794]

3.2.2.3. The possibility of proportionate and dissuasive enforcement of capital- and funding-based instruments in German law

In Germany, the powers to enforce financial regulation have been included in the *Gesetz über das Kreditwesen* (KWG) (Banking Act).[795] Besides its legal powers, BaFin uses informal contacts and moral

[789] Section 33AQ(5) Central Bank Act 1942. However, it is not allowed to impose a sanction that likely causes the person to be adjudicated bankrupt. (section 33AS(2) Central Bank Act 1942).
[790] *Supra,* footnote 595.
[791] Regulation 56(1) S.I. 158/2014. Note that the sanction itself takes effect only after it becomes final (section 33AW Central Bank Act 1942).
[792] Section 33BC Central Bank Act 1942.
[793] Whether sanctions will be imposed proportionately in individual cases is another question.
[794] International Monetary Fund (2014a), p. 17.
[795] For online access to the KWG, see footnote 212.

suasion as first steps before employing formal and more severe enforcement measures.[796] Also, the KWG provides BaFin, the German competent authority, with several powers to enforce compliance with capital requirements before sanctions are applied. A bank which does not meet the requirements of the combined requirements of the CCB and other capital buffers faces restrictions regarding the distribution of capital, and must submit a capital conservation plan indicating how the requirements will be met, within five working days (with the possibility of an extention to 10 working days) after identifying that it fails to meet these requirements.[797] BaFin can approve this plan, or impose restrictions on the distribution of capital.[798] The KWG also enables BaFin to use Pillar 2 powers to require banks to hold additional capital.[799] Furthermore, according to § 45(1) KWG, a bank can be ordered to take certain measures – mainly prohibitions and limitations – to improve its capital adequacy if its financial position or profitability justifies the assumption that the capital requirements prescribed in art. 92-386 CRR or the imposed Pillar 2 measures will not be met.[800] Imposing such prohibitions or limitations is only possible after the bank has received sufficient time to remedy the shortcomings, unless a foreseeable short-term deterioration of capital must be prevented.[801]

In general, the KWG allows for the use of both administrative and criminal sanctions, but none of the available sanctions for violations of capital- and funding-based instruments are of a criminal nature.[802] None of the sanctions have explicitly been granted to the ECB. The KWG creates a layered system for enforcing the rules for assigning risk-weights to household loans. Firstly, § 6(3) KWG allows BaFin to issue orders to banks and their senior management that are appropriate and necessary to stop violations of regulatory requirements. Secondly, BaFin can impose administrative fines for violations of rules of the KWG and the CRR, albeit not *directly* for a breach of the specific provisions in the CRR that set forth risk-weights – art. 124 and 164 CRR – or the provision implementing the power to impose Pillar 2 measures – § 10(3) KWG.[803] Instead, an intentional or negligent violation of an order pursuant to § 45(1)-(2) KWG, as described in the previous paragraph, is punishable with a fine (but neglecting an order pursuant to § 6(3) KWG is not).[804] The maximum fine is € 200.000, but it can be raised if

[796] As indicated in an interview with an official of BaFin.
[797] § 10i(6) KWG. Cf. art. 142 Directive 2013/36.
[798] § 10i(7)-(8) KWG.
[799] § 10(3) KWG.
[800] § 45(1) KWG.
[801] § 45(5) KWG.
[802] For example, §§ 54-55b KWG provide for criminal sanctions.
[803] Cf. § 56(5) KWG.
[804] § 56(2)(3)(j) KWG. For a brief comment on the required intent or negligence, see Kirchhartz (2013), p. 398. Aside, the English translation of the KWG does not show that intent or negligence is required for a breach.

necessary in order in order to ensure rthat the fine surpasses the benefit of the offence.[805] For legal persons it can be increased to 10% of annual net turnover in the year before the offence or twice the amount of the benefit.[806] Orders and fines that are imposed and legally enforceable, ought to be published without delay on the website of BaFin.[807]

Imposing these fines upon banks is, however, not straightforward, because 'German law, including German banking regulatory law, is based on the concept of sanctioning natural persons for their individual intentional or negligent misconduct.'[808] Although obligations of the KWG address banks, legal entities only can receive fines in a limited number of cases, if evidence suggests misconduct by managing directors or very high-level employees. Relevant for the attribution of breaches of regulatory law to the bank, its owner, representatives and managing directors are the triad of §§ 9, 30 and 130 of the *Gesetz über Ordnungswidrigkeiten* (OWiG) (Act on Regulatory Offences).[809] § 130 OWiG, in combination with § 9 OWiG, enables imposing fines on the owner(s), representatives and managing directors of a bank for not taking sufficient internal measures to ensure compliance with the regulatory requirements.[810] § 30 OWiG enables the attribution of the misconduct of representatives, managing directors, and other employees with controlling powers, such as compliance officers, to the legal entity.[811] The maximum fine for the legal person to which a certain regulatory offence is attributed, is the maximum fine of the regulatory offence (if this is not a criminal offence).[812] The attribution of violations conducted by "normal" employees to a bank can be more difficult.[813] Hence, both the bank itself and its managing directors can receive high fines, but imposing a fine upon a bank might not be

---

[805] § 56(7) KWG and § 17(4) and § 30(3) OWiG (*infra*, footnote 809).
[806] § 56(7) KWG.
[807] § 60b(1) KWG. Uwer & Rademacher (2015) argue that systemic interpretation of this provision in the context of the KWG leads to the conclusion that this publication needs to be seen as punishment, despite its preventive aim, because it is included in the part of the KWG about sanctions (p. 147). They also discuss the question of whether § 60b KWG is in conformity with German constitutional law.
[808] Schneider (2014), p. 22. Cf. Reichling (2013), p. 2233.
[809] Cf. Moosmayer (2012), p. 3014. OWiG, BGBl. I, 1987, 602, is available at http://www.gesetze-im-internet.de/owig_1968/ and last amended at 18 July 2017.
[810] See the discussion of §§ 9 and 130 OWiG in the handbook of Bohnert et al. (2016). Cf. Engelhart (2012), pp. 403-408).
[811] Schneider (2014), p. 22; Engelhart (2012), pp. 376-378, 390-395; Reichling (2013), p. 2233. See also the discussion of § 30 OWiG in the handbook of Bohnert et al. (2016). Note that culpability is a nessarary condition for a regulatory offence, according to § 1(1) OWiG. Cf. § 10 OWiG. The concept *vorwerfbar* in § 1(1) OWiG is similar to the criminal law concept of *schuldfähig* (Engelhart, 2012, pp. 330). In § 30 OWiG, the intent or negligence of the naturel person is attributed to the legal entity: Engelhart, (2012), pp. 376-378. § 59 KWG also applies § 30 OWiG to banks which are established in another member state of the European Economic Area and which provide services in Germany through branches or across borders.
[812] § 30(2) OWiG.
[813] Schneider (2014), p. 22.

easy if the breaches cannot be attributed to senior representatives of the bank. In case of widespread breaches, this will probably not be a problem.

The KWG creates non-pecuniary enforcements measures as well. A special representative can be appointed for taking suitable measures to set up and safeguard a proper business organisation, and for monitoring compliance with orders of BaFin.[814] Ultimately, the senior managers responsible for the violations of the rules on risk-weighted capital requirements can be removed, or the authorisation of a bank can be revoked.[815] A revocation of authorisation is published in the Federal Gazette.[816]

In view of the available sanctions, it can be concluded that proportionate sanctions can be imposed in Germany. It is even required to start with light sanctions before imposing more severe sanctions. Nevertheless, although inducing compliance by means of using the enforcement pyramid is possible the menu of potential sanctions is limited, compared to the Netherlands and Ireland. In addition, escalation is impossible if an order pursuant to § 6(3) KWG is neglected. Hence, there is room to improve the working of the enforcement pyramid. Dissuasive enforcement is possible, since deterrent fines can be imposed, both on individuals and banks, and ultimately the authorisation of a bank can be revoked. Moreover, many sanctions will be published. However, as explained above, inflicting a fine upon a bank migh not be easy in certain instances, which somewhat decreases its deterring effect.

The measures for ensuring compliance with the LTV limit determining eligibility of mortgage loans as cover assets for Pfandbriefe, are included in the PfandBG. Firstly, appropriate and necessary instructions can be given.[817] In addition, in certain situations, among other things, if deficiencies in the assessment of the mortgage lending value are present, a Pfandbrief issuer can be obliged to meet higher requirements than the standard requirements for the cover pool.[818] Moreover, violations of the LTV limit determining eligibility of mortgage loans as cover assets for Pfandbriefe, are a criminal offence, punishable with imprisonment up to a year or a fine.[819] The maximum fine is € 1,000 if the violation is committed by a natural person, and € 10 million if committed by a legal person.[820] As

[814] § 45c(2)(5)-(6) KWG.
[815] §§ 35(2)(6), 36(1) and 36(2) KWG. For credit institutions, BaFin can only propose to the ECB to revoke authorisation; for other financial institutions, BaFin is competent to withdraw authorisation (art. 14(5) Regulation 1024/2013).
[816] § 38(3) KWG.
[817] § 3(1) PfandBG.
[818] § 4(3b) PfandBG.
[819] § 4(7) in combination with § 38 PfandBG. Smola (2014), p. 186; Quirk (2010), p. 1336.
[820] § 17(1) and 30(1)-(2) OWiG.

explained above, managing directors can be fined as well, based on §§ 130 and 9 OWiG. A fine must surpass the benefit of the offence and must, if necessary, be raised above these maximum amounts.[821] If a fine of more than € 200 is imposed upon a bank in a criminal procedure, it is published in the central trade register.[822]

All in all, it is possible to enforce the LTV limit determining eligibility of mortgage loans as cover assets for Pfandbriefe proportionately, with sanctions ranging from instructions to large fines. Still, the sanction menu is somewhat limited, in light of the enforcement pyramid. Dissuasive sanctions can be imposed, because large fines are available, managing directors can be fined, fines imposed upon banks are published, and criminal prosecution is possible.

3.3. Independent application, enforcement and amendment of capital- and funding-based instruments

This section analyses to what extent capital- and funding-based instruments can be applied, enforced and amended independently, and to what extent rules foster the ability and willingness of a supervisor to act. Since supervisors have no powers to adjust LTV ratios for covered bonds, the application of this instrument does not require discussion. The future leverage ratio is not discussed either, because it is not yet known how it will be applied.

All capital-based instruments have a clear legal basis in the CRR or the national legislation implementing the CRD IV, but their policy objectives are not always crystal-clear. Uncertainty about its objective may hamper a swift use of an instrument, among other things, by facilitating inaction and resistance. Art. 124 and 164 CRR have both microprudential and macroprudential aims, and an increase of the risk-weights may be motivated by both microprudential and macroprudential reasons. Yet, the mentioned reasons for increasing risk-weights – loss experience on mortgage loans in the member state, forward-looking immovable property markets developments, financial stability considerations – suggest a primarily macroprudential focus, although some of them can be interpreted microprudentially.[823] For Pillar 2 measures, there is a debate whether it is desirable to take them for macroprudential purposes, which resulted in the proposal to use them only for microprudential

[821] §§ 17(4) and 30(2) OWiG.
[822] § 149 Gewerbeordnung (Industrial Code), BGBl. I, 1999, 202, available at https://www.gesetze-im-internet.de/gewo/. Cf. Reichling (2013), pp. 2233-2234.
[823] Art. 124(2) and 164(5) Regulation 575/2013.

reasons.[824] The policy objective for national flexibility measures – mitigating intensifying systemic risks – is clear, except for its broadness. Finally, it is beyond doubt that the CCB is meant to address systemic risks resulting from excessive credit growth.

The objectives of the instruments correspond with the mandate of the supervisors in charge with applying them, especially in case of DNB, the CBI and the ECB. In the Netherlands and Ireland, the central bank is in charge of increasing the risk-weights and setting the CCB, while BaFin has this responsibility in Germany.[825] The ECB is considered the competent and designated authority as well, for the purpose of exercising its micro and macroprudential tasks within the SSM.[826] Both the ECB and the Dutch and Irish central banks have a mandate that explicitly includes contributing to financial stability.[827] In Germany, the Bundesbank has the main responsibility of monitoring financial stability.[828] BaFin's mandate for banking supervision does not explicitly differentiate between micro- and macroprudential tasks, but the wording of the mandate encompasses macroprudential supervision.[829] However, an explicit macroprudential mandate might help to ensure commitment, if BaFin would be confronted with pressure when implementing macroprudential measures.

Of the various discussed capital-based instruments, the room to act is only constrained for national flexibility measures, because a range of conditions needs to be fulfilled when using this option to raise risk-weights.[830] Firstly, the supervisor intending to increase risk-weights must submit – to the European Parliament, the Council, the Commission, the ESRB and EBA – quantitative or qualitative evidence showing changes in the intensity of a systemic risk, which pose a threat to national financial stability.[831] Furthermore, it must justify why this risk cannot adequately be addressed by means of (1) the procedures of art. 124 and 164 CRR, (2) Pillar 2 measures and (3) a countercyclical capital buffer.[832] So,

[824] Cf. sub-section 3.1.1.2.
[825] For the Netherlands, see art. 1:24, 3:66 and 3:111a Wft. For Ireland, see regulations 4(1), 85, 91 and 92 S.I. 158/2014 and regulation 3 S.I. 159/2014. Fore Germany, see sections 6(1), 10(3) and 10d(3)-(9) KWG. These three supervisors are both the competent and designated authority. According to the CRR and CRD IV, the competent authority decides on increasing the risk-weights by means of art. 124 and 164 CRR and on Pillar 2 measures, while either the competent or the designated authority decides on national flexibility measures, and the designated authority decides on the countercyclical capital buffer.
[826] Art. 9(1) Regulation 1024/2013. For a discussion of the working of the SSM, see sub-section 3.2.1.2.
[827] ECB: art. 127(5) TFEU and art. 1 Regulation 1024/2013. DNB and CBI: see sub-section 1.3.4.2.
[828] Cf. sub-section 1.3.4.2.
[829] § 6(2) and 6(4) KWG.
[830] Art. 458(2) Regulation 575/2013.
[831] Art. 458(2)(a)-(b) Regulation 575/2013.
[832] Art. 458(2)(c) Regulation 575/2013. It also needs to justify why the systemic risk buffer cannot adequately address this risk, but that buffer is not relevant in this example, since it is not meant for targeting excessive credit growth, but for 'long term non-cyclical systemic or macroprudential risks' (art. 133(1) Directive 2013/36).

there is a hierarchy between options granted in the CRR and CRD IV for increasing risk-weights.[833] In addition, the authority must demonstrate that the increased risk-weights are 'suitable, effective and proportionate to address the situation'.[834] Finally, an assessment of the impact of the increased risk-weights on the internal market must be included.[835] By creating obstacles for using national flexibility measures, thes conditions included in art. 458 CRR diminish the room to opt for the possibility to raise risk-weights by means of art. 458 CRR (and reduce the administrative discretion in strict sense). Simultaneously, these conditions create an accountability mechanism between the supervisors on the one hand and EU institutons and bodies on the other hand, especially since the Council can oppose the proposed measures, on a proposal of the Commission, while taking utmost account of the opinions of the EBA and the ESRB.[836]

3.3.1. Operational independence: general issues

The independence of the supervisors to take decisions to use the discussed instruments differs per supervisor and instrument. Nationally, limitations to this independence are mainly related to the role of the government and, in particular, the Minister of Finance. DNB's operational independence with respect to macroprudential policy is impaired, at least formally. DNB is managed by its Governing Board, consisting of the President and three Executive Directors. They are appointed by the government, and can only be dismissed if no longer fulfilling the requirements for the performance of their duties or if being guilty of serious misconduct.[837] For its supervisory tasks, DNB is a non-departmental administrative body, meaning that it is not hierarchically subject to a minister.[838] The Minister of Finance is allowed to ask DNB for information which it needs to assess how DNB applies the Wft.[839] This facilitates holding DNB to account.[840] The minister cannot annul DNB's supervisory

---

833 Cf. European Banking Authority (2014b), pp. 20-21, 56; European Systemic Risk Board (2014b), pp. 7-8, 14-16.
834 Art. 458(2)(e) Regulation 575/2013.
835 Art. 458(2)(f) Regulation 575/2013.
836 See further sub-section 3.3.2.2.
837 Art. 12 Bankwet 1998. Cf. art. 6 Statuten van de Nederlandsche Bank N.V., available at http://www.dnb.nl/over-dnb/organisatie/organisatievorm/index.jsp (last visited 16 July 2016). Since DNB is joint-stock company with the Dutch state as only shareholder, it is not only governed by laws, but also by its statutes.
838 Art. 1:30 Wft. For more on non- departmental administrative bodies, see Van Wijk et al. (2014), pp. 63-65.
839 Art. 1:42 Wft; art. 14 Bankwet 1998.
840 The Minister of Finance uses this information to assess DNB's supervision. Every five years, he must send a report to the parliament for the evaluation of the effectiveness and efficiency of the functioning of DNB and the AFM (art. 39 Kaderwet zelfstandige bestuursorganen). Moreover, if DNB seriously neglects its tasks, the minister can take the necessary measures (art. 1:23 Wft). For a general discussion of the powers of the Ministry of Finance vis-à-vis AFM and DNB, see

decisions, nor has the general power to issue policy rules to DNB.[841] However, the minister can issue policy rules on general and institutional issues, like tasks of and cooperation among supervisors.[842] This may indirectly affect decisions on DNB. Moreover, if DNB adopts generally binding regulations (*algemeen verbindende voorschriften*) which are based on a provision in the Wft, the Minister of Finance has an override mechanism at his disposal.[843] The Minister of Finance is allowed to ask DNB to change these generally binding regulations, if they result in an unreasonable burden for the financial markets. It is not further defined when a burden is unreasonable. If DNB does not change them, the Minister is allowed to replace them by means of a ministerial decree or even repeal them. If DNB uses the macroprudential capital-based instruments of the CRR and CRD IV, this will be in the form of generally binding regulations based on the Wft.[844] As no further conditions or specifications are attached to this power of the Minister of Finance, the use of this override-mechanism is not rule-based. It reduces the operational independence of DNB to decide about the use of these macroprudential instruments. This override-mechanism is one-sided too, meaning that it only can be used if generally binding regulations of DNB are deemed too burdensome, and not if these are too light. This mechanism may increase accountability, by stimulating DNB to justify its actions, and by enabling correction of DNB's actions. However, it may also increase the inaction bias. Until now, there is no actual interference with the regulatory powers of DNB, since the Minister of Finance has never used this override-mechanism.

In Ireland, decisions on increasing risk-weights and setting the CCB are made by the Central Bank Commission, the decision-making body of the CBI.[845] Examining how independent the Central Bank of

---

http://www.parlementairemonitor.nl/9353000/1/j4nvgs5kjg27kof_j9tvgajcovz8izf_j9vvij5epmj1ey0/vjinnc15qsoz/f=/blg312906.pdf (last visited 15 February 2017).

[841] Art. 21 and 22 *Kaderwet zelfstandige bestuursorganen* (Framework act for non-departmental administrative bodies) allow ministers to do this, but these are not applicable to DNB (art. 1:30 Wft). The *Kaderwet zelfstandige bestuursorganen* is available at http://wetten.overheid.nl/BWBR0020495.

[842] Art. 1:25b(1) Wft. This provision was introduced in 2012, because the Minister of Finance desired to improve its supervision on the system of financial supervision. (Ministerie van Financiën (2011), pp. 1, 12-16). According to the explanatory memorandum (https://zoek.officielebekendmakingen.nl/kst-32782-3.html), the minister must consult the financial supervisors before issuing policy rules, and may not use the provision to deal with individual cases or to change open norms in the Wft. The Council of State criticised the introduction of this provision, because of its effects on the independence of the financial supervisors. It stated that the constraining clauses mentioned in the explanatory memorandum, should at least be incorporated in the Wft itself (https://www.raadvanstate.nl/adviezen/zoeken-in-adviezen/tekst-advies.html?id=9718 (both last visited 23 April 2015). Until now, no policy rules have been issued by the Minister of Finance based on this provision.

[843] Art. 1:29 Wft.

[844] See chapters 2-3 *Regeling specifieke bepalingen CRD IV en CRR* (Regulation specific provisions CRD IV and CRR*)*, available at http://wetten.overheid.nl/BWBR0034435/2015-10-15, and the Explanatory Memorandum to chapter 3 of this regulation, published in the *Staatscourant*, 19 december 2013, Nr. 35423, available at https://zoek.officielebekendmakingen.nl/stcrt-2013-35423.pdf (both last visited at 22 April 2017).

[845] Section 18B(1) Central Bank Act 1942.

Ireland can exercise its powers is certainly an exercise of more than only theoretical relevance. Prior to the crisis, Irish financial supervision was characterised by a light-touch approach, without much interference with banks.[846] The supervisory regime during this period has been described in several reports and articles as extremely weak and ineffective, while enforcement was weak as well.[847] Basically, according to Honohan (2010), the Central Bank of Ireland was captured.[848] An extensive inquiry by a Committee of the Houses of the Oireachtas, the Irish parliament, confirmed all these findings.[849] Other authors point as well at capture of the government by interest groups, and the close relationships between the Department of Finance and the CBI.[850] A broad range of reforms has been undertaken, affecting the structure, culture and approach of financial regulation and supervision.[851] In response to the concerns about capture, a deliberate choice was made to appoint "outsiders" to key posts within the CBI concerned with financial regulation.[852] Furthermore, the previously existing mandate of the CBI to promote the financial service industry, which could result in conflicts with its role of supervisor, has been removed.[853] Despite these reforms, the independence of the Central Bank Commission is somewhat impaired, among other things by its composition. Firstly, the Secretary General of the Department for Finance is part of the Central Bank Commission.[854] Secondly, one of the grounds for dismissal of members of this body is relatively vague.[855] The Minister for Finance has the right to do so if he is of opinion that this is necessary or desirable for enabling the Central Bank Commission to function effectively.[856] The resulting influence of the Minister for Finance on the decisions of the Central Bank of Ireland may impede its independence, as also signalled by the IMF – which however did not (yet) observe actual political interference.[857]

---

[846] Whelan (2014), p. 431. Cf. O'Donovan (2016); Scott (2012), p. 63.
[847] Connor et al. (2012), p. 73; Honohan (2010), para 4.36-4.38, 4.46. Cf. Collins (2011); O'Donovan (2016); McGrath (2015), pp. 150, 162.
[848] Honohan (2010), para 1.13. Cf. Regling & Watson (2010), pp. 37-39; Scott (2014), pp. 355-356.
[849] Houses of the Oireachtas (2016), pp. 10-12, 109-147, 158-160.
[850] Byrne (2012), pp. 201-202; Westrup (2012), pp. 72, 77. Cf. Ross & Webb (2012), pp. 15-16; McGrath (2015), p. 110.
[851] For an overview of all the reforms, see Appendix 11 in Houses of the Oireachtas (2016). Cf. O'Sullivan and Kinsella (2013), pp. 12-13.
[852] Scott (2012), p. 71.
[853] Houses of the Oireachtas (2016), pp. 143-146, 433; Collins (2011).
[854] Section 18CA(a) Central Bank Act 1942. The Secretary General is the highest official of the Department of Finance.
[855] This concerns the six to eight other members of this Commission – with in total ten to twelve members – which are appointed and can be dismissed by the Minister for Finance (sections 18CA(b), 24 and 25(3) Central Bank Act 1942). The Governor of the Central Bank is appointed by the Irish President on advice of the government (section 19(1)). The Heads of Central Banking and Financial Regulation are appointed by the Central Bank Commission itself, and require consent of the Minister of Finance (section 25(3)(b)).
[856] Section 25(3)(b) Central Bank Act 1942.
[857] International Monetary Fund (2014a), p. 13.

The independence of BaFin is significantly circumscribed by the legal and technical oversight that the *Bundesministerium der Finanzen* (BMF) (Federal Ministry of Finance) exercises.[858] This means that it 'can formally decide on every single organisational or supervisory operation and every policy-making activity of BaFin.'[859] Specifically, legal oversight means that the BMF can examine the legality of BaFin's decisions, whereas technical oversight entails that the BMF can review whether decisions are appropriate.[860] This legal and technical oversight has been restricted by several principles; lastly revised in 2013.[861] These principles show that providing information is an important aspect of the relationship between BaFin and the BMF. The ministry needs to receive draft versions of regulations and decrees which BaFin intends to issue.[862] In addition, BaFin needs to inform the BMF if it intends to publish a circular (*Rundschreiben*), a non-binding interpretation of law, on an individual regulatory issue which is not at par with regulations, in terms of content and impact. BaFin can only publish it if the BMF does not object within five working days.[863] When intending to change its administrative practice – i.e. the manner of applying financial legislation – in the application of particularly significant supervisory rules, BaFin must notify the BMF; consent can be assumed in the absence of an objection within ten working days.[864] Hence, the BMF is empowered to exercise control over certain important aspects BaFin's work, but it will not be involved in individual supervisory decisions. BMF will not be involved as long as BaFin's announcements on raising risk-weighted capital requirements are on par with regulations, and its supervisory practice is not significantly overhauled.

In practice the oversight by the Ministry of Finance is much less intrusive, due to lack of capabilities, in particular (qualified) staff, as the research of Handke (2012) shows.[865] The IMF concludes that BaFin in

[858] § 2 *Gesetz über die Bundesanstalt für Finanzdienstleistungsaufsicht* (FinDAG) (Act Establishing the Federal Financial Supervisory Authority), BGBl. I, 2002, 1310, available at http://www.gesetze-im-internet.de/findag/, and an English translation at http://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Aufsichtsrecht/Gesetz/findag_aktuell_en.html (both last visited 30 July 2016). There are no issues with appointing and dismissing BaFin Executive Board that might hamper its independence. Its members, the President and four Chief Executive Directors, are appointed by the German federal president, on proposal of the government, and can be discharged similarly, but only for an important reason ('*aus wichtigem Grund*') (§§ 6(1) and 9 FinDAG).
[859] Handke (2012), p. 239.
[860] Forkel (2011), p. 101.
[861] These principles (including an English translation) are available at: http://www.bafin.de/SharedDocs/Veroeffentlichungen/DE/Aufsichtsrecht/Satzung/aufsicht_bmf_bafin.html (last visited 30 July 2016).
[862] Principle IV(1)(a).
[863] Principle IV(1)(b).
[864] Principle IV(1)(c).
[865] Handke (2012), pp. 239-242.

practice is sufficiently independent, and that evidence of interference of BMF with BaFin's supervisory tasks is absent.[866]

Nevertheless, an intervention by the BMF in BaFin's policy cannot completely be excluded under the current legal regime. Dechent (2015) even argues that BaFin's lack of independence is in conflict with requirements in EU law, such as those included in art. 4(4) Directive 2013/36 and art. 19(1) Regulation 1024/2013.[867] Meanwhile, these arrangements also mean that BaFin is hold to account for its actions. Although limited by the aforementioned principles, there still is room for intervention by the BMF, without the need to always offer a justification. Therefore, this mechanism might be improved if the BMF would be required to justify intervention in light of BaFin's mandate and the objective of the proposed action. This will reduce the risk of inappropriate interventions by BMF.

There is another actor involved in deciding about using macroprudential capital-based instruments: BaFin will normally only take major macroprudential decisions after a discussion of the issues in the Financial Stability Committee (see Box 3.2 below), although BaFin can act independently from it.[868] §48t KWG even explicitly states that BaFin can take the national flexibility measures when the Financial Stability Committee has identified changes in the intensity of systemic risks.

The involvement of the Financial Stability Committee in the decision-making process on increasing risk-weights and setting the CCB may increase BaFin's attention for systemic risk and may improve acceptance of macroprudential measures. According to the IMF, FSB and the BIS, the power of macroprudential authorities like the German Financial Stability Committee to issue recommendations with a

> ''comply or explain' mechanism can increase the chance of action being taken and ensures transparency and accountability of the relevant actors, while at the same time maintaining the operational independence of the recipient authority. (…) [It] may also help the recipient authorities to overcome industry opposition or political pressure.'[869]

[866] International Monetary Fund (2011c), pp. 18, 42-43; International Monetary Fund (2016b), pp. 30-31.
[867] Dechent (2015), pp. 769-771. Forkel (2011) is critical as well on the lack of independence of BaFin, albeit from another perspective: he observes a conflict of interest for the BMF, which simultaneously is involved in overseeing BaFin's supervision of the financial sector and borrowing from that financial sector (pp. 101-102). This specific conflict of interests is, however, not particularly relevant for this study on taking regulatory and supervisory measures to restrict lending to households.
[868] As indicated in an interview with an official of BaFin.
[869] International Monetary Fund, Financial Stability Board and Bank for International Settlements (2016), p. 8.

In principle, this is true, but it depends on the design of the 'comply or explain' mechanism. Since decisions in the German Financial Stability Committee about warnings and recommendations require unanimity, the Ministry of Finance can block them. This does not help to overcome political pressure. In a worst-case scenario, the inaction bias may even increase, if BaFin waits for a recommendation of the Financial Stability Committee to act.

Box 3.2. The German Financial Stability Committee

Tasks and powers of the Financial Stability Committee

The Financial Stability Committee has been created at the end of 2012 by the adoption of the FinStabG.[870] Its tasks include (1) discussing the factors relevant to financial stability, (2) strengthening the cooperation between the BMF, the Bundesbank and BaFin in the event of a financial crisis, (3) deliberating on the handling of ESRB warnings and recommendations, and (4) issuing warnings and recommendations on risks which may impair financial stability, as well as measures which it deems suitable and necessary to implement in order to avert these risks.[871] Its warnings and recommendations can be addressed to the federal government, BaFin, or a public agency.[872] Recommendations may be published, and are subject to a comply-or-explain principle. Non-compliance must be must substantiated in detail.

Decision-making in the Financial Stability Committee

The Committee has nine voting members, three representatives of the BMF, the Bundesbank and BaFin, and is chaired by BMF.[873] Decisions on warnings and recommendations and their publication have to be taken unanimously.[874] Since the Bundesbank is responsible for monitoring financial stability and identifying systemic risks, it is allotted the tasks of making proposals to the Financial Stability Committee to issue warnings and recommendations, and evaluating the implementation of the recommendations of the FSC.[875]

The operational independence of the ECB, when performing its functions within the SSM, is guaranteed by the institutional setup of the SSM. With respect to its tasks within the SSM, the Supervisory Board is the key actor for taking decisions, albeit that the Governing Council can object to decisions. The

[870] *Supra,* footnote 212
[871] § 2 FinStabG.
[872] § 3 FinStabG.
[873] § 2(3) FinStabG.
[874] § 2(5) FinStabG.
[875] § 1 FinStabG.

Supervisory Board consists of a Chair, a Vice-Chair, four ECB-representatives and representatives of national supervisory authorities.[876] It decides with simple majority, with one vote per member.[877] Consequently, member states' representatives can dominate decision-making.[878] While Supervisory Board members are required to act independently and objectively in the interest of the EU as a whole,[879] the question remains to what extent national interests influence decisions. Still, the final say is not for the Supervisory Board: it prepares complete draft decisions, which shall be deemed adopted, unless the Governing Council of the ECB objects within 10 days.[880] Voting within the Governing Council is based on a system with rotating voting rights.[881] The ECB, national central banks, and members of the Supervisory Board and the Governing Council may neither take instructions from EU institutions, bodies, offices or agencies, nor from any government of a member state or from any other body.[882] In turn, these actors must respect this.

For its tasks within the SSM, the ECB has reporting obligations towards the European Parliament, the Commission, the Council and the Euro Group, and must respond to questions of the European Parliament and the Euro Group, orally or in writing.[883] The Chair of the Supervisory Board can be requested to participate in hearings op the European Parliament. National parliaments also receive the ECB's annual report, and may pose questions to the ECB. They also 'may invite the Chair or a member of the Supervisory Board to participate in an exchange of views in relation to the supervision of credit institutions in that Member State together with a representative of the national competent authority.'[884] Participation of the ECB in this exchange of views with national parliaments is not mandatory. These mechanisms improve the accountability of the ECB, but do not allow for attaching consequences to its (in)action. Procedures for dismissal of members of the Supervisory Board and the Governing Council which are appointed at EU level are sufficient to ensure independence.[885] Yet, the

[876] Art. 26(1) Regulation 1024/2013. The Chair is a full-time professional with no office at national supervisory authorities, while the Vice-Chair is a member of the Executive Board of the ECB (art. 26(3)).
[877] Art. 26(6) Regulation 1024/2013. In case of a draw, the Chair has a casting vote.
[878] Cf. Tröger (2014), pp. 478-479.
[879] Art. 19 Regulation 1024/2013.
[880] Art. 26(8) Regulation 1024/2013.
[881] Art. 10(2) Protocol 4 On the Statute of the European System of Central Banks and of the European Central Bank and Decision 2008/29 of the European Central Bank of 18 December 2008, OJ 2009, L3/4.
[882] Art. 130 TFEU, art. 7 Protocol Protocol 4 On the Statute of the European System of Central Banks and of the European Central Bank, and art. 19 Regulation 1024/2013.
[883] Art. 20 Regulation 1024/2013, and the Interinstitutional Agreement between the European Parliament and the European Central Bank on the practical modalities of the exercise of democratic accountability and oversight over the exercise of the tasks conferred on the ECB within the framework of the Single Supervisory Mechanism, OJ 2013, L 320/1.
[884] Art. 21 Regulation 1024/2013.
[885] Cf. art. 11(4) Protocol 4 On the Statute of the European System of Central Banks and of the European Central Bank, and art. 26(4) Regulation 1024/2013.

involvement of the Governing Council means that it is not safeguarded that decisions will always be purely taken in the interest of financial stability, since it may object to decisions for monetary policy concerns.[886]

3.3.2. Decision-making procedures, operational independence, and guided discretion

An analysis of the specific decision-making procedures for the instruments will reveal whether the operational independence of supervisors is further restricted, and to what extent guided discretion is used.

3.3.2.1. Ex ante *restrictions on the supervisory discretion*

The EU legislator, the Commission, the EBA, and the ESRB have issued various rules, technical standards, recommendations, and guidelines that guide decision-making on applying the discussed capital-based instruments.

Guided discretion for increasing risk-weights

A few rules restrict and steer the supervisory discretion to use art. 124 and 164 CRR and Pillar 2 measures to increase risk-weights. These rules help to reduce inaction. Firstly, competent authorities must at least annually assess whether risk-weights or LGD values are appropriate, based on (1) loss experience (only mentioned in art. 124 CRR), (2) forward-looking markets developments, and (3) financial stability considerations.[887] This obligation warrants that supervisors take the relevant risks into account. Yet, these factors are still rather general, even if further specified by the regulatory

[886] Cf. Art. 26(8) Regulation 1024/2013; Tröger (2014), pp. 478-479. The merits and demerits of the involvement of the Governing Council have been intensely discussed (see e.g. Beck & Gros (2012), Goodhart (2015); Tridimas (2016), pp. 103-105). Often financial stability – the objective of macroprudential policy – and price stability – the main objective of monetary policy – will coincide. For instance, excessive credit growth is dangerous for both financial and price stability. Since macroprudential and monetary policy can be complementary or mutually reinforcing, their coordination is beneficial to internalise potential spillovers (cf. European Central Bank (2013), p. 107; Constâncio (2014); Galati & Moessner (2013), p. 863). However, objectives can also conflict, for example, when the Governing Council pursues an expansionary monetary policy, but macroprudential policy needs to be restrictive. Then, there is a risk that monetary policy motivations collide with and trump financial stability motivations (cf. Ferran & Babis (2013), p. 266). Note that the ECB has created a platform for the Supervisory Board and the Governing Council to discuss macroprudential issues, the Macroprudential Forum, which unites all members of both bodies (Angeloni, 2016). Also note that an aspect favouring the independence of decision-making by the ECB, compared to decision-making at national level, is the greater difficulty for local interests to capture the ECB (Tröger (2014), p. 495).

[887] Art. 124(2) and art. 164(5) Regulation 575/2013.

technical standards of the EBA, which are currently under consultation.[888] This creates the risk that they will turn out to be meaningless. Nonetheless, the proposed regulatory technical standards will restrict the (administrative and subsuming) discretion of competent authorities somewhat, which helps to avoid inaction and improve the quality of decision-making. Secondly, the supervisor's administrative discretion in strict sense is further restricted by the obligation to raise risk-weights for banks using the Standardised Approach, if the assessment shows that the standard risk-weight of 35% does not reflect the actual risks in one or more property segments.[889] Despite its vagueness, this obligation reduces the inaction bias. However, art. 124 and 164 CRR do not provide for a specific forum to which supervisors have to present their annual analysis and justify their subsequent decision.

For Pillar 2 measures, there is one restriction on the supervisor's administrative discretion in strict sense, namely the obligation that additional capital requirements must be imposed in certain situations, for instance when risks or elements of risks are not covered by capital requirements or capital buffers, or when risks 'are likely to be underestimated despite compliance with the applicable requirements'.[890] Despite its imperative character, this provision is worded in a general manner and is, thus, hardly intrusive for the discretion of the competent authorities. For national flexibility measures, there are restrictions that limit the room for action, as discussed above, but no rules that help to reduce inaction.

[888] Art. 124(4) and 164(6) Regulation 575/2013; European Banking Authority (2015a). According to the standards, financial stability is deemed to be at risk when refraining from increasing risk-weights or minimum LGD values could result in 'a significant decline in the resilience of the financial system or a material disruption in the flow of lending to the economy' (art. 3(1(a), 3(1)(b) and 3(1)(c) proposed regulatory technical standards). Furthermore, for both the Standardised Approach and the IRB Approach, loss expectations must be based upon various factors, including the evolution of the market, actual LTV and DSTI ratios, and taxation systems (art. 2(2) and 5(2)). Under the Standardised Approach, the loss experience must in particular be determined by the ratio of losses stemming from loans up to the 80% LTV ratio over losses stemming from loans up to the 100% LTV ratio (art. 2(1)(a) proposed regulatory technical standards in combination with art. 101(1)(a) and 101(1)(c) CRR). Also, notably, for increasing risk-weights under the Standardised Approach for one or more property segments, competent authorities are required to take certain benchmark percentages regarding the loss expectation into account (art. 4(3) proposed regulatory technical standards).

[889] Art. 124(2) Regulation 575/2013.

[890] Art. 104(2)(e) Directive 2013/36. Moreover, art. 97(1)(b) Directive 2013/36 instructs competent authorities to take into account criteria for identifying and measuring systemic risks. These criteria are either developed by the EBA in consultation with the ESRB, or based on ESRB recommendations (cf. art. 23 Regulation 1093/2010). Currently, these criteria have not yet been developed. Art. 103(2) Directive 2013/36 instructs the EBA to issue guidelines on assessing risks for a group of banks and imposing measures on them, but these have not yet been developed either (if developed, they are only subject to a comply-or-explain principle).

Guided discretion for setting the countercyclical capital buffer

The provisions of the CRD IV, as well as an ESRB recommendation, create guidance for setting the countercyclical capital buffer rate.[891] Decisions on setting the rate of the CCB must be made every quarter, and be based upon an assessment of three aspects:[892]

1. The calculated buffer guide, which is the benchmark buffer rate, a calculated indicator serving as a common starting reference point for taking buffer decisions;[893]
2. Guidance and recommendations of the ESRB;
3. Other relevant variables.

The buffer guide must 'be based on the deviation of the ratio of credit-to-GDP from its long-term trend, taking into account, inter alia'[894] indicators measuring credit growth and changes in the credit-to-GDP ratio. Recommendation 2014/1 of the ESRB leaves supervisors with the choice to calculate the buffer guide in accordance with the guidance of the BCBS, or in accordance with their own methodology.[895] This choice is offered, because the indicator as calculated according to the methods of the BCBS does not perform well in every member state.[896] The ESRB recommendation lists various variables that supervisors must at least use for monitoring whether credit growth is excessive.[897] This includes measures of the private sector debt burden. Moreover, the ESRB recommends supervisors to use indicators for deciding on the rate of the CCB. These must include measures of stress in bank funding markets and general systemic stress.[898]

Although all these indicators must guide the decision-making process of the supervisory authorities, decisions must never be taken automatic, as is also stressed by the ESRB.[899] The indicators need to be assessed and evaluated. The term "guided discretion" is coined to describe this construction, which especially restricts the administrative discretion in strict sense and the subsuming discretion. The latter is restricted by guiding the process of classifying a certain situation as "excessive credit growth" and "a systemic risk". The former is restricted by using the buffer guide as a starting point for decisions on

[891] Art. 135 Directive 2013/36 empowers the ESRB to issue recommendations on various aspects of the CCB, whereas art. 136(2)(b) and 136(3)(b) instruct the designated authorities to take this guidance into account.
[892] Art. 136(3) Directive 2013/36.
[893] Basel Committee on Banking Supervision (2010), pp. 2-3 and Annex 1; European Systemic Risk Board Recommendation 2014/1, Section 1, Recommendation B4 and Section 2, 1(1)(c).
[894] Art. 136(2) Directive 2013/36.
[895] Section 1, Recommendation B4 of European Systemic Risk Board Recommendation 2014/1.
[896] Recital 14 of European Systemic Risk Board Recommendation 2014/1.
[897] Recommendation C of European Systemic Risk Board Recommendation 2014/1.
[898] Recommendation D of European Systemic Risk Board Recommendation 2014/1.
[899] Recital 7 of European Systemic Risk Board Recommendation 2014/1. Cf. art. 136(3) Directive 2013/36.

setting the CCB rate. The provisions in the CRD IV and the ESRB recommendations are relatively general, but provide some direction to supervisors, and thus limit their discretion. These rule-based restrictions can certainly improve the effectiveness of the CCB, by reducing the room for capture, forbearance and inaction. Still, McDonnell (2013) argues that a supervisor possesses too much discretion when applying the countercyclical capital buffer, due to the many indicators to choose from for guiding its decisions and the extensive room for judgment.[900] This creates possibilities to concede to pressure.[901] He advocates a more rule-based manner of applying the CCB: its rate shall in principle be determined by the buffer guide and supervisors can only deviate from it if their decision is accompanied by a public justification.[902] If the buffer guide performs accurately, this will indeed improve the effectiveness of the design.

Publication requirements for the supervisors are in place, and likely add to the effectiveness of the framework of the countercyclical capital buffer. The quarterly set rate of the CCB shall be announced on the website of the supervisor, accompanied with, among other things, its justification, 'the relevant credit-to-GDP ratio and its deviation from the long-term trend', the buffer guide and, if the rate increased, the date at which banks need to comply with the increased date.[903] In addition, the ESRB recommends publishing at least one of the indicators for monitoring whether systemic risk is built up and one of the indicators for deciding on the rate of the CCB.[904] These publication requirements increase the transparency of the decision-making process and may contribute to more effective rules, by limiting the room for unobserved pressure and increasing certainty in the market.

The further use of guided discretion

It varies by supervisor whether a guided discretion mechanism is used on top of the aforementioned required use. DNB monitors several indicators, but does, currently, not use a guided discretion

[900] McDonnell (2013), pp. 132-134. McDonnell (2013) discusses the design of the CCB in the Basel standards and its implementation in the US. Nevertheless, his arguments can be applied *mutatis mutandis* to the EU, since the EU rules are based upon the same Basel standards and the issues discussed by McDonnell are largely comparable to the issues in EU member states. However, a crucial difference is the ESRB guidance and recommendations, which are lacking in the US situation and which restrict the discretion of the supervisory authorities in the EU.
[901] *Ibidem,* pp. 126, 139.
[902] *Ibidem,* p. 134.
[903] Art. 136(7) Directive 20136/36. Other information which needs to be published are, if this is the case, the exceptional circumstances for requiring banks to comply earlier than within 12 months with an increased CCB rate and, if the CCB rate is decreased, an indicative period in which no increase is expected, accompanied with a justification. According to recommendation B6 of European Systemic Risk Board Recommendation 2014/1, supervisors shall publically explain any deviation from their selected methods.
[904] Recommendations C3 and D4 of European Systemic Risk Board Recommendation 2014/1.

mechanism with indicators with predefined thresholds that trigger action or require explanation for taking decisions related to other macroprudential instruments than the CCB.[905] To facilitate macroprudential decision-making, the Central Bank of Ireland uses many indicators, some with thresholds as a warning signal, but it is not publically known which indicators and thresholds are used.[906] Moreover, exceeding the thresholds does not mean that action needs to be taken or inaction must be explained.[907] For the time being, BaFin relies to a minor extent on guided discretion mechanisms. Currently, BaFin uses numerous indicators, and mostly qualitative analysis to ensure consistent decision-making. Macroprudential decisions are discussed in the German Financial Stability Committee. Whenever possible, this committee intends to use guided discretion mechanisms to decide about taking action: it is developing empirical indicators that steer decision-making, in order to make its decisions understandable and predictable, while retaining the mandatory discretion to act flexibly whenever necessary.[908] However, it is not publically known which indicators and thresholds are used by BaFin and the German Financial Stability Committee. The ECB relies predominantly on model-based analyses to decide about taking macroprudential action.[909] It is unknown whether any predefined outcomes of these models, for instance, certain significance levels related to risks, will trigger action.[910]

3.3.2.2. Restrictions on the supervisory discretion during the decision-making process

The discretion of supervisors to opt for a particular decision can be restricted as a result of the involvement of other actors, for instance, if their approval is required. The involvement of these other actors may either increase or decrease the inaction bias. One of these actors is the European Systemic Risk Board (ESRB). It is able to restrict the freedom of supervisors to decide about using macroprudential instruments, because it can issue warnings and recommendations for remedial action in case of significant systemic risks arising from developments within the financial system.[911] These can be addressed to the EU as a whole, to member states, to the EBA, ESMA and EIOPA, to national

---

[905] Cf. De Nederlandsche Bank (2016), pp. 17, 23. Within DNB, various internal bodies are involved in macroprudential decision-making, with a view of reducing group-think in decision-making.
[906] As indicated in an interview with an official of the CBI.
[907] *Ibidem.*
[908] Ausschuss für Finanzstabilität (2014), pp. 27, 45, 52.
[909] European Central Bank (2016), p. 10. The ECB is working as well on macroprudential stress-testing (Constâncio, 2016, pp. 60-61).
[910] This will be difficult anyhow, because the outcome of economic models can easily be sensitive to the precise set up and use of statistical techniques, or the inclusion or exclusion of certain variables.
[911] Art. 3 and 16-17 Regulation 1092/2010. For a more detailed discussion of the ESRB, see Ferran & Alexander (2010), pp. 764-775.

supervisors, or to the Commission.[912] The ECB is not mentioned as a potential recipient.[913] Warnings and recommendations are not legally binding and enforceable, but subject to a comply-or-explain principle: its recipient must communicate to the ESRB and the Council whether action has been undertaken, and must adequately justify inaction.[914] The ESRB can decide that a recommendation has not been followed up, or that the justification for inaction is inadequate.[915] On a case-by-case basis, it can decide to make a warning public.[916] So, although recommendations of the ESRB are not binding, the recipient is under pressure to comply with them, which decreases the inaction bias. Box 3.3 explains the decision-making within the ESRB.

Box 3.3: Decision-making within the ESRB

The ESRB's decision-making body is the General Board, with as voting members the Chair and the first Vice-Chair (respectively the president and a General Council member of the ECB), the governors of the national central banks, the Chairs of the EBA, ESMA and EIOPA, a member of the Commission, the Chair and two Vice-Chairs of the Advisory Scientific Committee and the Chair of the Advisory Technical Committee.[917] Each voting member has one vote; and a two-thirds majority is required for issuing a recommendation.[918] Several Working Groups and Experts Group have been established at the ESRB, reporting to the Advisory Technical Committee and the Advisory Scientific Committee.[919] Some of these groups prepare opinions on national macroprudential measures.

[912] Art. 16(2) Regulation 1092/2010. Note that ESMA stands for European Securities and Markets Authority and EIOPA for European Insurance and Occupational Pensions Authority.
[913] It had no supervisory role at the moment of adopting Regulation 1092/2010 and the regulation is not amended to correct this.
[914] Art. 17(1) Regulation 1092/2010.
[915] Art. 17(2) Regulation 1092/2010.
[916] Art. 18 Regulation 1092/2010.
[917] Art. 6 Regulation 1092/2010. The Advisory Scientific Committee consists of experts from academia and other sectors, representing a wide range of skills and experiences (art. 12 Regulation 1092/2010). The Advisory Technical Committee is composed of representatives of the national central banks, competent national supervisory authorities, the ESAs, the Commission and the Economic and Financial Committee (art. 13(1) Regulation 1092/2010). Both Committees shall provide advice and assistance to the ESRB at request of the Chair of the ESRB (art. 12(3) and 13(3) Regulation 1092/2010). Non-voting members of the General Board are high-level representatives of the NSAs and the president of the Economic and Financial Committee join. See art. 134 and 135 TFEU for more information about the Economic and Financial Committee.
[918] Art. 10 Regulation 1092/2010. A simple majority is required for issuing a warning.
[919] See the organisational chart of the ESRB, available at https://www.esrb.europa.eu/about/orga/html/index.en.html (last visited 9 March 2016).

Restrictions on the supervisory discretion when increasing risk-weights and setting the CCB

There are few restrictions arising from the involvement of other actors in case supervisors intend to increase risk-weights by means of art. 124 and 164 CRR and Pillar 2 measures, or intend to change the CCB rate. Competent authorities must consult the EBA about changing risk-weights and criteria for banks using the Standardised Approach. They have to notify the EBA when setting a higher minimum LGD value for banks using the IRB Approach, and when imposing Pillar 2 measures on a group of banks.[920] Each quarter, they must notify the ESRB about the CCB rate.[921] BaFin must also take into account any recommendations made by the German Financial Stability Committee when setting the rate of the CCB.[922] Whereas notification requirements only serve transparency, mandatory consultation might increase the quality of decision-making by demanding explanation.

In contrast, there are considerable restrictions on the discretion of competent or designated authorities which intend to use national flexibility measures to increase risk-weights. These may increase the inaction bias. Draft measures based on art. 458 CRR can be rejected by a qualified majority in the Council, on a proposal from the Commission, which has to take utmost account of opinions of the ESRB and the EBA.[923] However, the use of this power is limited by several conditions. The Commission can only propose a rejection if 'there is robust, strong and detailed evidence that the measure will have a negative impact on the internal market that outweighs the financial stability benefits'.[924] The Council can only reject a draft measure if (a) there are no changes in systemic risk that threaten the national financial stability, or (b) the risks can be adequately addressed by means of art. 124 and 164 CRR, Pillar 2 measures or the CCB, or (c) the draft measures are less suitable to address the risk or have disproportionate adverse effects on the financial system in the EU or other member states, or (d) the risk concerns more than one member state, or (e) the risk is already addressed by other measures in the CRR or CRD IV.[925] A member state is allowed to increase risk-weights for up to

[920] Art. 124(2) and 164(5) Regulation 575/2013 and art. 103(2) Directive 2013/36. When Pillar 2 measures are directed at individual banks, even notification is not required.
[921] Art. 136(7) Directive 2013/36. The ESRB received also a role in recommending a CCB rate for exposures in third countries (art. 138 Directive 2013/36).
[922] § 10d(3) KWG.
[923] Art. 458(4) Regulation 575/2013. The ESRB and the EBA have to provide an opinion within a month after notification of a draft measure, and also the Commission has to submit its proposal to the Council within a month after this notification. The Council has a month to decide on the Commission proposal.
[924] Art. 458(4) Regulation 575/2013.
[925] *Ibidem.* The Council shall also take the opinions of the ESRB and EBA into account.

two years, in the absence of a Commission proposal within a month or in the absence of a Council rejection within a month after receiving that proposal.[926]

Moreover, notwithstanding this procedure, it is always allowed to increase the risk-weights up to 25% above the rules of the CRR, provided that the conditions and notification requirements of art. 458(2) Regulation 575/2013 are met.[927] In the Netherlands, an additional restriction is present in the application of national flexibility measures: DNB must take these measures in consultation with (*in overleg* met) the Minister of Finance.[928] These specific Dutch words mean that the minister needs to agree with the measures. This requirement is absent when the ECB applies these national flexibility measures in the Netherlands.[929] If DNB exercises the power of art. 458 CRR or one of the other capital-based macroprudential instruments, it must also consult (*raadplegen*) a representation of the sector.[930]

These conditions and requirements seek to strike a balance between ensuring the unity of the single market and the need to effectively conduct macroprudential policy. It is only for valid reasons allowed to use art. 458 CRR to deviate from the basic microprudential rules, which are similar for all banks in the EU.[931] The aforementioned conditions under which the Commission can propose a rejection, and the Council can reject a measure, help to prevent that macroprudential measures are rejected easily (but also that they are adopted for protectionist reasons). Meanwhile, the procedure can be an additional hurdle to adopt macroprudential measures, and thus increase the inaction bias. Moreover, the fact that a systemic risk concerns more than one member state should only be invoked to reject a measure if this risk is being addressed at a supranational level. These conditions, as well as the hierarchy between the various options to increase risk-weights, show that art. 458 CRR bears the character of a provision of last resort. Nevertheless, if a threatening systemic risk exists, the conditions can certainly be fulfilled, and will not pose an unsurmountable barrier. Moreover, a fast increase of the risk-weights with 25% is possible, in case of urgency, without the need to enter the procedure. The involvement of the Council in the procedure creates the risk that decisions are politicised.

---

[926] *Ibidem.* If the systemic risk underlying the measure ceases sooner sooner than after 2 years, the measure shall also be discontinued. Measures can be renewed, using the same procedure, each time for a period of one year (art. 458(9) Regulation 575/2013).
[927] Art. 458(10) Reguatlion 575/2013.
[928] Art. 3:66(1) Wft.
[929] Art. 3:66(2) Wft.
[930] Art. 1:28 Wft. *Raadplegen* does not mean that the sector must agree with the rules.
[931] Identical rules for all banks in the EU facilitate the freedom to provide services and the freedom of establishment. However, the stability of internal market benefits from allowing national differences in macroprudential policy, tailored to the specific circumstances in the member state concerned.

3.3.2.3. Ex post *restrictions on the supervisory discretion*

Besides the override-mechanism by which the Dutch Minster of Finance can replace a generally binding regulation of DNB with a ministerial decree, there is no other override mechanism by which the executive in one of the examined jurisdictions can alter, annul or suspend a decision on the use of the discussed instruments. Nevertheless, a quasi-override mechanism is present due to the fact that both national supervisory authorities and the ECB can take these macroprudential measures, although national authorities are – in principle – the first to act. They cannot annul each other's measures, but can "top them up".[932] A likely result is that the risk of leniency or inaction decreases, since multiple actors can act. However, it is also possible that actors start looking towards each other, with inaction as a result. This latter outcome is less likely, since the national authorities and the ECB might be more eager to increase their influence than to wait for the other to act. Hence, this quasi-override mechanism decreases forbearance and inaction. Moreover, it functions as an accountability mechanism between supervisors, since they have to explain and justify why they do (not) take action. Explaining or justifying one's actions lies at the heart of accountability.[933] However, it is a form of accountability towards peers, not towards the legislature.

3.3.3. Restrictions when enforcing capital- and funding-based instruments

The enforcement of the capital-based instruments is a task of competent authorities, including the ECB within the Single Supervisory Mechanism.[934] Within the SSM, the ECB is in the driver seat for ensuring compliance with risk-weighted capital requirements and the countercyclical capital buffer. For significant banks, the ECB is in charge of enforcing applicable rules, whereas national authorities do this for the less significant banks, but under guidance of the ECB.[935] Yet, with respect to significant banks, the ECB can still ask national supervisory authorities to prepare draft decisions for enforcing risk-weighted capital requirements or assist otherwise in the supervisory process.[936] For enforcing risk-weighted capital requirements and the CCB, the ECB can either use the Pillar 2 powers as provided for in art. 16(2) Regulation 1024/2013, or inflict a fine in accordance with art. 18 of that regulation.[937] Moreover, the European Central Bank is allowed to require national supervisors to impose penalties,

[932] Art. 5 Regulation 1024/2013.
[933] Cf. Amtenbrink & Lastra (2008), pp. 127-128.
[934] Art. 4(1)(d) Regulation 1024/2013.
[935] Art. 4(1)(b), 4(3) and 6 Regulation 1024/2013. For the supervision of significant banks, the ECB forms joint supervisory teams (art. 3-6 Regulation 468/2014).
[936] Art. 90-91 Regulation 468/2014.
[937] Art. 4(3) Regulation 2014/2013. Cf. art. 120-133 Regulation 468/2014 and section 2 of chapter on enforcement measures.

to the extent necessary for performing its tasks, when such powers have not been conferred on the ECB.[938] So, the ECB can independently decide on enforcement, but may in practice be partly dependent on cooperation with national supervisors.

Ireland has taken some extra steps to ensure independent enforcement of financial regulation, after its recent history revealed that it was rarely enforced, because the supervisor was captured.[939] To reduce the risk of capture, a deliberate choice was made to appoint "outsiders" to key posts within the CBI.[940] This creates more behavioural distance between the supervisor on the one hand and the regulatees (and politicians) on the other hand.[941]

Both EU and national law include provisions to guide supervisors towards proportionate and dissuasive enforcement of violations. The ECB is obliged to impose effective, proportionate and dissuasive sanctions.[942] In turn, member states must ensure that the type of sanction and the level of pecuniary sanctions fulfil some requirements related to proportionality and dissuasiveness, by requiring that competent authorities take the gravity and duration of the breach into account, as well as, among other things, the losses caused by the breach, the financial strength of the offender, and recidivism.[943] These requirements have been implemented differently in each member state. Irish and Dutch legislation instructs the supervisor to take these circumstances into account, although Dutch legislation only mentions this in the context of fines and not in case of other penalties.[944] Yet, in the Netherlands, the proportionality principle applies to all enforcement, due to its codification in the Awb.[945] German legislation does not explicitly mention the circumstances of art. 70 Directive 2013/36, but requires that a fine must be larger than the obtained financial benefit.[946] BaFin has broad discretion when determining the magnitude of a fine, since 'there are hardly any rules to govern the quantum of penalties'.[947] This lack of guidance decreases legal certainty, and the broad discretion has as downside that BaFin is not steered towards proportionate and dissuasive enforcement. All in all, the requirements in these jurisdictions may contribute to avoiding too soft enforcement. Nevertheless, they are quite vague, which hampers their guidance.

938 Art. 9(1) and 18(5) Regulation 1024/2013.
939 Sub-section 4.2.3 dicusses this issue in more detail.
940 Scott (2012), p. 71.
941 On behavioural distance, see Black (1976), pp. 40-48.
942 Art. 18(3) Regulation 1024/2013.
943 Art. 70 Directive 2013/36.
944 IE: Regulation 58 S.I. 158/2014. NL: art. 4 and 4a *Besluit bestuurlijke boetes financiële sector.*
945 Art. 5:46 Awb, *supra* sub-section 3.2.2.1 and footnotes 727-728.
946 Section 56(7) and 60 KWG.
947 Schneider (2014), p. 22.

The Central Bank of Ireland has an additional choice when enforcing: it can opt for settlement or imposing sanctions. It has full discretion to decide whether and how – i.e. under which terms – to settle.[948] However, the CBI has limited its own discretion by publishing Inquiry guidelines, pursuant to section 33BD Central Bank Act 1942. These guidelines include the settlement and sanctioning policy, which is followed, unless this is inappropriate in light of the circumstances of the individual case.[949] The Inquiry guidelines list a range of factors which can be taken into account when determining the appropriate sanction.[950] To further clarify its policy, the CBI published an Outline of the Administrative Sanctions Procedure, a document without legal status. It *inter alia* states that the details of a settlement agreement will always be published and that a maximum discount of 30% for monetary penalties can be obtained by settling.[951] All in all, these guidelines are worded in a way that provides an indication of how the Central Bank of Ireland reaches its decisions, but without ever really limiting its discretion. Still, its self-selected transparency will probably help the CBI to avoid overly soft enforcement, because its guidance directs it towards penalties of a certain kind and magnitude.

3.3.4. Independent amendment of capital- and funding-based instruments

Since 2010, binding financial legislation is adopted at two levels in the EU.[952] Level 1 legislation concerns legal acts, such as the CRR and CRD IV, which are adopted by the EU legislator. Level 2 legislation consist of technical standards, which are drafted by the European Supervisory Authorities – the EBA, ESMA and EIOPA – and adopted by the Commission, and takes the form of delegated and implementing acts.[953] As the conditions for increasing risk-weights by means of art. 124 and 164 CRR, and the criteria for determining the mortgage lending value are set by regulatory technical standards the EBA is involved in drafting and amending rules on these issues. The EBA has a multifaceted, but specific mandate.[954] Its objectives overlap with the aims of the aforementioned regulatory standards, and provide the EBA with direction when drafting these standards.

---

948 Central Bank of Ireland (2014d), p. 21.
949 Central Bank of Ireland (2014c), para. 1.2. For more on these guidelines, see Murphy (2013), pp. 253, 258-261; Murphy (2014), p. 15.
950 *Ibidem,* para. 5.9.
951 Central Bank of Ireland (2014d), pp. 20, 23
952 See e.g. Raptis (2012), pp. 61-64; House of Lords (2015), p. 35; Enria (2015).
953 Cf. art. 290-291 TFEU. The process of adopting the technical standards is discussed later in this sub-section.
954 Its mandate includes '(a) improving the functioning of the internal market, including, in particular, a sound, effective and consistent level of regulation and supervision, (b) ensuring the integrity (…) and orderly functioning of financial markets, (…) (d) preventing regulatory arbitrage (…), (e) ensuring the taking of credit and other risks are appropriately regulated and supervised, and (f) enhancing customer protection.'Art. 1(5) Regulation 1093/2010.

The EBA is required to carry out it tasks independently, objectively and in the interest of the EU alone. Also the members of the Board of Supervisors, the decision-making body of the EBA, are obliged to act independently and in the interest of the EU.[955] Nevertheless, it cannot be excluded that the heads of the national competent authorities, who are voting members of the Board of Supervisors, vote with national interests in mind.[956] Moreover, the independence of the EBA is significantly restrained during the process of adopting technical standards, because it only develops *draft* regulatory technical standards, which only are binding after adoption by the Commission.[957] The Commission must decide within three months after submission whether to endorse draft regulatory technical standards.[958] If the EU interest so requires, it can partly endorse or amend them.[959] The regulatory technical standards become final after endorsement by the Commission, unless the Council or the European Parliament object within three months, for which they must give reasons.[960] The *Meroni* and *Romano* doctrines, developed by the CJEU, are the reason that technical standards are drafted by the EBA, but adopted by the Commission. In *Meroni,* the Court ruled that an EU institution can only delegate clearly defined executive powers, without a wide margin of discretion.[961] The CJEU ruled in *Romano* that the adoption of 'acts having the force of law' cannot be delegated to bodies which are not attributed those powers by the treaties.[962] The unavoidable involvement of these EU institutions significantly impairs the operational independence of the EBA. Instead, together with some consultation requirements, this increases the accountability of the EBA.[963]

[955] According to art. 42 Regulation 1093/2010, the chairperson and voting members are instructed to 'act independently and objectively in the sole interest of the Union as a whole and shall neither seek nor take instructions from Union institutions or bodies, from any government of a Member State or from any other public or private body.' In turn, these actors must refrain from seeking to influence the members of the Board of Supervisors in the performance of their tasks. The requirement to act independently from EU institutions is at odds with the fact that the Commission needs to adopt the regulatory technical standards and the Council and European Parliament can disapprove them (Lavrijssen & Ottow (2012), pp. 441-445).

[956] See art. 40, 43(1)-(2) and 44 Regulation 1093/2010 on the composition, tasks, and voting.

[957] Artt. 8(2), 10-15 Regulation 1093/2010.

[958] Art. 10(1) Regulation 1093/2010.

[959] The Commission has to give reasons to the EBA in these cases, as well as in the case of non-endorsement. Then, the EBA receives six weeks to amend the technical standards (art. 10(1) Regulation 1093/2010).

[960] Art. 13 Regulation 1093/2010.

[961] *Supra,* footnote 169.

[962] Case 98/80 *Romano v Institut National d'Assurance Maladie-Invalidité* [1981] ECR 1241. Cf. Griller & Orator (2010, pp 18-19.

[963] Open public consultations shall be conducted, unless this is disproportionate in relation to the scope and impact of the draft regulatory technical standards, and the Banking Stakeholder Group shall be consulted (art. 10(1) and 37(1) Regulation 1093/2010). This body within EBA has 30 members representing *inter alia* the financial industry, consumers, and academia.

In none of the jurisdictions LTV ratios in covered bonds legislation can be amended by a regulator or supervisor.[964] Consequently, there is no need to discuss their operational independence in this respect.

3.3.5. Overview of restrictions when applying and enforcing capital-based instruments

This section shows the complexity, especially in case of the capital-based instruments, of the relationships between the various factors which influence to what extent decisions are made independently and the ability and willingness to act is fostered. Therefore, figure 3.4 provides an overview of the relevant factors and actors that (may) restrict the discretion of the actor deciding on increasing risk-weighted capital requirements, taking the perspective of a national supervisor.[965] Firstly, it shows the *ex ante* restrictions on the supervisory discretion of all three options to increase risk-weights; restrictions which were already present before the decision-making process starts. Secondly, it illustrates restrictions arising from the involvement of other actors during the decision-making process. Thirdly, it displays how the *ex post* involvement of other actors, through an override mechanism or enforcement, may influence to what extent supervisory decisions take full effect.

Figure 3.4 shows that most restrictions on the discretion of the deciding actor are the results of either (1) *ex ante* rules which steer the supervisor towards action or, (2) of the involvement of other independent actors. In both situations interventions are positive. This is the case for interventions by independent actors, because they are less likely driven by political or industry interests. Furthermore, the figure reveals the potential clashes between national supervisors and the ECB, both in the phase of deciding about increasing risk-weights and in the phase of enforcing these risk-weights. Nevertheless, in the end the ECB is able to prevail when it comes to determining the risk-weights of capital-requirements.[966] This means that the Governing Council of the ECB is the ultimate decision-maker on increasing risk-weighted capital requirements, since it can reject decisions of the Supervisory Board (still, the Governing Council cannot propose decisions on its own initiative).

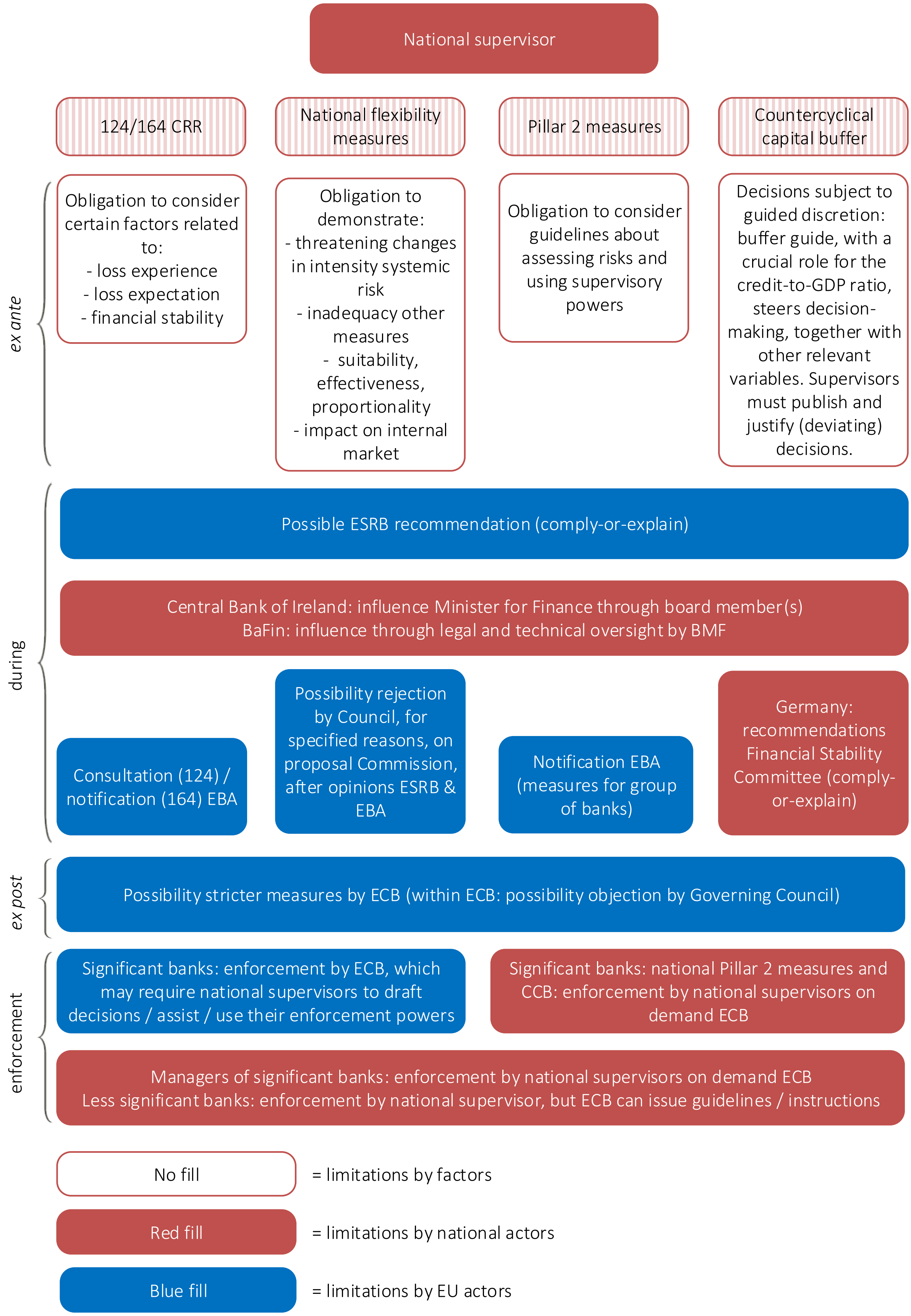
---

[964] At EU level, the LTV requirements for covered bonds are part of the CRR. Consequently, changes need to be initiated by the EU legislator. In the Netherlands, the provision prescribing the LTV ratio is included in a general implementing decree, which is a form of delegation from the legislator to the government. Hence, basically, the government decides on possible changes of this ratio. The Irish LTV ratio for covered bonds is included in an act. So, the legislator is in charge of changing it, but the act allows the Minister for Finance to change the LTV ratio as well, by means of a notification in the Irish official journal (section 32(14) Asset Covered Securities Act 2001). The LTV limit of 60% for covered bonds in Germany is part of an act, and thus needs to be changed by the legislator. Some valuation rules can be changed by the Ministry of Finance, in consultation with the Ministry of Justice (section 16(4) PfandBG).

[965] This figure can as well be presented from the perspective of the ECB, with some differences as a result. However, national supervisors are first in line to decide on taking macroprudential measures.

[966] A national supervisor cannot block or undo an increase of risk-weights by the ECB and vice versa. However, the ECB can *de facto* undo an increase in risk-weights by a national supervisor by not enforcing them.

Figure 3.4: Restrictions on the supervisory discretion to apply and enforce capital-based instruments



3.4. Concluding and comparative remarks

The qualitative analysis of this chapter has been summarised in table 3.3. This chapter has shown that the use LTV ratios in covered bond legislation cannot effectively help to limit borrowing by households, but helps to prevent that the consequences of a default of a borrower spread to the holders of covered bonds.[967] This chapter also reveals strengths and weaknesses of using capital-based instruments to address high household debt levels. Some conditions governing risk-weights under the Standardised Approach are vaguely worded. Adopting the proposals of the BCBS would reduce possibilities to circumvent higher risk-weights set under art. 124 CRR, and make capital requirements more sensitive to actual risks. The rules governing the assignment of risk-weights under the IRB Approach are too general and vague. Furthermore, the possibility to raise risk-weights through increasing the LGD value suffers from gaps. The LGD value is namely only one factor determining the risk weights; other factors are still determined by the highly criticised internal models of banks. Therefore, a possibility to impose output floors under the IRB Approach, as suggested by the BCBS, might be helpful.[968]

For these reasons, Pillar 2 measures and national flexibility measures are better fit for increasing risk-weights, if it were not for the fact that they are not subject to mandatory reciprocity.[969] If the EU legislator changes this, these measures can be more effective, by reducing the risk of leakage. It depends on the home supervisor of a foreign bank whether macroprudential measures are reciprocated, while host supervisors 'should have the ultimate say in ensuring that these tools are applied effectively and adequately address the risk of that country.'[970] The countercyclical capital buffer – already subject to mandatory reciprocity up to a rate of 2.5% – can be employed to lean against the build-up of excessive credit, if there is a general credit boom, which is not limited to the household sector. The CCB builds on system of risk-weights as well, and might be ineffective if not accompanied with minimum risk-weight floors.[971] Moreover, a problem of the CCB and all other capital-based measures is that their effects can leak away through various ways, most importantly to the non-banking sector, where lenders are subject to lower or no capital requirements.[972] This flaw needs to be repaired by broadening the scope of macroprudential capital measures to all financial institutions

967 Cf. sub-section 3.1.3.2.
968 Cf. sub-section 3.1.1.1.
969 An additional disadvantage of the national flexibility measures is the demanding procedure for using them.
970 Alexander (2012), p. 341.
971 Cf. sub-section 3.1.2.1.
972 Cf. sub-sections 3.1.1.3 and 3.1.2.1.

Table 3.3: Summary of the analysis of capital- and funding-based instruments

<table>
<tr><th>Determinacy and completeness</th><th>Possibility proportionate and dissuasive enforcement</th><th>Room for independent application, enforcement and amendment</th></tr>
<tr><td colspan="3">Qualitative evaluation, from high to low: yes, mostly, partly, barely, no</td></tr>
<tr><td>Determinacy:

• Standardised Approach: partly (rules on risk-weights partly vague)
• IRB Approach: barely (rules vague)
• CCB and LTV ratios for covered bonds: yes

Completeness:

Encompassing scope:
• Capital-based instruments: partly (only credit institutions and investment firms, only capital)
• LTV ratios for covered bonds: no (only one funding type)

Absence gaps and silence:
• 124 CRR: mostly (ineffective above 75%)
• 164 CRR: barely (silent on PD)
• Pillar 2 and national flexibility measures: partly (no mandatory reciprocity)
• CCB: mostly (above 2.5% no mandatory reciprocity)
• LTV ratios for covered bonds: barely (part above threshold can be funded differently)

Exceptions are subject to clear and protective conditions:
• All instruments: yes</td><td>Proportionate enforcement:

Availability whole range of sanctions, from light to severe:
• EU (ECB): mostly (some only via national supervisors)
• NL, IE: yes
• DE: mostly

Dissuasive enforcement:
Availability high administrative fines:
• EU, NL, IE, DE: yes

Mandatory publication of sanctions, apart from specific exceptions:
• EU, IE, DE: yes
• NL: yes, but exception seems to be often used

Possibility to sanction individuals:
• EU: only via national supervisors
• NL, IE, DE: yes

Availability threatening sanctions, like withdrawal licence:
• EU, NL, IE, DE: yes, but cooperation needed for withdrawal

Possibility criminal conviction:
• EU, DE, IE: no
• NL: yes</td><td>Ability and willingness to act:
Instrument has clear legal basis:
• All instruments: yes

Well-defined policy objectives:
• National flexibility measures and CCB: yes
• 124/164 & Pillar 2: partly (both micro and macroprudential)

Corresponds to clear mandate supervisor:
• ECB, DNB, CBI: yes
• BaFin: mostly (macroprudential mandate is not explicit)

Framework provides room for action:
• 124/164 CRR, Pillar 2 measures, CCB: yes
• National flexibility measures: partly (various constraints)

Operational independence:
• ECB: yes
• DNB: partly (Minister of Finance can override macroprudential powers)
• CBI: mostly (Minister for Finance can exert influence)
• BaFin: barely/partly (constrained by legal and technical oversight BMF)
• All: “top-up” mechanism

Use of guided discretion:
• 124/164 CRR: partly
• Pillar 2 measures: hardly
• National flexibility measures: no
• CCB: mostly

Accountability mechanism:
• 124 CRR: barely (consultation EBA)
• National flexibility measures: yes (justification towards EU institutions, ESRB, EBA)
• CCB: partly (publication rate and justification on website)
• BaFin: mostly (information requirements towards BMF, relationship with FSC)</td></tr>
</table>

that are subject to capital requirements, and subjecting more financial institutions to capital requirements.[973]

For enforcing capital-based measures, the ECB has proportionate and dissuasive enforcement measures at its disposal, but is dependent on the cooperation of national supervisors for imposing non-pecuniary sanctions, including sanctions on individuals, and for enforcing national law which transposes the CRD IV, such as the provisions on the CCB and national Pillar 2 measures. Time will tell how this works out in practice. To discover this, further research may be called for in a number of years. In the Netherlands and Ireland, proportionate and dissuasive enforcement measures are available, but in Germany the sanctioning menu is somewhat limited, while inflicting a fine upon a bank might not always be easy, which decreases its deterring effect.

Especially the ECB is protected against negative encroachments on its independence to take macroprudential decisions in the best interest of financial stability. In contrast, the power of the Dutch Minister of Finance to override macroprudential decisions of DNB, if these result in an unreasonable burden for the financial markets, restricts the operational independence of the Dutch central bank in its macroprudential capacity, although the minister has not yet used this power. Furthermore, DNB cannot independently take national flexibility measures, since agreement of the minister is required. The risk that the Irish Minister for Finance influences the Central Bank of Ireland cannot completely be excluded, but measures have been taken to create more behavourial distance between these two actors.[974] In addition, the possibility of the German Minister of Finance to exercise technical oversight over BaFin can impede its supervisory independence. In theory, the possibility of the German Financial Stability Committee to recommend BaFin, subject to a comply-or-explain principle, to use a macroprudential instrument, increases BaFin's willingness to act – by helping it to overcome political and industry pressure – without hurting its independence. However, since unanimity within the Financial Stability Committee is required to issue a recommendation, the Ministry of Finance can still block a recommendation, and the inaction bias may not decrease.

Positive restrictions on the supervisory discretion, in the form of rules or guidelines that steer supervisors towards taking adequate action, are partly present, but differ significantly between instruments. Guidance for using art. 124 and 164 CRR to increase risk-weights is being developed, while

[973] The ESRB has recently published a strategy paper which stresses the need to apply macroprudential requirements to all types of credit: European Systemic Risk Board (2016b), pp. 3, 5-6, 16.
[974] Cf. sub-section 3.3.3.

the use of CCB is subject to guided discretion, although even this mechanism is criticised for not steering supervisors enough towards adequate action.[975] Guided discretion mechanisms can be improved by making them more specific.

Already now, the risk of inaction is limited due to the possibility for the ECB to top up national macroprudential capital measures. This top-up possibility also functions as an accountability mechanism among peers, since supervisors have to explain and justify their decisions. The extent to which supervisors are accountable towards the legislature, executive or the public at large when using an instrument, differs significantly per instrument. Justification towards EU institutions, the ESRB, and the EBA is required for using national flexibility measures – not for refraining from using them. Every quarterly decision on the CCB requires justification to the public at large. While art. 124 and 164 CRR require an annual analysis, they do not provide for a specific forum to which supervisors are accountable for their subsequent (in)action. Hence, there is room to make accountability requirements more comparable, and to improve them by requiring public justification, both for using and refraining from using an instrument.

[975] Cf. sub-section 3.3.2.1.

4. Credit-based regulatory instruments

In recent years many member states have adopted borrower-based caps, i.e. direct maximum LTV, DTI, LTI and DSTI ratios, applying immediately to borrowers, independently of capital requirements or eligibility of loans for certain types of funding. Table 4.1 shows the use of borrower-based caps in EU member states.

Table 4.1: The use of borrower-based caps by EU member states

Member state	Current LTV limit	Current DSTI and LTI limits	In force since [B]
Austria			
Belgium			
Bulgaria			
Croatia	75% [A]	DSTI: 100% [A]	2006
Cyprus	80%	DSTI: 80% of net disposable income	2003
Czech Republic	90% [C]		2015
Denmark	95%		2015
Estonia	85-90% [D]	DSTI: 50%	2015
Finland	90-95% [E]		2016
France			
Germany			
Greece		DSTI: 30-40% [A]	2005
Hungary	35-85% [F]	DSTI: 10-60%	2015
Italy	80-100% [A]		<1995
Ireland	80-90% [G]	LTI: 3.5 [G]	2015
Latvia	90-95%		2007
Lithuania	85%	DSTI: 40% of net income	2011
Luxembourg			
Malta			
Netherlands	101% (2017) [H]	DSTI: 9.5-43.5% (2017)	2013 [H]
Poland	80-90%		2014
Portugal			
Romania	60-95%		2011
Slovakia	100% [I]	80% of disposable income	2017 [I]
Slovenia	80% [C]	DSTI: between 50% and 67% [C]	2016
Spain			
Sweden	85%		2010
United Kingdom		LTI: 4.5 [J]	2014

[A] *Based on Shim et al. (2013). Other information in this table is based on an overview provided by the ESRB:* https://www.esrb.europa.eu/national_policy/shared/pdf/overview_macroprudential_measures.xlsx *(retrieved 11 February 2017).* [B] *This refers to the year at which the caps came into force; the maximum limit may have been changed afterwards.* [C] *This is a recommendation.* [D] *Per quarter, 15% of the amount of housing loans may breach the requirements.* [E] *The Finnish supervisor may reduce the LTV ratio with maximum 10 percentage points.* [F] *Hungary also set LTV ratios of 30-75% for vehicle loans.* [G] *5-20% of the value of yearly supplied mortgage loans may exceed the LTV and LTI limits.* [H] *The LTV limit is reduced to 100% in 2018; prior to 2013, LTV and DSTI limits have been based on self-regulation.* [I] *Moreover, only 10% of the share of the loans may have a LTV ratio of >90%, and only 40% a LTV ratio of >80%. Between 2014 and 2017, limits had the form of a recommendation.* [J] *15% of the value of yearly supplied mortgage loans may exceed this limit. Cf. Bank of England, 2014, p. 3vv.*

This table reveals some of the heterogeneity of the use of borrower-based caps by member states, which partly results from the absence of harmonising EU legislation on this topic.[976] However, table 4.1 does not show the substantial legal differences between the design of LTV, DSTI, LTI and DTI ratios in different member states. These differences crucially affect the potential effectiveness of these instruments.[977] The next sections discuss the borrower-based caps in respectively the Netherlands, Ireland and Germany. Each section focusses on (1) their determinacy and completeness, (2) the proportionality and dissuasiveness of the measures to enforce them and (3) the independence in applying, enforcing and amending them.[978]

4.1. Direct DSTI, LTI and LTV limits in the Netherlands

The basis of borrower-based caps in the Netherlands is a provision on preventing an overextension of credit: art. 4:34 *Wet op het financieel toezicht* (Wft) (Act on Financial Supervision).[979] The Wft includes prudential and conduct-of-business requirements. Art. 4:34 Wft is part of the ongoing conduct-of-business requirements for credit supply. The Wft regulates credit-related products and services, and governs, in principle, all credit supplied to consumers, including commodities credit, meaning supplying goods or services that have to be repaid later.[980] Some specific forms of credit are excluded from the rules of the Wft, such as student loans, as well as credit which has to be redeemed within three months and for which only negligible costs are charged.[981] Most rules of the Wft, including those of art. 4:34 Wft, are not applicable to overdraft facilities that have to be redeemed within a month.[982] The scope of the Wft is encompassing in terms of governed (legal and natural) persons: its provisions apply to all credit supplied in the pursuit of a profession or business[983] – a phrase which is not

[976] Note that, in 2016, the ESRB issued a recommendation on monitoring risks arising from the real estate sector, including definitions of indicators, such as LTV and LTI ratios, to be monitored: European Systemic Risk Board Recommendation 2016/14 of 31 October 2016, *OJ* 2016, C 31/1
[977] See sub-section 2.3.1.2 for a discussion of the promising empirical results regarding the effectiveness of borrower-based caps.
[978] Sub-sections 4.1.1, 4.1.3, 4.2.1 and 4.2.3 are partly based upon Van 't Hof (2016).
[979] *Wet op het financieel toezicht, Staatsblad* 2006, 475. The Wft is available at http://wetten.overheid.nl/BWBR0020368.
[980] See the definition of credit in art. 1:1 Wft. For more about the types of credit falling under the scope of the Wft, see Van Poelgeest (2015), pp. 2-16, 22-32; Van den Ing (2012), pp. 76-78, 113-117.
[981] For the other exceptions, see art. 1:20(1) Wft. Cf. Van Poelgeest (2015), pp. 22-32. The excepted types of credit are not relevant for this research, since they will likely not lead to over-indebtedness.
[982] Art. 1:20(2) Wft.
[983] See art. 1:1 Wft for this phrase. See pages 18-22 in Van Poelgeest (2015) for a further discussion of this and some other conditions – which are less relevant for this study and are thus not discussed. Borrowing via a peer-to-peer platform would, in principle, fall outside the scope of this phrase, but this will not be further discussed, since households tend not to use these types of funding on a significant scale. Cf. Leloux (2013).

interpreted restrictively by courts – to consumers[984] in the Netherlands, whether the supplier is a Dutch business or professional or not.[985] However, credit which is offered via internet by an undertaking established in another member state, is not subject to the rules of the Wft.[986] Instead, it is governed by the rules of the country of origin, as a result of the implementation of the E-Commerce Directive.[987]

The responsibility to prevent overextension of credit

Art. 4:34(1)-(2) Wft imposes the responsibility to prevent overextending credit to consumers on credit providers.[988] They are prohibited from entering into a credit agreement or increasing the total amount of credit if it turns out that this would be irresponsible in the light of overextension of credit.[989] Furthermore, credit providers are obliged to obtain and evaluate information about the financial position of the consumer in advance.[990] These obligations are detailed by means of secondary legislation: art. 115 of the *Besluit Gedragstoezicht financiële ondernemingen Wft* (Bgfo) (Decree on Conduct of Business Supervision of Financial Undertakings under the Wft) obliges credit providers to

[984] A consumer is defined as a natural person, acting outside his trade, business or profession (art. 1:1 Wft), a definition which originates from EU consumer law (see e.g. art. 3(a) Directive 2008/48). The CJEU interprets this concept of a consumer objectively, by considering whether someone acts outside his trade, business or profession, irrespective of his concrete knowledge, even if he is not a weak party due to this knowledge (Case C‑110/14 *Horațiu Ovidiu Costea v. SC Volksbank România SA* [not yet published], para. 18-27).

[985] Van Poelgeest (2015), pp. 33-35; Bierman et al. (2015), p. 308. The rules of part 4 of the Wft apply to all persons allowed to supply credit in the Netherlands (art. 4:1 Wft). Supplying credit is prohibited without a license of the AFM, DNB, or another EU banking or insurance supervisor (art. 2:60-2:62 in combination with 2:11-2:54f Wft). Although these rules pose restrictions on the freedom to provide financial services, they are, in principle, justified for reasons of protecting consumers, i.e. if pursuing a legitimate interest, and if proportionate in relation to the objective pursued. After the adoption of the Consumer Credit Directive (CCD) and Mortgage Credit Directive (MCD), provisions on assessing a consumer's creditworthiness were integrated into art. 4:34 Wft and associated legislation (cf. section 5.1.2). In case of the CCD, the principle of mutual recognition was intentionally not included in the final version in order to grant the consumer the benefit of protection of home country laws (Rott, 2009, pp. 185-186). Art. 2(1) MCD explicitly allows member states to maintain or introduce more stringent provisions than those provided for in the Directive into national law (cf. art. 32(4)).

[986] Art. 1:16 Wft in combination with art. 3:15d(3) of the Dutch civil code (*Burgerlijk Wetboek*), available at http://wetten.overheid.nl/BWBR0005291.

[987] Art. 3(1)-(3) Directive 2000/31 of the European Parliament and of the Council of 8 June 2000, OJ 2000, L 178/1. Cf. Van Poelgeest (2015), p. 34. See Hellner (2004, pp. 196-198) for an explanation of art. 3 of this directive.

[988] The Dutch word used in the Wft for overextension of credit is *overkreditering.* Several authors have noticed a trend of shifting the responsibility of preventing over-indebtedness from consumers to credit suppliers (e.g. Brosens et al., 2008, p. 61; Van Poelgeest, 2015, p. 74). This can be seen as a result of acknowledging findings from behavioural economics concerning people's limitations when making financial decisions (sub-section 2.1.2.2). The legislative history of the predecessors of art. 4:34 Wft, in previous acts, shows that there was no intention to take a borrower's own responsibility away (cf. Broekhuizen & Labeur (2006), p. 251).

[989] Art. 4:34(2) Wft. Before 2011, these rules only applied when entering into a credit agreement. Due to the implementation of art. 8(2) CCD, it also applies when significantly increasing the total amount of credit. The amendment is published in: *Staatsblad* 2011, 246, available at https://zoek.officielebekendmakingen.nl/stb-2011-246.html (last visited 5 December 2014).

[990] Art. 4:34(1) Wft.

document and apply criteria for assessing a credit application, in order to prevent overextension of credit.[991] For consumer credit, this obligation is the only further specification of art. 4:34(3) Wft. Before the regulatory LTV, DSTI and LTI caps came into force on 1 January 2013, after some paragraphs have been added to art. 115 Bgfo, this was also the case for mortgage credit (this study uses the term "consumer credit" to denote credit supplied to consumers, not secured on residential property, and the term "mortgage credit" for credit supplied to consumers, which is secured on residential property).[992] "Overextension of credit" is nowhere defined in the Wft, the Bgfo and preceding or related legislation, and until 2012 this regulatory system contained no substantial rules on what amounts responsible credit provision.[993] The intention was to establish an open norm, to be further detailed by the credit suppliers and the sector itself, and to be monitored by the AFM.[994] Indeed, the sector regulated itself by adopting codes of conduct, which include a system of borrower-based caps.[995]

Obtaining information about the financial position of a consumer and the credit registry

Reliable information about income and existing debt is a prerequisite for determining LTV or DTI ratios, and enabling responsible lending, i.e. lending while taking the interests of borrowers, in particular their repayment capabilities, into account.[996] Art. 4:34(1) Wft, further detailed by art. 113-114 Bgfo, requires lenders to obtain information about the financial position of consumers applying for a loan. Art. 113 Bgfo prohibits a credit supplier to extend a loan of more than € 1000 without written or other durable recorded information on the financial position of the consumer.[997] With respect to income, this can be a payslip, for example. Art. 114 Bgfo obliges a credit supplier to check the information about existing

[991] Art. 4:34(3) Wft in combination with art. 115(1) Bgfo. The amendments since 2012 will be discussed below. The Bgfo is available at http://wetten.overheid.nl/BWBR0020421.
[992] This is in line with the use of the name Consumer Credit Directive for Directive 2008/48, governing unsecured consumer credit, in contrast with the Mortgage Credit Directive, Directive 2014/17, governing mortgage credit. Art. 1:1 Wft defines mortgage credit, in short, as a credit agreement with a consumer concerning credit secured on real estate, where the lender holds a first lien over the property.
[993] Van Tuyll (2012), p. 31.
[994] See e.g. Brosens et al. (2008), pp. 61-63; Van Tuyll (2012), pp. 30-32; Claassen & Snijders (2014), pp. 188-190. This is also very clearly stated in, the following letter from the Minister of Finance to the Dutch parliament, in 2009: http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2009/05/18/antwoorden-op-kamervragen-kamerlid-sap-hypotheken-dsb-bank.html (last visited 28 July 2016).
[995] The earliest versions of some of those codes of conducts are already some decades old.
[996] Campbell (2012), p. 18. According to European Commission (2009c) '[r]esponsible lending means that credit products are appropriate for consumers' needs and are tailored to their ability to repay.' (p. 3). Cf. footnote 1368.
[997] Art. 113(2) and 113(3) Bgfo exclude credit meant to obtain securities under certain circumstances from this obligation, as well as overdraft facilities if the overdraft has to be repaid within three months and the limit is not higher than the monthly income received on the bank account.

credit at the credit registry before entering into a credit agreement of more than € 250. All this information and the credit agreement have to be documented and maintained for at least five years.[998]

Every credit supplier is obliged to participate in the system of credit registration.[999] The amount and duration of consumer credit, if the duration is at least three months and the amount at least € 250, is recorded at the credit registry, as well as information on limits on overdraft facilities and credit cards, and information on arrears which exceed two months.[1000] Information on mortgage debt is not registered, unless mortgage arrears longer than 120 days are present. Neither is data recorded on income, student loans or debt resulting from arrears on energy payments or rent.[1001] So, lenders have to rely partly on information provided by the borrower. In April 2016, a Dutch newspaper reported that almost half of the people is silent or even lies about existing student debt, because it would affect their borrowing capacity. Still, there was no political willingness to require registration of student loans in the credit registry, because of their favourable repayment conditions.[1002]

4.1.1. Determinacy and completeness of the DSTI, LTI and LTV limits

4.1.1.1. The DSTI and LTI limits for consumer credit

The three codes of conduct for consumer credit have been each drafted by a different association. Two of them apply to consumer credit in general and will be discussed together, because they exhibit considerable similarities. The third code of conducts only deals with commodities credit. After their description, the determinacy and completeness of the rules in the three codes of conduct is analysed.

DSTI and LTI limits in the VFN and NVB codes of conduct

The two codes of conduct applying to general credit are those of the *Vereniging van Financieringsondernemingen in Nederland* (VFN) (Union of Finance Companies), a union of non-bank credit providers, and of the *Nederlandse Vereniging van Banken (NVB)* (Dutch Banking Association), representing nearly all active banks in the Netherlands.[1003] Both codes of conducts contain – almost

[998] Art. 33 Bgfo.
[999] Art. 4:32 Wft.
[1000] See Van Poelgeest (2015), p. 58; https://www.bkr.nl/veelgestelde-vragen/welke-leningen-en-kredieten-worden-geregistreerd/ (last visited 11 February 2017).
[1001] *Ibidem*. However, data on mobile phone contracts and possible arrears on it, are registered, as such contract are considered as a form of credit under Dutch law (see the following case: Hoge Raad 13 June 2014, NL:PHR:2014:76 and NL:HR:2014:1385, *JOR* 2014/206).
[1002] De Groot & Keultjes (2016).
[1003] The VFN code of conduct, applicable since January 2014, as well as an explanation to it, can be found via http://www.vfn.nl/nl/normen-en-gedragscodes/gedragscodes. The NVB code of conduct, applicable since 2012,

identical – rules for determining a household's monthly borrowing capacity. Since providing credit is not allowed when there is no borrowing capacity, this is in fact a DSTI limit.[1004] The monthly borrowing capacity is (1) the actual net income minus (2) the lending standard minus (3) the actual recurring expenses.[1005] These three concepts require further explanation:

1. Income must be calculated excluding holiday bonuses and allowances. According to the NVB code of conduct, only income from sources with a durable character may be taken into account.[1006]
2. The lending standard is an amount which households should have at their disposal to cover living expenses. It distinguishes between four types of households, and is derived from a norm on required minimum living expenses, yearly set by the VFN and NVB for their respective codes of conducts, based upon reference values of Nibud, the *Nationaal Instituut voor Budgetvoorlichting* (National Institute for Family Finance Information).[1007]
3. Recurring expenses are housing costs, existing credit costs and, if applicable, alimony.[1008] Instead of taking real costs of existing credit into account, VFN members may assume them to be at least 2% of the credit sum.[1009] Members of the NVB must take them into account for at least 2% of the credit sum or limit.[1010] According to the judgment of the District Court of Amsterdam in a recent civil case, banks are not obliged to take higher existing credit costs than 2% of the credit sum into account, even if they know that the real existing credit costs are higher.[1011]

Both codes of conduct also include – partly different – provisions that lead to LTI caps, insofar the debt results from consumer credit. The VFN code of conduct sets the credit limit for revolving credit or overdraft facilities at 50 times the monthly borrowing capacity, due to the duty to assume a monthly

as well as the actual minimum standards, can be found via https://www.nvb.nl/publicaties-standpunten/publicaties/1743/gedragscode-en-normen-consumptief-krediet.html (last visited 28 July 2016).

[1004] Art. 6c VFN Code of conduct.

[1005] Art. 4-5 VFN code of conduct and art. 5-6 NVB code of conduct.

[1006] Art. 8 NVB Code of conduct.

[1007] Art. 4-5 VFN code of conduct and its explanation, and art. 5-6 NVB code of conduct and the document with its minimum standards. The four household types are a single, a single with children, a couple and a couple with children. The minimum standard (the norm on required minimum living expenses) increases above certain income thresholds, since households with more income usually spend more. The lending standard is calculated as: minimum standard + 0,15*(actual net income -/- minimum required costs for housing -/- minimum standard). The minimum required cost for housing is a standard set by Nibud.

[1008] Art. 5 VFN code of conduct and its explanation, page 2 of the NVB document with the minimum standards.

[1009] See the explanation to art. 6 VFN Code of conduct.

[1010] Art. 7 NVB Code of conduct. Furthermore, both codes of conduct prescribe two possible calculation methods for taking tax advantages resulting from mortgage interest deductibility into account for calculating the existing net monthly mortgage credit costs. The first allowed method is reducing the gross monthly costs with 25% or 30%, depending on the borrower's income, as a fictitious tax advantage. Alternatively, the net monthly costs of a 30 year annuity amortisation scheme can be used (art. 6a VFN Code of conduct and the explanation on art. 5 and 6 VFN Code of conduct and art. 7 NVB Code of conduct).

[1011] Rb Amsterdam 31 December 2014, ECLI:NL:RBAMS:2014:9091, para. 4.8.

burden of at least 2% of the total credit amount for calculating the repayment capacity.[1012] For instalment credit, the maximum credit sum is 50 or up to 96 times the monthly borrowing capacity, depending on the calculation method which credit providers choose.[1013] The rules of the NVB code of conduct lead to a credit limit or maximum credit sum of 50 times the borrowing capacity.[1014]

The codes of conduct apply to the members of the respective organisations. VFN members can be expulsed in case of structural non-compliance.[1015] Furthermore, both codes of conduct require credit providers to agree with their intermediaries on paper that the latter will uphold the code of conduct.[1016] When an intermediary systemically violates the code of conduct, the credit provider must exclude the intermediary from acting on its behalf.[1017]

The scope of both codes of conducts is credit supplied to consumers, other than credit for purchasing, remodelling or refinancing an own residence, secured by collateral through establishing a mortgage.[1018] Moreover, they prohibit providing unsecured credit for *purchasing* an own residence, if this violates the norms of the code of conduct for mortgage credit (so, providing unsecured credit for e.g. *remodelling* an own residence is allowed).[1019] The scope of the NVB code of conduct has additional limitations: it only applies to consumer credit with a sum between € 1.000 and € 75.000.[1020] Also, it excludes some types of credit from the scope of the articles dealing with the DSTI and thus the LTI norms, including credit for which the application of those norms would be burdensome for consumers, provided that (1) the consumer shows the bank that he has enough income and/or capital, (2) the methods of this code of conduct are difficult to apply to this credit, and (3) the bank motivates the non-application of the norms sufficiently and documents this motivation.[1021]

1012 Art. 6a VFN Code of conduct. Cf. pages 3-4 of the explanation of the VFN Code of conduct.
1013 See art. 6a VFN Code of conduct Instalment credit is credit which has to be redeemed in fixed terms.
1014 Art. 7 NVB Code of conduct. This is the case for both revolving and instalment credit.
1015 Art. 1 VFN code of conduct.
1016 Many Dutch households use services of an intermediary when taking out a mortgage loan.
1017 Art. 8 VFN code of conduct and art. 13 NVB code of conduct.
1018 Art. 1 VFN code of conduct.
1019 Art. 1 and the explanation of the VFN code of conduct.
1020 Art. 3 and 10 NVB code of conduct.
1021 Art. 4 NVB code of conduct. Among the other excluded types are (1) credit secured by collateral on belongings of consumers, if the consumer is able to pay the credit costs out of the credit received from the bank, (2) credit with a duration of maximum three months and a limit not higher than the monthly income received on the bank account, (3) credit secured by collateral on belongings of consumers which are able to generate revenues and (4) student loans. Some provisions of the NVB code of conduct still apply to these exemptions, such as the prohibition to supply credit for acquiring an own house if then the norms of the code of conduct for mortgage credit would be violated. Also the VFN code of conduct includes an exemption: art. 6e allows exceeding the DSTI ratio for refinancing loans, if this is in the interest of the consumer, which is at least the case if the new interest rate is lower.

DSTI limits in the NTO code of conduct

The third code of conduct applying to consumer credit is that of the *Nederlandse Thuiswinkel Organisatie* (NTO) (Dutch Homeshop Organisation), an organisation representing the interests of web shops. According to the NTO, more than 70% of all online consumer sales are handled by their members.[1022] Members of the organisation are obliged to apply their code of conduct.[1023] The NTO code of conduct deals with hire purchase credit, and applies to loans between € 250 and € 5000.[1024]

The NTO code of conduct, also called income and expenses test, consists of a system for calculating the maximum amount of credit that can be extended, based upon income and expenses. The calculation of the borrowing capacity differs slightly from to the other two codes of conduct. It is based on actual net income and actual housing costs, as reported by the consumer, while the magnitude of the other expenses is derived from the minimum references values, as calculated by Nibud.[1025] The buffer for disposable income is lower than under the other two codes of conduct, and thus offers less protection. Existing credit must be taken into account, with assumed monthly costs of 2% of the total outstanding credit sum, as recorded in the credit registry.[1026] So, these rules create maximum DSTI ratios as well. Yet, if no borrowing capacity exists, credit can still be extended if it can be justified by the individual circumstances of the consumer, which needs to be substantiated.[1027]

Evaluating the determinacy and completeness of the DSTI and LTI limits for consumer credit

This system of an open norm in the Wft, with the codes of conducts as further specification, is completer than one would suspect at first sight. The scope of the codes of conduct concerning consumer credit is restricted to members of the respective organisations, of which many, but not all of the credit suppliers, are member. This suggests that the scope of the DSTI limits is limited. However, the protective influence of the codes of conduct reaches beyond their own scope. The AFM namely takes the view that these codes of conduct are a minimal interpretation of art. 4:34 Wft. Consequently, it verifies whether own criteria of lenders not subject to a code of conduct, would at least provide the

[1022] See https://www.thuiswinkel.org/over-ons (last visited 28 July 2016). Membership of the NTO is voluntarily, but web shops have an incentive to become member, since the NTO-label signals credibility to their customers. The code of conduct is available at https://www.thuiswinkel.org/bedrijven/lidmaatschap/voorwaarden/inkomens-en-lastentoets-voor-kredietverstrekkende-webshops (last visited 5 December 2014).
[1023] See https://www.thuiswinkel.org/bedrijven/lidmaatschap/voorwaarden (last visited 28 July 2016).
[1024] Art. 2 and 15 NTO code of conduct.
[1025] Art. 3, 6-11 NTO code of conduct. The consumer must be pointed at his own responsibility for reporting the correct income and housing costs (art. 3). Income includes allowances (art. 11).
[1026] Art. 3, 11 and 15 NTO code of conduct.
[1027] Art. 12 NTO code of conduct.

same degree of protection to overextension of credit as the codes of conduct. In a lawsuit, a lender argued that this stance of the AFM violated the *lex certa* principle, since the Wft itself did not indicate that the norms of a code of conduct would function as minimum norm.[1028] However, both the District Court of Rotterdam and the court of last instance judged that this principle was not violated, because the AFM communicated its stance in advance to credit providers.[1029] So, the overall scope of the degree of protection achieved by the DSTI caps is encompassing.

These judgments and the *lex certa* principle automatically provoke the question of whether this system is determinate. The open norm of art. 4:34 Wft itself is vague and general, and thus indeterminate. It requires further specification to enable enforcement.[1030] The codes of conduct function as this further specification. Their provisions are relatively complex and technical, but they are quite specific. For professionals, like lenders, this complexity is no problem. This evaluation corresponds with the judgments of the courts that the norms are sufficiently clear and determinate.[1031] However, in judgments concerning the code of conduct for mortgage credit, both the District Court of Rotterdam and the court of last instance held that a violation of this code is not necessarily a violation of art. 4:34 Wft.[1032] Analogically, this applies as well to the codes of conduct for consumer credit. This diminishes the determinacy of the total framework, despite the fact that the norms in the codes of conduct are sufficiently clear and determinate. Furthermore, the differences between the codes of conduct might hamper their functioning as a yardstick for the required minimal required degree of protection against overextension of credit, because it may be unclear which rules and exceptions determine the desired level of protection. Nevertheless, since large deviations from codes of conduct by lenders will likely be a violation of art. 4:34 Wft, this lack of clarity does not decisively impair the effectiveness of the rules.

[1028] Rb Rotterdam 4 May 2011, NL:RBROT:2011:BQ3835, *JONDR* 2011/148, para. 2.10.
[1029] *Ibidem;* CBb 28 November 2013, NL:CBB:2013:260, *JOR* 2014/41, para. 5.5. The *College van Beroep voor het bedrijfsleven* (CBb) (Trade and Industry Appeals Tribunal), the court of last instance in these kinds of cases, also ruled that art. 115(1) Bgfo must not be interpreted as stipulating that the criteria of the lenders should always prevent an overextension of credit. Nonetheless, since art. 115(1) Bgfo mentions this as the aim of the criteria, the own criteria should at least not be unsuitable for serving that goal, according to the CBb (para 5.1). Also in cases about the code of conduct for mortgage credit, in the period before the regulation on mortgage credit was in force, the District Court of Rotterdam and the CBb both ruled that this code of conduct could be taken as a valid minimum interpretation of the open norm of art. 4:34 Wft, and that this does not violate the principles of legal certainty and *lex certa:* Rb Rotterdam 20 May 2010, NL:RBROT:2010:BM5231, *JOR* 2010/196, para. 2.10-2.12; CBb 19 July 2013, NL:CBB:2013:69, *JOR* 2013/280, para. 5.2.
[1030] Cf. Van Tuyll (2012), p. 32.
[1031] See e.g. CBb 28 November 2013, NL:CBB:2013:260, *JOR* 2014/41, para. 5.5.
[1032] Rb Rotterdam 20 May 2010, NL:RBROT:2010:BM5231, *JOR* 2010/196, para. 2.13; CBb 19 July 2013, NL:CBB:2013:69, *JOR* 2013/280, para. 5.2.

The codes of conduct are relatively complete with respect to preventing possibilities to circumvent their rules, but there are gaps. All three codes of conduct require lenders to take existing loans into account when calculating the maximum DSTI ratios. However, this requirement does not cover debt resulting from arrears on energy payments or rent, since it is no credit (in addition, it cannot be verified without relying on information provided by the consumer, because it is not recorded in the credit registry). The fact that banks are allowed to take debt-service costs of existing loans into account for 2% of the credit sum, even if they know that they are substantially higher, constitutes another gap.[1033] Other loopholes might be created through the exceptions to the codes of conduct. The NVB code of conduct allows for more exceptions than the VFN code of conduct.

So, there is room for leakage in the rules of the codes of conduct concerning consumer credit. Still, the open norm itself functions as a safety net to prevent widespread and large deviations from the norms of the codes of conduct, since it is general and applies always. Furthermore, borrowers and lenders themselves have incentives to avoid an overextension of credit. Nevertheless, lenders can be under pressure due to competition or conflicting incentives from sales targets of fees. In addition, they might rely on a risky business strategy – for instance, to increase market share.[1034]

4.1.1.2. The DSTI, LTI and LTV limits for mortgage credit

Self-regulation was the major means of shaping responsible mortgage credit supply and preventing overextension of credit since 1990, when the first code of conduct for mortgage credit had been adopted, until 1 January 2013, when the regulatory income and LTV limits came into force. The code of conduct for mortgage credit includes a system for calculating DSTI and LTI limits that is very similar to the current regulatory system, and, since the revision of 2011, a LTV limit of effectively 106%.[1035] Before that, LTV limits were only used in the national mortgage guarantee scheme, the *Nationale Hypotheek Garantie* (NHG), existing since 1995. The NHG is briefly discussed in box 4.1.

[1033] *Supra*, footnote 1011.
[1034] Cf. Grace et al. (2015), p. 92; Fitzgerald (2013), p. 357.
[1035] See art. 6-7 code of conduct for mortgage credit. A Dutch and English version of this code of conduct and an explanation accompanying it (only in Dutch) are available at https://www.nvb.nl/publicaties-standpunten/publicaties/1671/gedragscode-hypothecaire-financieringen.html (last visited on 9 January 2015). With the revision of the code of conduct for mortgage credit in 2011, a LTV cap was introduced and possibilities to use exceptions to the DSTI norms were reduced. This has been the result of pressure from the Minister of Finance, who threatened to introduce regulatory LTV and LTI limits, and the AFM, which observed that mortgage lenders exceeded the maximum lending norms regularly, for instance by assuming, without any substantiation, that the income of the borrower would rise (Van Poelgeest (2015), pp. 80-81; Van Boom (2012), p. 271). For some lenders this was even the default option.

Box 4.1: DSTI and LTV limits in the Dutch national mortgage guarantee scheme, the NHG

In the Netherlands, mortgage guarantees are provided by a private foundation, backed by the government for its financial commitments.[1036] In turn for a fee, paid by the borrower, this foundation provides a guarantee to the lender in case the borrower would be unable to meet his payments obligations. Irrespective of the type of loan, the guarantee decreases monthly with the amount which would be redeemed under an annuity mortgage with a duration of 30 years.[1037] Moreover, for loans taken out since 1 January 2014, banks bear 10% of the risk of a loss.[1038] Due to this guarantee, mortgage lenders face lower risk and offer lower interest rates to borrowers with a guaranteed loan. In fact, banks sometimes do not lend without a guarantee. Furthermore, under certain circumstances, the residual debt of a borrower after a forced sale can be cancelled.[1039] So, the NHG leads to advantages for both borrowers and lenders.

Conditions and norms apply to borrowers participating in the mortgage guarantee scheme, including LTV and DSTI limits.[1040] Households are only eligible for a guarantee if both the mortgage amount and the house value are below a certain threshold.[1041] This amount is based on the average selling price of a house in the Netherlands, and has risen substantially over the years.[1042] Since 2013, the regulatory LTV cap is incorporated in the NHG norms, but until 2011 the LTV limit was effectively 112% of the lowest of either the price paid for the house, or the market value according to an appraisal report, plus some other costs, most importantly costs for improving the quality of the house.[1043] The NHG norms include a system of DSTI limits, which are yearly adopted based on advice of Nibud, after approval by the Minister of Internal Affairs.[1044] LTI limits can be derived from the DSTI limits. Substantially, this system is similar to the current regulatory regime.

[1036] This is the *Stichting Waarborgfonds Eigen Woningen* (Foundation Homeownership Guarantee Fund). See https://www.nhg.nl/Over-NHG/Stichting-WEW (last visited 28 July 2016); Priemus (2013), pp. 353-354.
[1037] Art. A1(2.a) of the conditions and norms of the NHG, available at https://www.nhg.nl/V-N/Voorwaarden-Normen-2017-3. An archive with all conditions and norms since 1995 is available at https://www.nhg.nl/V-N/Archief-Voorwaarden-en-Normen (both last visited 18 February 2017).
[1038] Art. B13(2)-(3) of the conditions and norms of the NHG.
[1039] See https://www.nhg.nl/Consument/Voorwaarden-voor-kwijtschelding (last visited 17 September 2016).
[1040] *Supra,* footnote 1037.
[1041] See e.g. https://www.nhg.nl/Consument/NHG-afsluiten/Voorwaarden-bij-aankoop (last visited 28 July 2016). Note that a fixed percentage of additional costs (currently 6%) should be subtracted from the threshold value to obtain the maximum allowed value of the house.
[1042] The NHG itself might have contributed to the rising threshold value, as Kerste et al. (2011, p. 98) concluded that it had raised house prices. During the crisis, the threshold was temporarily decoupled from the average selling price.
[1043] This LTV limit can be derived by combining norms 5.1 and 2.2 (2.3. for new houses, where the LTV limit was effectively 108% until 2011). In 2012, the LTV limit was effectively 108% for all houses.
[1044] See chapter 6-7 of the NHG norms, and, on approval by the Minister of Internal Affairs, art. 4(1) and art. 13(2)-(3) of the statutes of the *Stichting Waarborgfonds Eigen Woningen,* available at https://www.nhg.nl/Over-NHG/Stichting-WEW/Statuten (last visited 28 July 2016).

The basis of the regulatory DSTI and LTV limits has been laid by adding some paragraphs to art. 115 Bgfo.[1045] Art. 115(3) Bgfo states the norms regarding income and the relationship between mortgage credit and the value of the house – so, DSTI and LTV limits – are determined by ministerial decree. This is the *Tijdelijke regeling hypothecair krediet* (Trhk) (Temporary regulation of mortgage credit).[1046] Subsequently, art. 115(4)-(5) Bgfo oblige mortgage lenders to apply these income criteria, in addition to their own criteria, when assessing an application for credit, and to take into account the LTV cap. So, their own criteria and the code of conduct for mortgage credit, which partly determines and restricts these own criteria, remain applicable. Finally, paragraphs six and seven of art. 115 Bgfo prescribe methods for valuing the house when determining the LTV ratio.

DSTI and LTI limits in the *Tijdelijke regeling hypothecair krediet*

The Trhk sets a limit for the financing costs – all the necessary costs for financing a mortgage loan, i.e. the DSTI ratio – which is differentiated to both the income level and the interest costs.[1047] Higher DSTI percentages are allowed for higher income levels, and for higher interest rates. The latter seems counterintuitive, but with lower interest rates, there is a higher risk of sharply rising interest rates, for instance, after the termination of the fixed-rate period.[1048] This may lead to over-indebtedness. If mortgage interest is not tax deductible, the DSTI limits are much lower.[1049] The allowed DSTI percentages in 2017 range between 9.5% and 43.5%. This leads to LTI ratios of 2 to 2.5 for the lowest income categories, 4-5 for middle-income categories, and up to 5.5 for the highest income categories.[1050] Basically, the DSTI limits are a household's income minus the portion of income which it needs for other expenses than servicing its housing debt. This portion is calculated by taking half of the difference between the actual average expenditures of Dutch households with a similar income, as measured by a continuous budget survey of the Dutch statistical agency, and the required minimum living expenses, and adding this to the required minimum living expenses.[1051] This method is subject to various criticisms. Some consider it arbitrary (households might want to spend more than 50% of

[1045] *Wijzigingsbesluit financiële markten 2013*, *Staatsblad* 2012, 695, available at https://zoek.officielebekendmakingen.nl/stb-2012-695.html. In later years, the paragraphs about the valuation of the home have been amended twice. Art. 115 Bgfo is available at http://wetten.overheid.nl/BWBR0020421/Hoofdstuk10/Afdeling102/1022/Artikel115.
[1046] The *Tijdelijke regeling hypothecair krediet* is available at http://wetten.overheid.nl/BWBR0032503.
[1047] Art. 3(1), 3(5) and the first attachment of the Trhk.
[1048] See also the Explanatory Memorandum to art. 3 Trhk in *Staatscourant*, 20 December 2012, Nr. 26433 (p. 8).
[1049] Tables 3-4 of the first attachment of the Trhk.
[1050] See https://www.nibud.nl/wp-content/uploads/voorbeeldhuishoudens-verschil-maximale-hypotheek-2016-en-2017.pdf (last visited 18 February 2017).
[1051] As of 2015, the required minimum living expenses include a buffer. For an extensive explanation of the methods used by Nibud, the institute which calculates these ratios, see Nibud (2015), pp. 15-25.

their free disposable income on housing) and undifferentiated (it is based on a two-person household with a single income).[1052] The AFM is aware of the risks of norms which are based on one household type, and monitors what their effects are on other household types, to ensure that vulnerable people remain protected.[1053] Previously, it has proposed differentiation in household types.[1054] The Financial Stability Committee has also warned against procyclical elements in the calculation of the DSTI limits.[1055] Recently, some elements in the calculation have been changed to make the norms less procyclical.[1056]

The detailed rules on the income which may be taken into account for calculating the DSTI ratio try to balance protection and flexibility. In principle, only current fixed and durable gross income counts, which is salary, including fixed bonuses and allowances, governmental allowances and pensions, and other durable, long-term sources of income.[1057] However, if the borrower had no fixed income, his average income of the last three calendar years can be used for the calculation.[1058] This is intended for people working as entrepreneur, freelancer or via a temporary employment agency.[1059] Also, two future streams of income may be taken into account: (1) future available income from disposable capital, if it can be reasonably expected and (2) an expected future structural increase of income within a reasonably term. This term could be up to several years and has to be substantiated, like the grounds for expecting increasing income.[1060] The restrictions for taking future income into account are looser than those of the code of conduct for mortgage credit to provide more flexibility.[1061] Yet, in 2011, conditions in the code of conduct were tightened for the very reason that mortgage lenders exceeded

---

1052 See e.g. Rietdijk (2014), Battes (2015a), Boelhouwer & Schiffer (2015), pp. 5-6, 12-14.
1053 Cf. https://www.afm.nl/nl-nl/professionals/nieuws/2016/jul/eenverdieners-hypotheek (last visited 27 September 2016).
1054 This differentiation was proposed at the time that the norms were still part of the code of conduct for mortgage credit. Cf.https://www.rijksoverheid.nl/documenten/kamerstukken/2010/04/21/brief-inzake-aanscherping-regels-hypothecaire-kredietverlening (last visited 9 September 2016). Boelhouwer & Schiffer (2015) have also proposed differentiated norms, which take the household type and life-stage into account (p. 17).
1055 See the accounts of the meeting of 12 November 2013 (*supra,* footnote 1166).
1056 Nibud (2016), pp. 18, 46-47.
1057 Art. 2(1) Trhk. The list of allowed types of income is identical to that in the explanation to art. 6(3) code of conduct for mortgage credit.
1058 Art. 2(2) Trhk.
1059 See the Explanatory Memorandum to the Trhk, published in the *Staatscourant*, 20 December 2012, Nr. 26433, p. 7, available at https://zoek.officielebekendmakingen.nl/stcrt-2012-26433.html (last visited 28 July 2016). These provisions have been loosened compared to the code of conduct for mortgage credit of 2011, in which averaging the income over three years only applied to entrepreneurs, while for other people without fixed income, the fixed and durable part of the income had to be determined and had to serve as basis for the calculation (art. 6(3) and the explanation to this article of the code of conduct for mortgage credit).
1060 Explanatory Memorandum to art. 2 to art. 5 Trhk (*supra*, footnote 1059).
1061 According to art. 6(3)(b) the code of conduct for mortgage credit, future income could only be taken into account if it was unconditionally and written assured by the employer, and would take effect within six months.

the maximum norms regularly, for example, by assuming, without any substantiation, that the income of the borrower would rise.[1062] According to letters of the Ministers of Finance and Housing, objective information proving the expected increase is now required.[1063] However, this is not clear from the text; the current conditions are a bit vague and, thus, create room for circumvention.

Various rules ensure a prudent calculation of the actual DSTI percentages. A protective condition is that financing costs should always be calculated using gross financing costs, and an annuity scheme of 30 years or the real term of the mortgage, if that is shorter than 30 years.[1064] This means that it is not possible to artificially reduce debt-servicing costs by assuming a very long maturity. Other paragraphs of art. 3 Trhk settle issues related to the calculating the maximum financing costs, such as summing up the income of dual earners, and regulating the interest rates that should be used for the calculation.[1065] Finally, art. 3(11) Trhk requires mortgage lenders to take the costs of other loans of consumers into account, by either adding them to the actual financing costs or deducting them from the maximum allowed financing costs. This concerns previously supplied consumer or mortgage credit, as well as student loans.[1066] The financing costs of existing credit are assumed to be 2% of the total credit amount, but for student loans a percentage of 0.75% or 0.45% is used, because of their low interest rates and other favourable conditions.[1067]

To grant lenders and borrowers flexibility, the Trhk provides for exceptions to the DSTI caps. Three of them are geared towards specific situations, namely (1) refinancing one mortgage loan with another, while staying in the same house, (2) taking energy saving measures and (3) credit for bridging the period in which a new house is already bought, but the old house is not yet sold. Protective and mostly precise conditions are attached to these exceptions.[1068] Yet, although an increase of the DSTI limit in

[1062] Van Poelgeest (2015), pp. 80-81; Van Boom (2012), p. 271.
[1063] See letter of the Minister of Finance, 14 December 2012, available at https://zoek.officielebekendmakingen.nl/dossier/32847/kst-32847-37 and letter of the Minister for Housing, 7 February 2013, available at https://zoek.officielebekendmakingen.nl/dossier/32847/kst-32847-41 (both last visited 28 July 2016).
[1064] Art. 3(2) Trhk. Art. 3(3) Trhk provides one exception to this rule, which can be used if it is justified in light of the conditions of the mortgage and the personal circumstances of the borrower.
[1065] See art. 3(7)-(9) Trhk). The rules on interest rates prevent that lenders use a very low interest rate in their calculation in order to increase the allowed loan amount.
[1066] See the Explanatory Memorandum of the Trhk, p. 8 (*supra*, footnote 1059).
[1067] See the letter of the Minister for Housing of 30 May 2016 and the attached letter of Nibud, at https://zoek.officielebekendmakingen.nl/kst-32847-243.html and https://zoek.officielebekendmakingen.nl/blg-759718 (both last visited 28 July 2016). Moreover, if a student loan is almost redeemed, a lender may assume a future income increase, in order to account for the fact that the associated credit costs will soon end.
[1068] A condition in the first situation is that the new principal of the mortgage loan is not larger than the amount of the old loan together with the costs of redeeming the old loan and taking out the new loan (art. 4(2) Trhk). Several precise conditions are attached to the second situation, e.g. that the consumer's income is at

case of energy saving measures can be justified by the lower monthly costs for borrowers as a result of these measures, the actual savings depend on the behaviour of the borrower. The Trhk also created a general possibility to extend credit which exceeds the DSTI limit, if motivated and substantiated by documents and calculations which show that this is justified.[1069] Furthermore, the credit provider must be able to show that he verified that the reason underlying the deviation is durable.[1070] The text of art. 4(1) Trhk does not exclude the possibility that banks use generic characteristics of consumers as a basis for using the exception clause, as long as the conditions are fulfilled.[1071] These conditions help to minimise circumvention and overextension of credit to consumers.

The LTV limit and valuation rules in the *Tijdelijke regeling hypothecair krediet*

The maximum LTV ratio will be 100% as of 1 January 2018, after the gradual reduction of one percentage point per year, starting with 105% in 2013 (hence, it is 101% in 2017).[1072] Several exceptions to this LTV cap have been created. Similarly to the exceptions to the DSTI ratios, it is allowed to exceed the maximum ratio for refinancing one mortgage loan with another, and for taking energy saving measures.[1073] In the latter case, it is allowed to finance the costs for taking energy saving measures with the mortgage loan, up to a LTV ratio of 106% (apparently, these measures are supposed to be not value-enhancing, which is a bit puzzling). Furthermore, a borrower with residual debt from selling his previous house is allowed to refinance this, without taking it into account when calculating the LTV ratio.[1074] Protective and mostly precise conditions have been attached to these exceptions.[1075] Apart from three exceptions for specific situations, there is one general option to exceed the LTV cap, namely if the actual financing costs are substantially lower than the maximum allowed financing costs.[1076] The

least € 33.000 (art. 4(3) Trhk). Only for the third exception some criteria are less precise, due to the use of a phrase like a reasonable period (art. 4(4) Trhk). These exceptions were already included in art. 6(6) code of conduct for mortgage credit.

1069 Art. 4(1)(a)-(b) Trhk.

1070 Art. 4(1)(c)-(d) Trhk.

1071 The 2007-version of the code of conduct for mortgage credit contained a general exception clause (art. 6(6)), contrary to the 2011-version. Under that regime, the court of last instance allowed banks to base the use of this clause on generic characteristics of consumers, as long as the bank used own criteria for responsible lending, as required under art. 4:34 Wft (CBb 19 July 2013, NL:CBB:2013:69, *JOR* 2013*,* para. 5.4 and 5.9-5.10).

1072 Art. 5(1)-(2) Trhk. In 2012 the LTV ratio limit 106%, due to the code of conduct for mortgage credit.

1073 Respectively art. 5(5)(a) and 5(4) *Trhk.* The conditions for using the exception of art. 5(5)(a) are identical to those for using the same exception to exceed the DSTI norms.

1074 Art. 5(3) Trhk.

1075 In January 2016, it was reported in the Dutch news that some lenders granted borrowers thousands of euros above the LTV limit owing to very small energy saving measures, sometimes costing no more than € 100 (Stikkelorum, 2016). This suggests that this exception is vaguely worded and facilitates creative compliance, but this is not the case: the rules are precisely defined, but have been violated.

1076 Art. 5(5)(b)-(e) Trhk*.* One of these specific exceptions allows exceeding the LTV limit to finance necessary improvements for the house, if the LTV ratio will decrease. The Explanatory Memorandum clarifies that this exception is meant for houses which decreased in value, and need improvement to ensure their safety, for reasoning behind this exception is that consumers with relatively low debt-service costs, and thus a relatively low LTI ratio, should easily be able to repay their debt.[1077] Consequently, risks for the lender are much lower when exceeding the LTV cap. This exception is slightly vague, since it is not defined when a DSTI is "substantially lower".

Art. 115(6)-(7) Bgfo provide the methods allowed for valuing the house for determining the loan-to-value ratio, with some safeguards to guarantee the reliability of these values. The value of the house is either determined by (1) its building costs, (2) its market value, (3) model-based valuation, or (4) the most recent official appraisal value based on to the *Wet waardering onroerende zaken* (Wet WOZ, Act on Real Estate Valuation).[1078] The market value must be determined by an appraisal expert and the appraisal report may not be older than a year at moment of entering into the mortgage agreement.[1079] If model-based valuation or the WOZ value is used, only a LTV ratio of 90% is allowed, in order to reduce the risk of overextending credit.[1080] These valuation methods are namely based upon objective criteria of the house, like its size and the location, but they can overrate the true value of the house, if it is in poor shape.[1081] These latter valuation methods have been introduced in July 2016, with the transposition of the Mortgage Credit Directive, in order to offer consumers a cheap valuation method instead of the repealed option to use the price paid for the house as its value.[1082] The most recent official appraisal value based upon the Wet WOZ can also be used without the 90% LTV limit, if the house is already wholly or partly owned by the borrower, or if he will inherit it wholly or partly.[1083] This option was created to avoid unnecessary taxation costs for homeowners who want to increase the credit sum or switch to another mortgage lender.[1084] Nevertheless, it comes with the small risk that the WOZ value is higher than the market value (usually it is the other way around).[1085] Removing this option will create more consistency.[1086]

---

instance concerning the foundation or the roof (https://zoek.officielebekendmakingen.nl/stcrt-2016-56566.html, last visited 21 February 2017).

[1077] Explanatory Memorandum to art. 5 Trhk (*supra*, footnote 1059).

[1078] The Wet WOZ is available at http://wetten.overheid.nl/BWBR0007119.

[1079] Art. 115(6)(2) Bgfo.

[1080] Art. 115(6)(3) Bgfo.

[1081] See page 34 of the Explanatory Memorandum to the AMvB amending the Bgfo, available at https://zoek.officielebekendmakingen.nl/stb-2016-266.html (Cf. pages 5 and 8-11 of the minutes of a written discussion between the Minister of Finance and the parliament: https://zoek.officielebekendmakingen.nl/kst-34292-13 (both last visited 29 July 2016).

[1082] The latter option was repealed, because it was considered incompatible with art. 19 Directive 2014/17.

[1083] Art. 115(7) Bgfo.

[1084] See *Wijzigingsbesluit financiële markten 2014, Staatsblad 2013, 537*, pp. 35 & 49, available at https://zoek.officielebekendmakingen.nl/stb-2013-537.html (last visited 29 July 2016).

[1085] Het Financieele Dagblad (2014a) drew attention to this risk, after finding out that banks are often unaware of the actual market value of the house, when extending these kind of mortgage loans.

[1086] Art. 115(6)(3) and 115(7) Bgfo are conceptually incoherent.

Scope of the DSTI, LTI and LTV limits

The regulatory framework establishing DSTI, LTI and LTV limits applies to all mortgage credit supplied in the Netherlands, due to the wide scope of the Wft.[1087] Banks, insurers, and other financial institutions are bound by it. This is certainly desirable in the light of the recommendation of Jeanne and Korinek (2014) to move macroprudential policy beyond banking regulation.[1088] This wide scope limits the possibilities of circumventing the maximum DSTI, LTI and LTV ratios.

However, the reasoning of a judgment on the scope of art. 4:34 Wft, delivered in April 2014, in an urgency procedure, increased the risk of circumventing the DSTI, LTI and LTV limits.[1089] According to the reasoning of the court, in a situation where a homeowner moves to another house and does not substantially increase the credit sum, a bank may treat the situation as a replacement of collateral for an already existing agreement, instead of a new credit application.[1090] Consequently, art. 4:34 Wft, and thus the Trhk, does not apply. When following this intriguing reasoning, banks can circumvent the DSTI, LTI and LTV requirements in cases that borrowers move and do not substantially increase the credit sum. Although the outstanding amount of debt will not increase in these cases, DSTI, LTI or LTV ratios might alter, if consumers earn less, interest rates have increased, or the value of the new house is lower than that of the old.

Evaluating the determinacy and completeness of the regulation of mortgage credit

Art. 4:34 Wft has been created as an open norm, but with respect to mortgage credit this norm has been made specific by further rules and requirements, coming into force as of 1 January 2013. Since then, a vague and indeterminate open norm is history. Violating a code of conduct does not necessarily establish a violation of art. 4:34 Wft, according to the courts,[1091] which diminishes the determinacy of

---

[1087] As discussed at the beginning of section 4.1.

[1088] Jeanne & Korinek (2014), pp. 167-168.

[1089] Rb Amsterdam 14 April 2014, NL:RBAMS:2014:2404, *RVR* 2014/78. In July 2016, this was the only published judgment concerning the Trhk.

[1090] *Ibidem,* para. 4.4-4.5. The case concerned a homeowner who already borrowed mortgage credit from a bank, and who wanted to move to a cheaper house. He asked the bank whether he could directly switch the mortgage loan to the new house under the existing conditions, which the bank confirmed (para. 2.1-2.2, 4.3). However, when the consumer later lodged the credit application, the bank treated it as a new application, and refused to offer the loan. The reasons for refusal were that (1) the LTI limit would be exceeded, due to existing consumer loans, and (2) uncertainty about selling the old house and the resulting revenue (para. 3.2, 4.3). The consumer argued, however, that it would repay the consumer credit with the money obtained from the price differential between the old and the new house. In addition, he argued that there was no new credit application, but only a replacement of collateral for an already existing agreement (para. 4.2). The court confirmed the uncertainty about the moment of selling the old house, but judged that it can at least be reasonably expected that the total amount of debt will decrease (para. 4.4). Also, it agreed with the argument on the replacement of collateral (para. 4.5).

[1091] As discussed in 4.1.1.1.

the self-regulatory system. This problem is absent with a system of regulatory DSTI, LTI and LTV limits. As is the case with the rules in the codes of conducts, the rules and requirements in the Trhk are technical and specific, but clear and thus determinate.

The Trhk is reasonably complete. Firstly, all mortgage credit suppliers subject to the Wft are covered by it. The biggest limitation to its scope is that it does not apply when the credit sum is not significantly increased, which creates certain risks and possibilities for circumvention, as discussed above. Secondly, the conditions attached to the exceptions to the DSTI, LTI and LTV caps do not completely exclude the risk of abuse, but nevertheless minimise it. Some exceptions have been loosened compared to those under the latest version of the code of conduct for mortgage credit, such as the increased freedom to expect rising income and expect income from capital. This creates more possibilities to deliver tailor-made solutions, but also adds some extra risks. Thirdly, when determining DSTI and LTI limits, mortgage lenders are required to take into account other financial commitments, including consumer credit and other loans. The method for calculating this is not prescribed, which suggests that real costs should be used, but for consumer credit the debt-service costs must be set at at least 2% of the credit sum or credit limit, according to the code of conduct for mortgage credit, which still applies.[1092] As discussed before, this leaves some room for circumvention.

Meanwhile, the completeness of the entire system to prevent overextension of credit is hampered by the incoherence of the various sets of rules. While the Trhk and the three codes of conducts share the overall idea of calculating a household's borrowing capacity – which can be expressed as a DSTI ratio – by means of deducting already existing expenses from its income, the implementation is different for each set of rules, as shown in table 4.2. Although these inconsistencies do not decisively impair the effectiveness of the current system, they hamper the alignment of the various rules, and make it difficult to ascertain the actual level of protection of a consumer. Some differences stem from the different subject matter of each set of rules – consumer credit, hire purchase credit, or mortgage credit. Insofar as this is not the case, it is recommended to remove inconsistencies, by aligning methods.

Finally, the completeness of borrower-based caps depends on the transmission channels of their effects. These are shown in figure 4.1. This reveals that the risk of leakage is relatively small, especially since (1) other credit has to be taken into account when calculating DSTI limits for mortgage credit, and (2) DSTI limits also apply to most lenders of consumer credit.

[1092] Art. 6(11) code of conduct for mortgage credit.

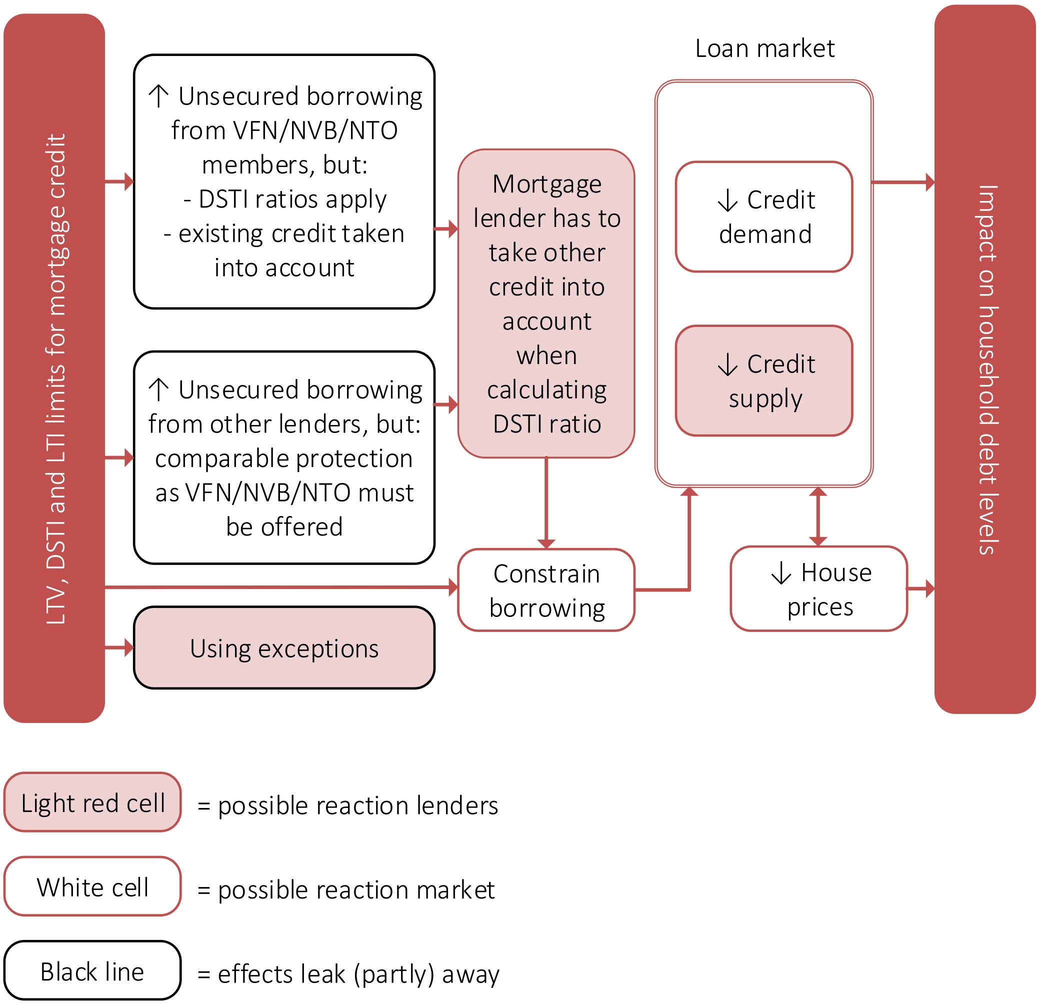
Table 4.2: Main characteristics regarding the calculation of the borrowing capacity (DSTI ratio)

	VFN code of conduct	NVB code of conduct	NTO code of conduct	Trhk
Income	net income		net income	gross income (incl. potential increase)
Deduct from income: minimum living expenses	minimum required living expenses		"super-minimum"[1093] required living expenses	minimum required living expenses (incl. buffer)
Deduct from income: buffer	buffer of 15% of free disposable income[1094]		buffer of 10% of "super-minimum" required living expenses	buffer of 50% of assumed free disposable income[1095]
Deduct from income: housing costs	gross financing costs minus estimated deduction MID, or net costs of an annuity mortgage of 30 years	actual financing costs or gross financing costs minus estimated deduction MID	actual housing costs	
Deduct from income: existing credit costs	existing credit costs à 2% of credit limit, or real costs	existing credit costs à 2% of credit sum/limit		
Material scope	consumer credit	consumer credit between € 1,000 - € 75,000	hire purchase credit between € 250 - €5,000	mortgage credit
Exceptions	specific	general & specific	general	general & specific
Benchmark household	four types: a single, a single with children, a couple, a couple with children			a couple with one income

All in all, it can be concluded that, from a systemic perspective, the risks appear contained, despite the room for using exceptions, and some room for circumvention of the regime establishing DSTI, LTI and LTV limits for mortgage credit. Abusing exceptions and circumvention can lead to very negative consequences for the consumer concerned, but it seems unlikely that it can happen on such a large scale that it results in systemic fragility, due to the conditions and the determinate rules. Of course, this is an interim conclusion, not taking enforcement and decision-making issues into consideration.

[1093] This are the minimum required living expenses, minus some avoidable costs, such as part of the assumed budget for clothing, inventory and maintenance of garden & house (art. 9 NTO code of conduct).
[1094] The free disposable income is the actual net income, minus the minimum required costs for housing, and minus the minimum required living expenses.
[1095] The assumed free disposable income is the difference between the actual average expenditures of Dutch households with a similar income and the minimal required living expenses.

Figure 4.1: Transmission channels of the DSTI, LTI an LTV limits in the Netherlands



4.1.2. The possibility of proportionate and dissuasive enforcement of the LTV, DSTI and LTI limits

4.1.2.1. The powers to enforce maximum LTV, DSTI and LTI ratios

While DNB is responsible for enforcing the risk-weighted capital requirements, the AFM is responsible for enforcing the LTV, DSTI and LTI limits. It does not only enforce the regulatory caps on mortgage credit, but also the DSTI and LTI limits for consumer credit, which are part of codes of conducts, based on the open norm of art. 4:34 Wft. The discussed case law shows that this open norm is indeed enforced by the AFM. The courts agreed with the conduct of business supervisor, that the codes of conduct can rightfully be taken as a minimal interpretation of this open norm.[1096] The AFM and DNB have declared, in the published general principles underlying the enforcement policies, that they will

[1096] See the discussion on the scope of these codes of conduct, at the end of section 4.1.1.1.

take action if a violation is signalled, no matter whether a norm is open or closed.[1097] However, they acknowledge that demonstrating a violation of an open norm requires more motivation.[1098] An important reason for this is that also the regulatees subject to an open norm possess a certain degree of freedom regarding its interpretation.[1099] The case law reflects this: courts have judged in some cases that the non-compliance with a code of conduct does not automatically establish a violation of the norm of preventing an overextension of credit.[1100] As the AFM should honour this freedom, this reduces the effectiveness of enforcement. The AFM does not face this hurdle when enforcing the regulatory DSTI, LTI and LTV limits.

The measures available for enforcing the maximum LTV, DSTI and LTI ratios are largely similar to those available for enforcing the risk-weighted capital requirements, since the Wft underlies enforcement in both cases. The AFM uses the same informal enforcement measures as DNB, and like DNB, it can issue an instruction to adhere to a particular line of conduct within a reasonable term, can impose an order for incremental penalty payments, and a fine of the third category.[1101] Also the AFM can sanction the manager who was responsible for the breach, appoint a custodian, or withdraw authorisation, at least if the authorisation was granted by the AFM.[1102] However, criminal prosecution for violations of LTV, DSTI and LTI limits is not possible. According to Mein (2015a), enforcement differs between the AFM and DNB. Firstly, the AFM actively uses its *formal* enforcement powers, not least when art. 4:34 Wft and associated rules are violated.[1103] This follows from its strategy to prioritise certain themes and, subsequently, to stringently enforce in these areas in order to signal that it is actively supervising, and non-compliance is punished.[1104] In that way, the AFM seeks to influence behaviour of lenders, and to improve compliance. Secondly, unlike DNB, the AFM normally publishes the imposition of administrative fines on its website, often accompanied with a press release.[1105]

[1097] About these principles, see Voerman & Bast (2011), p. 114; Van Es & Verrest (2013), pp. 99-104. The original enforcement policy from 2008 (Handhavingsbeleid van de Autoriteit Financiële Markten en De Nederlandsche Bank) is available at http://www.dnb.nl/binaries/Handhavingsbeleid%20AFM%20en%20DNB%20ondertekening%2010%20juli%202008_tcm46-184090.pdf, while additional clarification was published in 2011: hhttps://www.afm.nl/nl-nl/nieuws/2011/mei/handhavingsbeleid-afm-dnb. For the official notification of the policy in 2008, see https://zoek.officielebekendmakingen.nl/stcrt-2008-132-p30-SC86677.html (all last visited 19 July 2016).
[1098] Handhavingsbeleid van de Autoriteit Financiële Markten en De Nederlandsche Bank, p. 4.
[1099] Cf. Van Tuyll (2012), p. 30; Claasssen & Snijders (2014), p. 189.
[1100] *Supra,* sub-section 4.1.1.1 and footnote 1032.
[1101] Cf. sub-section 3.2.2.1.
[1102] Cf. sub-section 3.2.2.1.
[1103] Mein (2015a), pp. 149, 155, 159-160.
[1104] *Ibidem,* pp. 149-153, 160-163.
[1105] *Ibidem*, pp. 141, 154.

Therefore, the arsenal of enforcement instruments at the disposal of the AFM is wide enough and includes deterring measures, like large administrative fines. The dissuasiveness of the available sanctions is confirmed by anecdotal evidence: according to an expert, banks tend to stay significantly under the maximum allowed ratios when lending out of fear for publicised sanctions by the AFM.[1106] Mein (2015a, 2015b) has examined the proportionality of fines imposed by the AFM, and concludes that their proportionality depends more on the severity of the violation *in abstracto* – meaning the legal classification of a violation, e.g. punishable with a fine of the third category – than on the severity *in concreto*.[1107] If the concrete violation is not very severe, the AFM may mitigate the magnitude of the fine, but it is less willing to abstain from imposing it altogether.[1108] With a reduced fine, the AFM can namely still publish its imposition, which is often feared most.[1109] All in all, it is fair to conclude that the DSTI, LTI and LTV caps are backed by a credible threat, especially since existing case law shows that the AFM dares to use its powers.[1110]

4.1.2.2. Private enforcement by borrowers

Also borrowers are able to put pressure on lenders to comply with the DSTI, LTI and LTV limits, as not only public, but also private law influences the extension of credit to consumers.[1111] The crucial concept in this regard is the 'duty of care', existing both in public and private law. In the Wft – part of public law – this concept has recently been codified in art. 4:24a for the provision of financial services, prescribing a supplier of a financial service to carefully take the legitimate interests of the consumer into account.[1112] Under private law, the concept already had a history, with as the essence of the special duty of care that lenders and their intermediaries are obliged to act as professional partners who take the interest of consumers into account.[1113] The essence of the duty of care under public and private law is the same.[1114] This duty of care does not take the own responsibility of the consumer

[1106] Mulder (2015).
[1107] Mein (2015a), pp. 177-179, 196-199. Cf. Mein (2015b), pp. 275-276.
[1108] Mein (2015a), p. 216.
[1109] *Ibidem.*
[1110] Cf. sub-section 4.1.1. It is true that the AFM mainly imposed low fines, but this is partly explained by the lower maximum amounts at that time.
[1111] For a general discussion on the advantages and disadvantages of private enforcement, see section 5.2.
[1112] This provision is in force since 1 January 2014, but already earlier specific obligations resulting from a duty of care were incorporated in the Wft. For the introduction of this article, see: *Wijzigingswet financiële markten 2014*, *Staatsblad,* 2013, 487. It is available at https://zoek.officielebekendmakingen.nl/stb-2013-487.html (last visited 24 February 2015). A long list of examples of such specific obligations is provided in Hartmann & Keupink (2011), p. 98.
[1113] Cf. Van Poelgeest (2015), pp. 207-208; Broekhuizen (2017), p. 336.
[1114] Broekhuizen & Du Perron (2012), p. 169; Van den Berg (2013), p. 312.

away.[1115] Especially in financial law, public and private norms influence each other.[1116] The content of this duty of care in private law is consequently influenced by public norms, although the violation of a norm from administrative law – e.g. DSTI caps – does not automatically lead to a violation of the duty of care.[1117] For the latter also an impairment of the consumer's interest is required.[1118] The introduction of a public duty of care, makes it easier for consumers to claim damages. If a lender breaches his duty of care, the consumer can namely claim a tortious act.[1119]

The threat of court cases on lenders crucially depends on the likelihood that courts honour the pleading of borrowers. Therefore, the case law requires attention. According to this, the special duty of care *inter alia* entails that the creditworthiness of consumers has to be verified sufficiently by the lender.[1120] However, it means more than that. Firstly, to avoid breaching their duty of care, lenders and their intermediaries have to thoroughly verify reported debt-service costs for already existing loans, and to signal whether interest rates would possibly rise, in case they seem unreasonably low.[1121] If interest rates of the existing loans can be expected to increase, this rise should be discounted in the calculation of the maximum allowed DSTI ratios.[1122] What is more, courts have established a breach of the duty of care if lenders did not take into account a risk of unemployment that was not unforeseeable,[1123] or an income drop after retirement for an old borrower.[1124] In other cases, it was held against the lender or the intermediary that they did not verify whether bonuses were structural,[1125] or whether sufficient grounds were present for expecting a certain amount of income from a Bed & Breakfast.[1126] Meanwhile, courts have judged in several cases that lenders did not breach their duty of care when supplying mortgage loan with a LTV ratio above 100%, as long as they warned

---

[1115] Van Poelgeest (2015), pp. 216-217. Cf. Van den Berg (2013), p. 312. With the introduction of the provision, the Council of State criticised the explanation to the introduction of the duty of care in public law, which presumably introduced a responsibility for the lender to ensure that a fully informed, but possibly non-rational consumer takes the appropriate decisions. In reaction, the Minister of Finance added that a lender is not responsible to protect a consumer for all irrational decisions (cf. Broekhuizen (2016), pp. 174-176).
[1116] Bierens (2013), p. 18.
[1117] Cortenraad (2012), pp. 704-706. See e.g. Rb Den Haag, 1 June 2016, ECLI:NL:RBDHA:2016:5961, para. 4.5.
[1118] Cortenraad (2012), p. 706.
[1119] Van den Berg (2013), p. 312. See e.g. Hoge Raad 16 June 2017, ECLI:NL:HR:2017:1107, para. 3.2.3 en 4.3. Cf. art. 6:162 Burgerlijk Wetboek (*supra,* footnote 986).
[1120] See e.g. Rb Leeuwarden 27 April 2011, NL:RBLEE:2011:BQ3459. Cf. Van Poelgeest (2015), pp. 217-213.
[1121] Hof Arnhem-Leeuwarden 17 September 2013, NL:GHARL:2013:6826, *JOR* 2013/313, para. 2.14. In this case the interest rate on the existing loan was very low and the intermediary, being a professional party, had to realise this and verify whether it was correct. In fact, in this case, it turned out to be temporary low.
[1122] *Ibidem.* Interest costs over the amount of too much extended credit were considered as damages and should be paid by the intermediary in that case (para. 2.18).
[1123] Rb 's-Gravenhage 10 August 2011, RBSGR:2011:BU3314, *RF* 2012/26, para. 4.13-4.15.
[1124] Hof Arnhem-Leeuwarden 26 May 2015, ECLI:NL:GHARL:2015:3705, para. 4.6.
[1125] Hof Amsterdam 2 February 2016, ECLI:NL:GHAMS:2016:355, *NTHR* 2016/2, para. 3.1-3.5
[1126] Rb Utrecht 6 April 2011, NL:RBUTR:2011:BP9469, *NJF* 2011/298, para. 4.11.

for the risk of residual debt.[1127] This reveals the delicacy of balancing a lender's duty of care and a borrower's own responsibility, especially since courts consider a credit agreement as a relatively simple agreement.[1128] All in all, these cases show that lenders cannot mechanically apply the rules and can expect to get away with negative consequences. They must carefully act, think ahead in the interests of the consumer, and thoroughly verify reported income. Meanwhile, Cherednychenko and Meindertsma (2014) point at inconsistencies in this body of case law, as well as the indistinctness of the role of regulatory norms in relation to the duty of care.[1129] This might hinder private enforcement, by discouraging borrowers to start a legal procedure.

Borrowers can also start proceedings against a lender via an independent arbitration institute, KiFid *(Klachteninstituut Financiële Dienstverlening,* Financial Services Complaints Tribunal).[1130] This is often faster and cheaper than proceeding before a court. Lenders are obliged by law to be affiliated with KiFid; and most of them have agreed to accept its decisions as binding.[1131] The outcome of existing decisions of KiFiD on overextension of credit varies.[1132] It shows that a lender is not blamed if credit is extended within the norms.[1133] On the contrary, lenders can be held responsible for the overextension when they violated certain rules or principles of the code of conducts. This could result in paying damages – either part of or all of the damages – or lead to converting a loan into another loan with different conditions.[1134] However, extending credit beyond the income criteria in the code of conduct

[1127] Rb Amsterdam 15 June 2016, ECLI:NL:RBAMS:2016:3464, para. 4.1-4.5; Hof Amsterdam 31 May 2016, ECLI:NL:GHAMS:2016:2028, *JOR* 2016/201, para. 3.4, 3.8.
[1128] Rb Noord-Holland 9 April 2014, ECLI:NL:RBNHO:2014:8140, *NJF* 2015/10, para. 4.2; Hof Amsterdam 31 May 2016, ECLI:NL:GHAMS:2016:2028, *JOR* 2016/201, para. 3.4.
[1129] Cherednychenko & Meindertsma (2014), pp. 186-191.
[1130] http://kifid.nl/ (last visited 20 July 2016).
[1131] Art. 4:17 Wft, art. 16 *Implementatiewet buitengerechtelijke geschillenbeslechting consumenten* (Act on out-of-court settlement of consumer disputes; available at http://wetten.overheid.nl/BWBR0036550) and art. 1(a) *Besluit aanwijzing geschilleninstanties Wft* (Ministerial decree designating settlement bodies Wft; available at http://wetten.overheid.nl/BWBR0036800). Already before this obligation existed, the NVB code of conduct, the NTO code of conduct and the code of conduct for mortgage credit provide consumers with the possibility to go to the KiFiD with complaints (art. 14 NVB Code of conduct; Art. 10 NTO Code of conduct; Art. 18 code of conduct for mortgage credit).
[1132] Decisions of the KiFiD are available at http://kifid.nl/consumenten/uitspraken (last visited 20 July 2016). Sometimes they are published in journals that publish case law, such as *JOR.*
[1133] See e.g. decision 2014-004 of 28 January 2014.
[1134] For instance, in decision 2010-216 of 29 December 2010, it was decided that the lender had to bear the costs of overextension of credit, meaning redeeming residual debt, because it had to inform the young consumer better. In decision 2012-14 of 21 June 2012 KiFiD's Commission of Appeal decided that extending a loan was never allowed, according to the income criteria of the VFN Code of conduct, but that the damages had to be shared between borrower and lender with respectively 40% and 60%, because the borrower is responsible too. In decision 2011-68 of 1 April 2011, the lender was ordered to convert a loan into another loan with different conditions, because the borrower could not bear the monthly costs, and lender was deemed responsible for extending too much credit, in violation of the norms of the code of conduct for mortgage credit (note that the annotation in *JOR* 2011/222 was highly critical on the reasoning in this decision).

for mortgage credit does not automatically qualify as an overextension of credit.[1135] Like courts, KiFiD generally concludes that lenders do not violate their duty of care if they warned consumers of the risks which are involved with extending credit above the norms.[1136] Verdicts of KiFiD are contradictory regarding the question of whether a lender can rely on declared income by the consumer, or whether expected income from an own business must be verified and examined.[1137] Concluding, the risk of arbitration cases or civil proceedings, which both may result in paying damages, is another pressure on lenders to abide by the DSTI, LTI and LTV ratios, although the decisions still reveal inconsistencies.

All in all, enough reasons exist for credit providers, especially mortgage lenders, to comply with the DSTI, LTI and LTV caps, because enforcement options are good and credible. The possibility for consumers to arbitrate or litigate further strengthens incentives to comply. Hence, this precondition for effectiveness is sufficiently fulfilled in the Netherlands.

4.1.3. Independent application, enforcement and amendment of the DSTI, LTI and LTV limits

The ability and willingness of actors to apply and enforce the borrower-based caps is fostered if the caps have a clear legal basis, well-defined policy objectives, which correspond with the actors' mandate, and if there is a framework which provides the actors with room to act.[1138] All the DSTI, LTI and LTV limits, both for consumer and mortgage credit, are an elaboration of the obligation of art. 4:34 Wft for credit providers to prevent an overextension of credit. While the codes of conduct, drafted by the representative organisations of these credit providers, have no legal basis in the Wft or Bgfo, courts have accepted the stance of the AFM that they function as a minimum interpretation of the open norm of art. 4:34 Wft.[1139] The regulatory borrower-based caps have a clear legal basis, art. 115 Bgfo. Since all the borrower-based caps are aimed at preventing an overextension of credit to consumers, their main purpose is consumer protection. This is confirmed by their position in the chapter 4 of the Wft, which contains conduct-of-business requirements. Nevertheless, the legislative history shows that the

[1135] See e.g. decision no. 2014-167 of 17 April 2014. In this case, the lender extended more credit than allowed under the income criteria of the code of conduct for mortgage credit, but mentioned this on the fifth page of the contract in a clause that states that the borrower agrees with it (para 3.2.). The then applicable version of the code of conduct for mortgage credit allowed exceptions from the income criteria in special circumstances, under condition that the borrower knew it and agreed in writing with it (art. 6(6) of the 2007-version). The tribunal considers that a consumer can be expected to read the contract before signing (para. 5.3). Surprisingly, the decision does not discuss whether any special circumstances were present.
[1136] Decision 2015-132 of 29 April 2015, para. 5.6; Decision no. 2015-394 of 18 December 2015, para. 5.3.
[1137] See respectively decision 2015-389 of 17 December 2015, para. 4.5, and decision 2016-009 of 22 March 2016, para. 4.4-4.5.
[1138] Cf. sub-section 1.4.4.1.
[1139] Cf. sub-section 4.1.1.1.

regulatory DSTI, LTI and LTV limits have been introduced for other purposes as well. An important reason behind the decision to adopt regulatory and reduced LTV and LTI limits was preventing the uncertainty which emanated from a statement of the AFM. The AFM namely announced that the DSTI percentages of 2012, as developed by Nibud and included in the code of conduct for mortgage credit, were too wide for consumers in some income categories. Therefore, it would not necessarily consider all lending to those consumers as responsible, even if banks abided by the code of conduct for mortgage credit.[1140] Subsequently, regulatory LTV and LTI caps were adopted as result of a motion of parliament and a budget agreement between several political parties in spring 2012.[1141] However, other reasons were avoiding the risk of residual debt, and facilitating cheaper financing of mortgage portfolios.[1142] In a letter of the Ministry of Finance, these issues have been explicitly linked to financial stability in the Netherlands.[1143] So, the regulatory borrower-based caps are meant to protect consumers, and also to contribute to financial stability.

The AFM possesses the task to enforce all borrower-based caps, which it can do operationally independently from the government and the Ministry of Finance. The AFM is namely subject to the same or similar provisions as DNB for the issues discussed before.[1144] One of the aims of AFM's conduct-of-business supervision is ensuring that customers are treated carefully, among others things, in the interest of financial stability.[1145] So, the objectives of the borrower-based caps correspond with its mandate. However, neither the AFM, nor DNB, which has the main responsibility for financial stability, has received the power to use the borrower-based caps as an instrument. Instead, every year, the Minister of Finance adopts the maximum DSTI percentages by means of a ministerial decree, based

[1140] See http://www.afm.nl/nl/nieuws/2012/jan/verruiming-leencapaciteit-tweeverdieners.aspx (last visited 28 July 2016).
[1141] The motion asked for for governmental action to avoid fines of the AFM for banks abiding by the norms (see https://zoek.officielebekendmakingen.nl/dossier/32847/kst-32847-20. For one of the letters to the parliament explaining that the regulatory LTV caps were a result of the mentioned motion, see https://zoek.officielebekendmakingen.nl/dossier/32847/kst-32847-32. For the agreement between the political parties, see http://old.findinet.nl/~uploads/newsModule/lenteakkoord.pdf (see p. 10 about LTV caps) and for the formal budget resulting from it http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2012/05/25/voorjaarsnota-2012.html (see pp. 23-24 about LTV caps). For a letter linking the LTV caps to this agreement, see https://zoek.officielebekendmakingen.nl/kst-33000-V.html.
[1142] *Wijzigingsbesluit financiële markten 2013*, *Staatsblad* 2012, 695, p. 97 (*supra,* footnote 1045).
[1143] See https://www.rijksoverheid.nl/binaries/rijksoverheid/documenten/kamerstukken/2012/05/25/visie-toekomstbestendigheid-hypotheekrenteaftrek-reactie-motie-kuiper-c-s/visie-toekomstbestendigheid-hypotheekrenteaftrek-reactie-motie-kuiper-c-s.pdf (last visited 25 February 2017).
[1144] These provisions have been discussed in sub-section 3.3.1. All the discussed provisions of the Wft also apply to the AFM. The grounds for dismissal of members of the Board of the AFM are the same as those for dismissal of members of the Governing Board of DNB, but included in another provision, art. 1:26(2) Wft. Also, there are a few procedural differences.
[1145] Art. 1:25(1) Wft.

on advice of Nibud. The minister also has the power to amend the LTV limit. The mandate of the Ministry of Finance, insofar as it concerns financial markets, is making rules for a well-functioning financial system, and contributing to a solid economic structure that is founded in an economically and financially sound Europe.[1146] Arguably, this includes making rules to ensure the stability of the financial system, but not to protect consumers.

4.1.3.1. Decision-making and guided discretion regarding the application, enforcement and amendment of DSTI and LTI limits for consumer credit

The norms in the three codes of conduct concerning consumer credit are an interpretation of the open norm of art. 4:34 Wft, which is a form of principle-based regulation. The open norm leaves considerable discretion – especially administrative discretion in a strict sense and interpretative discretion – to credit providers to develop their own criteria to prevent an overextension of credit. This is only limited by a few requirements. The risk of self-regulation based on imposed principles is that regulatees may get away with the minimum required level of protection.[1147] The VFN, NVB and NTO have chosen to use a system for determining borrowing capacity, which is based upon minimum reference values of Nibud. Still, they possess discretion to adopt these values with or without adjustments. Likewise, discretion exists for deriving the maximum DSTI and LTI norms from these minimum reference values. This discretion is indeed reflected in the differences between the codes of conduct. So, in practice, this system resembles some features of a guided discretion mechanism. However, the formally unlimited discretion of the VFN, NVB, and NTO leads to the legitimate question of whether there are enough safeguards against the risk that the rules in the codes of conduct are set at a level which offers insufficient protection.

Nonetheless, their discretion is *de facto* not unlimited, since the AFM can put pressure on the sector. Currently the AFM has taken the stance that it considers the codes of conduct as a minimal interpretation of the open norm of art. 4:34 Wft. However, it is conceivable that the AFM would abandon this point of view if the codes of conduct would be loosened, or if the sector would choose to deviate substantially from the reference values of Nibud. As a matter of fact, the AFM showed already once that it does not necessarily take self-regulatory norms – at that moment more specifically the maximum financing costs set by Nibud – as a good interpretation of the open norm.[1148] If the sector would substantially loosen the rules in its codes of conducts, the AFM has to decide whether it

[1146] Art. 2 *Organisatie- en mandaatbesluit Ministerie van Financiën 2015* (Decree on the organisation and mandate of the Ministry of Finance), available at http://wetten.overheid.nl/BWBR0037135).
[1147] Black (2008), p. 426.
[1148] This concerned the code of conduct for mortgage credit and led to the regulation of LTI and LTV norms.

considers them still a good interpretation of the open norm of art. 4:34 Wft. The threat of sanctions imposed by the AFM can influence the choices of VFN, NVB and NTO for the maximum DSTI ratios. The literature calls this the shadow of hierarchy, and has found that self-regulation can be effective under the threat of adopting regulation.[1149] Then, the threat of sanctions or the adoption of regulation must be credible.

However, this threat is only credible if courts accept the stance of the AFM. In Dutch administrative law, courts have to be reticent when reviewing supervisory discretion.[1150] So, courts are unlikely to quickly disagree with such a stance of the AFM. However, as Van Tuyll (2012) rightly argues, it is conceivable that supervisor and supervised come in fairness to a different interpretation of an open norm.[1151] A court will grant the sector a certain degree of interpretative discretion, because art. 4:34 Wft is an open norm.[1152] The case law reflects such freedom of interpretation, since courts judged in some cases that non-compliance with a code of conduct does not automatically establish a violation of art. 4:34 Wft.[1153] Hence, the legal situation that art. 4:34 established an open norm, as well as the case law of courts about this system, restrict the discretion of AFM. So, *de facto* neither the sector, nor the AFM has unlimited discretion to determine when credit supply is irresponsible. The decision-making process in this situation of principle-based regulation does not minimise the risk of overindebtedness.

4.1.3.2. Decision-making and guided discretion regarding the application, enforcement and amendment of DSTI, LTI & LTV limits for mortgage credit

The Minister of Finance is the main decision-maker for determining the DSTI, LTI and LTV limits for mortgage credit. Except for the gradual reduction to 100%, the LTV ratio is not intended to be regularly adjusted. The maximum allowed DSTI ratios are yearly adopted with a ministerial decree, based on advice of Nibud. Higher law does not impose *ex ante* restrictions on the content of this ministerial decree. So, the discretion of the minister is not restricted or guided in that respect.

1149 Héritier & Lehmkuhl (2008), p. 3; Fredriksson et al. (2012), pp. 54, 59-60

1150 For an example of a case in which the Supreme Court confirmed this with respect to the AFM, see Hoge Raad, 21 November 2014, ECLI:NL:HR:2014:3349, *NJB* 2014/2162, para. 3.4.3, 3.5.2, 3.5.3.

1151 Van Tuyll (2012), p. 30. Cf. De Vries (2013), p. 349.

1152 Cf. Claassen & Snijders (2014), who state that credit providers indeed deserve a certain degree of freedom regarding the interpretation of the open norm (p. 189). With respect to another open norm, the court has explicitly judged that the addressee has a certain degree of freedom to interpret the open norm (CBb 10 September 2013, ECLI:NL:CBB:2013:104, JOR 2013/312, para. 5.3). Cf. De Vries (2013), pp. 351-352.

1153 *Supra,* sub-section 4.1.1.1 and footnote 1032.

Various actors are involved in the process of adopting the DSTI ratios. *De facto,* this creates a form of guided discretion, while it also contributes to the accountability of the Minister of Finance. The tables with the DSTI limits are developed by Nibud, an independent foundation, which investigates households' financial behaviour, and keeps track of price and other relevant developments affecting their budgets. Nibud has a pivotal role in the determination of the DSTI and LTI ratios, providing input for both the caps on consumer and mortgage credit. One of the reasons for using the input of Nibud in the process of adopting the DSTI limits for mortgage loans, is to avoid that decisions are mainly driven by political considerations.[1154] However, the proposed ratios are not binding for the Minister of Finance: Nibud is nowhere mentioned in the Trhk, so its advice has no formal status. Still, its advice is authoritative, because Nibud is an expert organisation. Also, since Nibud's advice and explanation for the DSTI limits was published online for the first time in October 2015, it becomes visible if the minister deviates from it.[1155] AFM, DBN, and the Minister for Housing are consulted before adopting the caps, although this is no formal requirement.[1156] The Financial Stability Committee (see Box 4.1) is not consulted in the process of adopting the DSTI ratios.[1157] The NVB provides input as well, again without a formal role. Regularly, discussions take place between the Minister of Finance, the AFM and the NVB. So, although the sector itself clearly lost influence compared to the situation of self-regulation, it still has influence. In 2016, for the first time a public consultation was held for the yearly changes of the Trhk.[1158] Reactions will be published if the contributor grants permission for publication. Public consultation creates transparency, which may contribute to holding the minister to account.

While the Minister of Finance is does not face formal *ex ante* and ongoing restrictions limiting his discretion, there are a few *ex post* restrictions. A ministerial decree is a form of sub-delegation from the government to a minister, which is neither discussed in the Council of Ministers, nor requires advice of the Council of State. Parliamentary discussion is not required for adopting ministerial decrees, but they are often sent to the parliament before adoption, to give it the opportunity to discuss it.[1159] The yearly adopted ministerial decrees determining the DSTI caps and amending the rules of the

[1154] As indicated in an interview with an official of the Ministry of Finance.
[1155] Nibud (2015).
[1156] Yet, in 2012, the Minister of Finance has written to the parliament that he considers it important that the vision of both the AFM and DNB are structurally taken into account: see https://zoek.officielebekendmakingen.nl/ah-tk-20112012-1419.html (last visited 30 July 2016).
[1157] However, all actors involved in the Financial Stability Committee are involved in the process of adopting the DSTI ratios.
[1158] https://www.internetconsultatie.nl/regelinghypothecairkrediet2017 (last visited 16 August 2016).
[1159] Van der Pot (2014), pp. 682-690.

Trhk, are indeed sent to the parliament, which is thus able to discuss the matter with the Minister of Finance. Consequently, the legislator can control the Minister of Finance, and hold him to account.

Box 4.3. The Dutch Financial Stability Committee

Tasks and powers of the Financial Stability Committee

The Financial Stability Committee has been created at the end of 2012 by a ministerial decree of the Minister of Finance, without a legal basis in higher law.[1160] Therefore, the committee lacks powers to create legal consequences (*rechtsgevolgen)* for other parties, i.e. to change their rights and obligations. The Committee is meant to reinforce and structure the consultations between DNB, the AFM and the Ministry of Finance on risks threatening financial stability, and to ensure remaining attention for these risks, also in prosperous economic times.[1161] Its tasks include identifying systemic risks, making recommendations to deal with them, aligning and coordinating the Dutch response to warnings and recommendations of the ESRB, and discussing possible actions to mitigate systemic risks, including the options for reinforcing the legal instruments that DNB, the AFM and the Minister of Finance have at their disposal.[1162] The Financial Stability Committee is precluded from interfering with the execution of legal powers of DNB, the AFM, or the Minister of Finance.[1163] Its warnings and recommendations are non-binding, but, according to the Explanatory Memorandum to the ministerial decree establishing it, it is reasonable that DNB, the AFM and the Ministry of Finance provide an explanation if they deviate from them.[1164]

The Financial Stability Board (2014), an international body to promote financial stability, and the International Monetary Fund (2017) have recommended the Dutch authorities (1) to embed the role and institutional standing of the Financial Stability Committee in primary legislation in order to improve its effectiveness and enhance its credibility, and (2) to introduce a comply-or-explain principle regarding its recommendations.[1165] In 2014, the Committee itself considered the two recommendations respectively not necessary in the short term, and not necessary.[1166]

[1160] See *Instellingsbesluit Financieel Stabiliteitscomité*, *Staatscourant,* 6 November 2012, Nr. 22730, available at: https://zoek.officielebekendmakingen.nl/stcrt-2012-22730.html. The website of the Financial Stability Committee is http://www.financieelstabiliteitscomite.nl/.

[1161] Explanatory Memorandum to the *Instellingsbesluit Financieel Stabiliteitscomité (supra,* footnote 1160).

[1162] Art. 4 *Instellingsbesluit Financieel Stabiliteitscomité.*

[1163] Art. 4(4) *Instellingsbesluit Financieel Stabiliteitscomité.*

[1164] *Supra,* footnote 1160.

[1165] Financial Stability Board (2014), pp. 15-15, 24; International Monetary Fund (2017), pp.

[1166] See account of the meeting of 4 November 2014. Accounts of the meetings of the Financial Stability Committee are published on its website: http://www.financieelstabiliteitscomite.nl/nl/publicaties (last visited 25 February 2015).

Decision-making in the Financial Stability Committee

The Committee consists of three representatives of DNB, two of the AFM, and two of the Ministry of Finance.[1167] The director of the CPB Netherlands Bureau for Economic Policy Analysis joins as an external member, without voting rights.[1168] The representatives of the Ministry of Finance do not take part in the decision-making on warnings and recommendations: on the one hand to guarantee the committee's independent focus on financial stability, uncompromised by any policy concerns, and on the other hand to assure the freedom of the Ministry of Finance to take its own policy decisions, considering more aspects than financial stability.[1169]

The recommendation to gradually reduce the LTV limit to 90%

The Committee has actively discussed LTV – and to a lesser extent LTI – limits, and considers them as important macroprudential instruments, since they counteract overextension of credit and reduce imbalances.[1170] In May 2015, the Committee recommended the next government to further reduce the LTV limit with one percent point per year to 90%.[1171] The objectives of this lower limit are reducing vulnerabilities to house price shocks, the risk of residual debt, and banks' difficulties with funding their mortgage portfolios. The recommendation fits in with earlier recommendations of the IMF and a Dutch independent committee of experts, which both recommended a gradual reduction of the LTV limit to 80%.[1172]

[1167] Art. 3 *Instellingsbesluit Financieel Stabiliteitscomité.*
[1168] Cf. art. 5 *Instellingsbesluit Financieel Stabiliteitscomité.*
[1169] Art. 6(2) and the Explanatory Memorandum of the *Instellingsbesluit Financieel Stabiliteitscomité.*
[1170] See accounts of the meetings of 17 December 2012, 30 May 2013, 12 November 2013, 20 May 2014, 4 November 2014.
[1171] This recommendation is available at http://www.financieelstabiliteitscomite.nl/media/58/29/272341/29/aanbeveling_van_het_financieel_stabiliteitscomit_over_de_ltv-limiet_na_2018.pdf (last visited 9 August 2016).
[1172] The International Monetary Fund (2014c) suggested this, because it should reduce vulnerabilities to shocks and address the household debt overhang, which, according to the IMF, is the centre of the Dutch weak economy by constraining consumption (pp. 11-12, 19). The Commissie Structuur Nederlandse Banken (2013) proposed the lower LTV limit in order to reduce households' vulnerabilities to economic shocks and to decrease house prices and banks' difficulties with funding their mortgage portfolios (pp. 22-23). The Financial Stability Committee also refers to studies of DNB and the CPB Netherlands Bureau for Economic Policy Analysis about the effects of reducing the LTV limit. The Centraal Planbureau (2015) questions the effectiveness of the LTV limit and suggests that reducing mortgage interest deductibility targets the problems more directly, whereas LTI limits are more effective in addressing housing booms. It points at the distortive effects of a lower LTV limit for the housing market, and the need for additional savings by first time buyers in order to be able to buy a house (pp. 2-5, 14-16, 26-33). The study of De Nederlandsche Bank (2015) quantifies issues like the risk of residual debt in light of the frequency of crises, and the need and room for additional savings by first time buyers if the LTV limit would be 90%. It points at the advantages of a lower LTV limit as later have been mentioned by the Financial Stability Committee as reasons for recommending a LTV limit of 90%.

The enforcement strategy of the AFM also influences to what extent DSTI, LTI and LTV limits will be respected. Its own principles steer the AFM towards action, namely to enforce quickly, instead of tolerating violations, and to choose the most effective instrument.[1173] This published enforcement strategy of the AFM is – intentionally – vague, and provides little guidance in deciding whether and how to enforce.[1174] However, in June 2017, the court ordered the AFM to publish its internal policy for determining the magnitude of fines.[1175] The published document reveals a step-by-step plan to determine the magnitude of the fine, but also leaves discretion to adjust the fine, if this is suitable.[1176] Since 2015, the AFM has the policy that every fine exceeds the advantage obtained by the offence. In recent years, the AFM has acted actively against violations of rules on responsible lending.[1177] Generally, it uses formal sanctions as final step.[1178]

All in all, in the current system with regulatory DSTI, LTI and LTV ratio, the influence of the mortgage lenders on the determination of the level of the caps seems rather limited. In that sense, it can be expected that protective caps can effectively be established. This conclusion gains strengths by pointing at to the involvement of various types of experts in their adoption – the AFM as conduct of business supervisor, DNB as macroprudential supervisor, and Nibud as household finance expert.
Despite their involvement, the Minister of Finance decides about the ratios, with a lot of discretion, and without much formal checks. Especially in light of the large societal impact of these rules, the Ministry of Finance considers itself best suited for balancing the interests of on the one hand creating protective rules, and on the other hand avoiding overly restrictive rules, which may remove the responsibilities of market parties themselves.[1179] It fears that a supervisor, if it would receive powers to set DSTI and LTV caps, will not sufficiently consider the societal costs of strict rules, since that is not part of the supervisor's mandate.[1180]

1173 *Supra,* footnote 1097.
1174 Cf. Mein (2015a), p. 177. Note that the AFM also published guidance about complying with the norms on mortgage credit, and used a dashboard to measure compliance (https://www.afm.nl/nl-nl/professionals/doelgroepen/adviseurs-bemiddelaars/advies-bemiddeling/leidraden and https://www.afm.nl/nl-nl/over-afm/prioriteiten/oud-thema/kbc/dashboard/hypotheekadvies-en-beheer (last visited 30 July 2016)). This may help the AFM to overcome inaction when detecting violations.
1175 CBb 15 June 2017, ECLI:NL:CBB:2017:223.
1176 The document is available at https://www.afm.nl/nl-nl/over-afm/werkzaamheden/maatregelen/boetehoogte (last visited 22 August 2017).
1177 Mein (2015a), pp. 159-163.
1178 As indicated in an interview by an official of the AFM.
1179 As indicated by an official of the Ministry of Finance in an interview.
1180 *Ibidem.*

Although, currently there seem to be no major problems with this role for the Ministry of Finance, it has clear downsides that the actors who pursue objectives aimed at guaranteeing consumer protection and financial stability – AFM and DNB respectively – lack a formal role in the process of adopting and amending LTV, DSTI and LTI ratios. Firstly, based on political interests, the Minister of Finance may try to avoid measures with short-term costs, but long-term benefits for financial stability or consumer protection. This might especially become problematic if pressure to abstain from lowering limits increases, for instance during a boom. This is the very reason that independent supervisory agencies exist.[1181] Secondly, the absence of formal guidance for the discretionary powers of the Minister of Finance and limited formal duties to explain decisions decrease the transparency of the process of adopting the caps, and leave room for representatives of particular interests to influence the decision-making process. Nevertheless, in recent years the transparency has been improved by the publication of Nibud's advice and the public consultation for the DSTI ratios for 2017. This contributes to reducing room for capture.

In light of these conclusions, a first recommendation is to assign a formal role to Nibud, DNB, the AFM, or the Financial Stability Committee in the process of adopting and amending the LTV, DSTI and LTI ratios. The second recommendation is to provide formal *ex ante* guidance for the setting of the DSTI limits, in order to reduce the room for capture and inaction, and to further increase transparency and legal certainty. One option to increase guidance is to formalise the input of Nibud, the AFM and DNB, and to allow the Minister of Finance to amend or neglect this input only for a limited number of reasons.[1182]

A more far-reaching option is to give one of the supervisors decisive powers. Yet, assigning the leading role to either of the supervisors has its drawbacks. Assigning it to the AFM fits best with the fact that the provisions on overextension of credit were historically introduced for the sake of consumer protection, and not for macroprudential aims. However, then DNB continues to lack important macroprudential instruments in its toolbox as designated authority. On the contrary, assigning the leading role to DNB is at odds with the current design of the Wft, and results in less attention for consumer protection compared to financial stability. Another option is to separate the task of setting DSTI and LTV caps, and to assign the power to set a LTV limit to DNB. Then, DSTI limits could be set by the AFM or the Ministry of Finance.[1183] The merits of this idea will be further discussed in sub-section

[1181] Cf. sub-section 1.4.4.
[1182] An example would be avoiding a demonstrably disproportionate and significantly negative impact on a subset of households. Then, recalibration might be desirable.
[1183] This makes it a bit more difficult to align DSTI and LTV limits and their respective exceptions, but this is certainly not impossible.

7.1.3.1. In all cases, far-reaching instruments with impact on a political sensitive area as household finance are put in the hands of unelected experts. However, this concern is softened, since the Minister of Finance already has an override mechanism at his disposal for such a situation. If DNB or the AFM would receive the power to set LTV, DSTI and LTI limits, the rules will likely have the form of generally binding regulations. The possibility of the Minister of Finance to replace such regulations with a ministerial decree, if they constitute an unreasonable burden for the financial markets, has already been discussed in sub-section 3.3.1.[1184] Moreover, if one of the supervisors is given a decisive role, its discretion must be guided by means of rules or guidelines, adopted by the legislature, in order to reduce concerns about democratic legitimacy and room for capture.

4.2. Direct LTI and LTV limits in Ireland

4.2.1. Determinacy and completeness of the LTI and LTV limits for housing loans

In October 2014, the Central Bank of Ireland (CBI) proposed to establish LTI and LTV ratios for housing loans, by publishing a consultation paper with draft regulations for residential mortgage lending.[1185] The primary objective of these regulations is to improve the resilience of the banking and household sectors to financial shocks.[1186] The secondary aim is dampening the pro-cyclical dynamics between property lending and housing prices by limiting the room for loosening lending standards during upswings.[1187] The CBI considered the use of other instruments, such as capital-requirements, but these were deemed less effective, and they do not increase the resilience of households.[1188] The CBI views LTI and LTV caps as complementary achieving these objectives, since the LTV limit addresses the wealth aspect and the LTI cap the income aspect of the same risk.[1189] In other words, a LTI ratio deals with the affordability for the borrower, whereas a LTV cap addresses the scale of potential losses of the lender if a borrower would be unable to service the debt. In addition, a LTI cap is more protective when house prices rise during an upswing.[1190]

[1184] Then, the Minister of Finance has to argue that the borrower-based caps constitute an unreasonable burden for households which are active in the market for household finance.
[1185] Central Bank of Ireland (2014e). Note that the OECD already in 2011 recommended Ireland to establish LTV and LTI ratios, because of the large role of property loans in the crisis (Organisation for Economic Co-operation and Development (2011), pp. 26-27. In 2013, the OECD concluded that no action was taken regarding its recommendation (Organisation for Economic Co-operation and Development (2013), p. 45).
[1186] Central Bank of Ireland (2014e), pp. 2, 4-5. Cf. Hallissey et al. (2014), who show a strong correlation between high LTV and LTI levels and default rates in Ireland, using loan-level data.
[1187] Central Bank of Ireland (2014e), pp. 2, 4-5. Cf. Cassidey & Hallissey (2016), pp. 272-280.
[1188] Cf. Central Bank of Ireland (2014e), pp. 5-13.
[1189] *Ibidem,* p. 11.
[1190] *Ibidem.* Cf. Hallissey et al. (2014).

Based on an analysis of actual LTI and LTV data and an international comparison, the Central Bank of Ireland initially proposed a “proportionate” LTI limit of 3.5 and a “proportionate” LTV limit of 80%.[1191] The term “proportionate” means that a certain proportion of all the loans supplied by a lender in a certain time-interval is allowed to exceed the limit.[1192] This design follows the example of the UK’s Prudential Regulation Authority, which introduced a proportionate LTI limit in 2014.[1193] The rationale behind proportionate limits is providing flexibility, whilst still ensuring prudent standards.[1194] Moreover, as explained by the Chief Economist of the Central Bank of Ireland, the limits have been introduced for macroprudential reasons and do not target individual banks or loans, but the stability of the whole system:

> ‘It is not that every loan above a particular threshold is risky, but that too many high LTV or LTI loans can destabilise the system as a whole. Hence, the rules are necessarily broad-brushed and one can imagine many circumstances in which it makes sense to make use of the leeway.’[1195]

The consultation on the proposed LTI and LTV ratios led to numerous submissions, as well as opinion pieces and discussions in leading Irish newspapers.[1196] Most of the concerns regard the ceiling of the LTV ratio, in particular the negative effects which the proposed 80% limit might have on first-time buyers.[1197] This led to an adjustment of the LTV ratio for first-time buyers in the final regulations.[1198]

In February 2015, the Central Bank of Ireland established the LTI and LTV caps by means of the adoption of Statutory Instrument 47/2015, officially referred to as *Central Bank (Supervision and Enforcement) Act 2013 (Section 48) (Housing Loan Requirements) Regulations 2015*.[1199] It came into force immediately after its official publication on 10 February 2015, in order to avoid uncertainty or

1191 Central Bank of Ireland (2014e), pp. 2, 4-5.
1192 *Ibidem,* pp. 2, 19-22.
1193 Central Bank of Ireland (2014e), pp. 13, 18-19. Cf. Prudential Regulation Authority (2014). In the UK the LTI limit is 4.5, while exceeding this limit is allowed for 15% of the total number of new mortgage loans.
1194 Central Bank of Ireland (2014e), pp. 19, 22.
1195 Address by Lars Frisell to Irish Economy Conference. See EPN Newswire (2015).
1196 The Central Bank of Ireland (2015a) published a feedback statement on the received submissions. It mentions 157 submission (p. 4). Also newspaper articles voiced concerns, for some articles see Beesley (2014), Blaney (2014), Hancock (2014), The Irish Times (2014), Keenan (2014) and Reddan (2014, 2015).
1197 Central Bank of Ireland (2015a), pp. 6-9; Blaney (2014), Hancock (2014), Reddan (2014).
1198 Central Bank of Ireland (2015a).
1199 For S.I. 47/2015, see http://www.irishstatutebook.ie/2015/en/si/0047.html (last visited 6 March 2015). S.I. 47/2015 is amended by S.I. No. 568/2016, *Central Bank (Supervision and Enforcement) Act 2013 (Section 48) (Housing Loan Requirements) (Amendment) Regulations 2016*, available at http://www.irishstatutebook.ie/eli/2016/si/568/made/en/print.

frontloading of mortgage applications.[1200] In November 2016, the CBI published its review of the LTI and LTV caps, and announced some amendments, which took effect on 1 January 2017.[1201]

4.2.1.1. The LTI and LTV limits and the valuation rules

S.I. 47/2015 prescribes a maximum loan-to-income ratio of 3.5 for housing loans supplied for owner-occupied residential property, i.e. primary dwellings.[1202] Income is defined as a borrower's total gross annual income, before tax and other deductions.[1203] In contrast to the Dutch rules, it is not further defined what counts as income. In each calendar year, for each regulated financial service provider the amount of newly supplied loans with a LTI limit higher than 3.5 is allowed to be maximum 20% of the total monetary amount of all newly supplied loans.[1204] So, up to 20% of the supplied loans may be non-compliant with the LTI limit. However, on average, the limit cannot be exceeded.

The maximum LTV ratio for owner-occupied residential property is different for first-time buyers and non-first-time buyers, namely 90% and 80%, respectively.[1205] A higher LTV limit is set for first-time buyers than for non-first-time buyers in order to meet the concerns that first-time buyers loose access to mortgage finance and would be unable to buy a house.[1206] In each calendar year, for each lender, the value of newly supplied loans to first-time buyers with a higher LTV ratio than the limit may not be

[1200] Central Bank of Ireland (2015a), pp. 26-27

[1201] Information related to the review is available at https://www.centralbank.ie/financial-system/financial-stability/macro-prudential-policy/mortgage-measures (last visited 29 April 2017). Cf. footnote 1199.

[1202] Regulation 5 in combination with regulation 2(1) S.I. 47/2015. Buy-to-let mortgages – borrowing to buy a house for renting purposes – are intentionally not covered by the LTI ratio, since comparing the borrowed sum with borrower's income instead of the rental income is not considered a suitable metric for measuring affordability for this type of lending (Central Bank of Ireland, 2015a, pp. 17-18).

[1203] Regulation 2(1) S.I. 47/2015.

[1204] Regulation 5 S.I. 47/2015.

[1205] Regulation 6(1) S.I. 47/2015. First-time buyers are borrowers to whom never a housing loan has been advanced. If the loan is advanced to more than one person – for instance a couple – all of them must be a first-time buyer in order to qualify together as first-time buyer (regulation 2(1)-(2) S.I. 47/2015). Before 1 January 2017, the LTV limit for first-time buyers was 90% up to a house value of € 220,000 and 80% above this value. the maximum house value of € 220,000 was applied to this 90% LTV limit for first time buyers to ensure that the aim of dampening pro-cyclicality could still be achieved (Central Bank of Ireland (2015a), pp. 8-9; Central Bank of Ireland (2015b), p. 5). In the consultation process of the review of the measures in 2016, a lot of submissions suggested to increase the limit of € 220,000 (Central Bank of Ireland, 2016b, pp. 10-13). The CBI has decided to remove this limit, because rising house prices, in particular in Dublin, mean that the LTV limit effectively tightens, and thus must be updated yearly, while the LTV limit is not intended to have a short-term orientation (Central Bank of Ireland, 2016c, pp. 4-5).

[1206] Central Bank of Ireland (2015a), pp. 8-9. Note that researchers from the CBI have shown empirically that first-time-buyers are less likely to default than second and subsequent buyers, after controlling for various factors (Kelly et al. (2015)). This might justify differences in the LTV and LTI limits between these groups of borrowers. However, Duffy & O'Hanlon (2014) showed that – in their research period from 2005-2012 – first-time buyers were much more likely to receive loans with a high LTV ratio, and thus to have negative equity after the crisis hit Ireland (Duffy & O'Hanlon (2014), pp. 328-329).

more than 5% of the total value of newly supplied loans. This percentage is 20% for loans supplied to non-first-time buyers.[1207]

One specific exemption to the LTV ratio exists, as it does not apply when advancing a new housing loan to borrowers with negative equity, i.e. borrowers for whom the amount of their existing housing loan – including interest and arrears – exceeds the value of the house for which that loan was granted.[1208] This exception was introduced to avoid that borrowers with negative equity would be trapped in their house.[1209]

S.I. 47/2015 also prescribes the methods for valuing the house. Its value for purposes of calculating the LTV ratio is the lowest of either the market value of the property, or the price agreed in the contract – excluding associated costs for sale, such as legal fees and stamp duty.[1210] In case a borrower has already secured a housing loan on the residential property, the market value of that property must always be used for valuation purposes.[1211] This rule covers the situation that a borrower applies for increasing the amount of an already existing housing loan. Then, the purchasing price of the house might not be a meaningful indicator of its real value anymore. Furthermore, in case a housing loan is supplied for constructing a house, or acquiring land and constructing a house on it, the market value of the land plus the estimated construction costs count together as the value for calculating the LTV ratio.[1212]

The Statutory Instrument further regulates the assessment of the market value, which is the estimated amount for which the house should exchange on the valuation date between a willing buyer and a willing seller in an arm's-length transaction – meaning that the parties are independent and unrelated, for instance, not being family members – after proper marketing and assuming that parties would act knowledgeably and prudently, without pressure.[1213] In order to ensure an impartial and objective valuation, the market value should be determined by a professionally competent appraiser, who is

---

[1207] Regulation 6(2)-(2A) S.I. 47/2015. For non-primary dwellings the LTV cap is 70%, with the option for lenders to provide maximum 10% of the monetary amount of the yearly supplied loans above this limit (regulation 6(3)-(4) S.I. 47/2015).
[1208] Regulation 6(5) in combination with regulation 2(1) S.I. 47/2015. The exemption also applies if the loan is advanced to more than one person – for instance a couple – and only one of them has negative equity (regulation 2(3) S.I. 47/2015).
[1209] Cassidey & Hallissey (2016), pp. 288-289.
[1210] Regulation 2(1) S.I. 47/2015.
[1211] *Ibidem.*
[1212] *Ibidem.*
[1213] *Ibidem.*

sufficiently independent from the process of underwriting the housing loan.[1214] The date of the valuation is not allowed to be more than four months before the date at which the loan is advanced.[1215] The market value, including its calculation and the used methodology, must be documented in a clear and transparent manner, and recorded on a durable medium.[1216] The lender must receive and maintain a copy of this information.[1217] These valuation requirements are comparable to those included in the CRR and contain several protective elements.

4.2.1.2. The scope of the LTI and LTV limits

All regulated financial service providers are subject to S.I. 47/2015.[1218] A regulated financial service provider is defined as a person, body corporate or unincorporated body carrying on a business of providing one or more financial services or products, which is under regulation of either the Central Bank of Ireland, a similar regulator in another EU member state or the ECB.[1219] Thus, not only credit institutions, but all kind of financial service providers are subject to these regulations.[1220] Almost all mortgage lenders are regulated financial service providers, except for local authorities that provide mortgage loans. Subject to some conditions, these local authorities provide loans to households which are not able to obtain a loan from a bank or building society.[1221] These loans are available for people with a maximum gross income of € 50,000 (€ 75,000 for couples), and cannot exceed € 200,000 and 97% of the market value of the house.[1222] While low-income households are particular vulnerable, and their situation deserves ongoing attention, the fact that local authorities are not subject to S.I. 47/2015 is no major problem from a macroprudential perspective, as their share in the total amount of outstanding mortgage loans is only about 1%.

[1214] Regulation 7(2)(a) S.I. 47/2015.
[1215] Regulation 7(3)-(4) S.I. 47/2015.
[1216] Regulation 7(2)(b)-(c) S.I. 47/2015.
[1217] Regulation 7(2)(d) and 7(5) S.I. 47/2015.
[1218] See the definition of "lender" in regulation 2(1) S.I. 47/2015.
[1219] See section 2(1) of the consolidated version of Central Bank Act 1942 (supra footnote 775) and section 18(c) of Interpretation Act 2005, available at http://www.irishstatutebook.ie/eli/2005/act/23/enacted/en/html (last visited 3 March 2017).
[1220] This link provides a list of types of regulated financial service providers: https://www.centralbank.ie/regulation (last visited 29 April 2017).
[1221] Cf. http://www.citizensinformation.ie/en/housing/owning_a_home/help_with_buying_a_home/local_authority_mortgages.html (last visited 1 August 2016).
[1222] Regulations 2, 4-6 S.I. 408/2012 Housing (Local Authority Loans) Regulations 2012), available at http://www.irishstatutebook.ie/eli/2012/si/408/made/en/print (last visited 1 August 2016).

The scope of S.I. 47/2015 is further limited to a loan being or to be secured on residential property in Ireland, and supplied to a natural person who acts for purposes outside his trade, business or profession, or to a small company.[1223] However, there are some exemptions to this scope. Firstly, it does not apply to a refinancing loan, if the secured house is the same, and if the amount of the new loan does not exceed the outstanding amount of the existing loan.[1224] Then, the amount of debt does not increase.[1225] Secondly, S.I. 47/2015 does not apply to existing housing loan agreements.[1226] Thirdly, housing loans provided with the purpose of addressing arrears, or the reasonable prospect of arrears, are excluded from the scope of S.I. 47/2015,[1227] as the CBI does not want to interfere with attempts to restructure loans.[1228]

4.2.1.3. Evaluating the determinacy and completeness of the maximum LTI and LTV ratios

The new LTI and LTV limits are controversial in Ireland. Several researchers express regret that the limits are not applied in a rule-based countercyclical manner.[1229] More often, the caps have been criticised for restricting access for first-time buyers to the expensive Dublin housing market and pushing them to other areas or the rental market.[1230] Others argue that such restrictions are the very aim of the regulations and thus desirable, like the resulting easing of the rising house prices in Dublin.[1231] Cassidy and Hallissey (2016) report that the annual growth rate of house prices in Ireland fell from 16.3% in Q4 2014 to 6.6% in Q4 2015, and in Dublin even from 22.3% to 2.6%.[1232] While this does not prove causality, it may be the result of the borrower-based caps. The shortage of housing supply, especially in Dublin,[1233] can explain high house prices and shows that LTI and LTV limits alone

[1223] Regulations 2(1) and 3(1) of S.I. 47/2015. Regulation 2(1) S.I. 47/2015 defines a housing loan as 'the amount advanced or the total sum of amounts advanced by a lender to a borrower which are or are to be secured on a residential property'. Residential property is also defined in this regulation as '(a) a building or part of a building, and land on which a building is to be constructed which at the date the conveyance or lease is executed, was used, or it is the intention of the borrower that the building or part of the building would be used, as a dwelling or would have a dwelling constructed on it; and (b) the building, or part of the building, does not have or will not have a commercial use on a primary basis'.
[1224] Regulation 4(1)(a) S.I. 47/2015. Arrangement fees, professional fees and costs or administration costs related to the new housing loan need not to be taken into account.
[1225] Cassidy & Hallissey (2016), pp. 273-274.
[1226] Regulation 4(1)(b) S.I. 47/2015.
[1227] Regulation 4(1)(c)-(d) S.I. 47/2015.
[1228] Cassidy & Hallissey (2016), p. 274.
[1229] Duffy et al. (2015), p. 22.
[1230] Irish Examiner (2015), Taylor (2015), The Irish Times (2016), Weston (2016), Brady (2016), McCartney (2016)
[1231] Taylor (2015), Pope (2016), McCartney (2016). Cf. Lyons (2016).
[1232] Cassidy & Hallissey (2016), p. 294.
[1233] Research reveals this shortage: Duffy et al. (2014); Lyons (2015), p. 153; Barrett et al. (2015), Lyons (2016), Morgenroth (2016).

are not the answer. Research of the CBI shows that the introduced measures had, apparently, limited effect on actual LTI and LTV ratios.[1234] The central bank also published that in 2015, in the period after the introduction of the caps, the value of loans exceeding the LTI limit was 17% of the total value of loans.[1235] The value of the loans exceeding the LTV cap was 13% of the total value, while the value of the loans surpassing both limits was 2.5% of the total value of loans.

The rules on the LTI and LTV ratios are technical, but determinate: they are not vague, ambiguous or general. In addition, their scope is wide, beyond bank lending, which helps to limit circumvention: they apply to all regulated financial service providers when supplying housing loans that are secured or to be secured on residential property in Ireland. Only mortgages provided by local authorities are excluded.

However, several other aspects of the regulations hinder preventing circumvention. Most notably, the effectiveness of the regulations is undermined by the absence of a DTI limit or a requirement to take other loans into account. Consequently, consumers might choose to resort to risky and more expensive types of unsecured borrowing.[1236] The Central Bank of Ireland acknowledges that a DTI limit would be more appropriate than a LTI limit, but considers it premature to establish enforceable rules on total debt levels, since the credit registry is not yet operational.[1237] Currently, there is a private credit bureau in Ireland, but many lenders do not register information, resulting in incomplete and inaccurate information.[1238] At the end of 2013, the Credit Reporting Act 2013 was enacted, providing for the establishment, maintenance and operation of a central credit register by the Central Bank of Ireland.[1239] This act obliges lenders to report information about credit applications exceeding an amount of € 500. In addition, they must assess the credit register in case of handling a credit application

[1234] Kinghan et al. (2016).

[1235] Keenan et al. (2016), p. 5. At that moment, the proportionate limits of the LTI and LTV caps were 20% and 15%, respectively. An examination performed by a journalist in January 2016 shows that it depends on the circumstances whether people actually could borrow less than in June 2014, seven months before the introduction of the LTI and LTV limits. It seems that banks tend to use the proportionate margin only for borrowers who have a certain amount of income left after mortgage repayment and have a good savings history. Banks normally allow a borrower only to exceed either the LTI limit of 3.5 or the LTV limit of 80%/90% (McBride, 2016). The risk is that this practice might change substantially during a boom.

[1236] Central Bank of Ireland (2015a), p. 28.

[1237] Central Bank of Ireland (2015a), p. 9.

[1238] The website of the Irish Credit Bureau is http://www.icb.ie/. Cf. http://www.citizensinformation.ie/en/money_and_tax/personal_finance/loans_and_credit/irish_credit_bureau.html (both last visited 24 March 2015). On the problems, see Hancock (2014b).

[1239] See in particular section 5(1) of the Credit Reporting Act 2013, which is available via http://www.irishstatutebook.ie/2013/en/act/pub/0045/index.html. See also the related S.I. 19/2014, available via http://www.irishstatutebook.ie/2014/en/si/0019.html (both last visited 24 March 2015). For an introduction to this act, see Kane (2013).

exceeding an amount of € 2,000.[1240] Consumers applying for credit are obliged to report their outstanding amount of debt to the lender, if it exceeds € 5,000 and results from a credit agreement. In turn, the lender should provide this information to the Central Bank of Ireland.[1241] It is expected that the part of the credit register related to consumers is operational from 31 December 2017.[1242] Once the credit register is operational, it is possible to establish a DTI cap or a requirement to take other loans into account.

In order to reduce the room for circumvention, the Central Bank of Ireland established that 'a lender shall not engage in a practice, enter into an arrangement or transaction, execute a document or structure or restructure a loan for the purpose or having the effect (…) of avoiding the obligations under'[1243] S.I. 47/2015, irrespective of the issue whether avoiding the rules is the sole or primary intention or effect or not. This requirement can prevent a considerable degree of circumvention, such as a situation where a lender offers secured housing loans up to the LTV or LTI limit and unsecured loans besides it. However, it cannot prevent that another lender provides an unsecured loan alongside the housing loan. Although any lender is obliged by the Consumer Protection Code 2012 to gather information on debt and financial commitments of the borrower, and shall abstain from offering a loan if the consumer refuses to provide the information,[1244] this obligation does not sufficiently cover the situation where a consumer simultaneously applies for a mortgage and an unsecured loan. In such a situation there is not yet an outstanding amount of mortgage debt, which is supposed to be known by the lender. Even if the lender providing the unsecured loan would be aware of the application for a mortgage loan, this would be difficult to prove and thus to enforce. More importantly, the lending activities of a credit provider supplying only an unsecured loan fall outside the scope of the LTV and LTI caps, because S.I. 47/2015 defines a lender as a regulated financial service provider that supplies

[1240] See respectively sections 11, in particular 11(5)-(6), and 14, in particular 14(5)-(6) of the Credit Reporting Act 2013.

[1241] Section 14 of the Credit Reporting Act 2013.

[1242] Hancock (2014b); Regulation 1(2) S.I. 486/2016 Credit Reporting Act 2013 (Section 11) (Provision of Information for Central Credit Register) Regulations 2016, available at http://www.irishstatutebook.ie/eli/2016/si/486/made/en/pdf; Regulation 1(2) S.I. 487/2016 Credit Reporting Act 2013 (Section 17) (Access to Central Credit Register) Regulations 2016, available at http://www.irishstatutebook.ie/eli/2016/si/487/made/en/pdf; Regulation 1(3) S.I. 488/2016 Credit Reporting Act 2013 (Section 20) (Verification of Identity of Credit Information Subjects) Regulations 2016, available at http://www.irishstatutebook.ie/eli/2016/si/488/made/en/pdf.

[1243] Central Bank of Ireland (2016a), pp. 8-10. However, this excludes information on loans provided by licensed moneylenders (on these, see sub-section 5.1.3) and local authorities. This information should be ready for use at 30 June 2018.

[1244] Provisions 5.1 and 5.4 Consumer Protection Code 2012, as further discussed in sub-section 5.1.3.2.

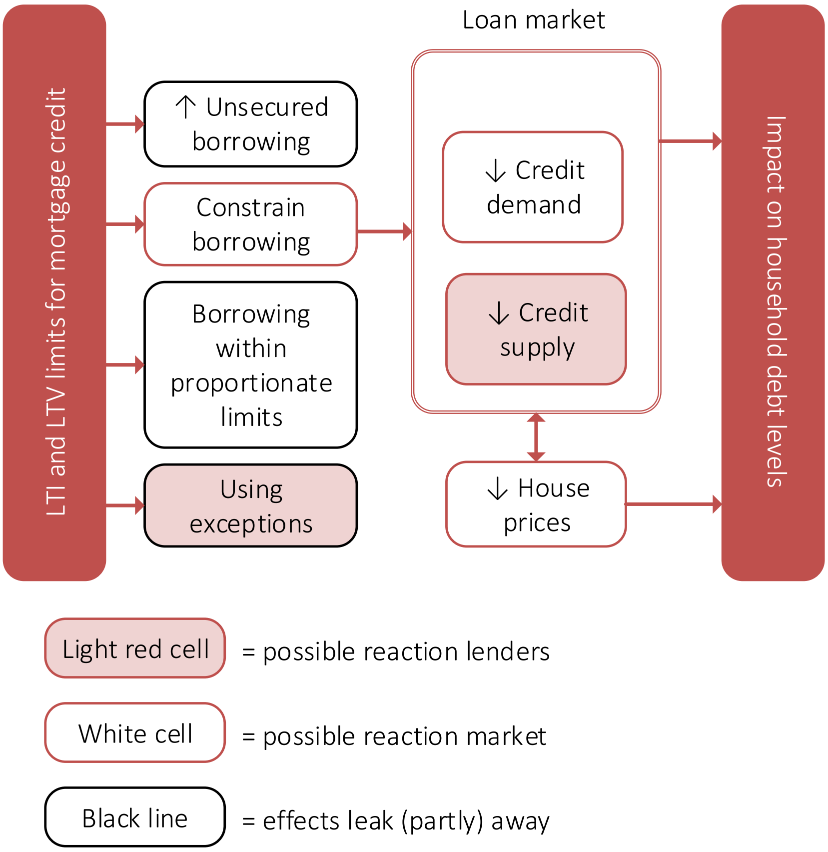
loans which are or are to be secured on residential property.[1245] Until the central credit register is operational, this is the largest loophole in the system, undermining its effectiveness.
Due to the aforementioned rules of the Consumer Protection Code 2012, it would have been possible to prohibit all lenders to supply unsecured loans that are meant for financing a house, or to establish a DTI limit.[1246] However, then iit is more difficult to objectively ascertain existing debt levels, and to demonstrate that a lender knowingly supplied too much credit, if that would be the case. This hinders enforcement. Moreover, the absence of reliable data on unsecured credit makes the calibration of DTI limits difficult for the CBI.[1247]

Another loophole is the exclusion of borrowers with negative equity from the LTV ratio, which excludes many households from the cap. Duffy and O'Hanlon (2014) estimate that approximately 37% of all households have negative equity.[1248] More specifically, 64% of all the mortgage loans for primary dwellings taken out in the period 2005-2012 are under water, mostly younger people and first-time buyers.[1249] Cassidy and Hallissey (2016) report that 40% of the households had negative equity at the moment that the consultation for the LTV and LTI limits took place.[1250] The rules could also have been constructed as in the Dutch situation, where only the residual debt itself is not taken into account for calculating the LTV ratio, but the remainder of the loan has to comply with the rules. Admittedly, this adds some complexity to the rules.[1251] Nonetheless, the risk of this loophole are limited, since households with negative equity will probably have become cautious when applying for a new loan, while also lenders can be expected to take care.

The transmission channels of the LTV and LTV limits are shown in figure 4.2. This shows how the LTI and LTV limits can reduce credit demand and supply, but also how effects can leak away, especially by resorting to unsecured borrowing.

[1245] Regulation 2 S.I. 47/2015. Note that the regulations can apply to multiple lenders, as long as they supply housing loans, because they require a lender to ensure that the total amount of loans that are or are to be secured on residential property advanced to a borrower should comply with the rules (regulations 2, 5 and 6).
[1246] As discussed in sub-section 4.1.1.1, in the Netherlands, the codes of conduct prohibit to supply unsecured credit which is meant for financing a house, if violating the rules of the code of conduct on mortgage credit.
[1247] As indicated in an interview with an official of the CBI.
[1248] Duffy & O'Hanlon (2014), p. 328.
[1249] *Ibidem,* pp. 333-337.
[1250] Cassidy & Hallissey (2016), p. 288.
[1251] Note that the CBI considered several options for designing the rules on negative equity, but decided that the increase in complexity was outweighed by the positive effects (Cassidy & Hallissey (2016), p. 289).

Figure 4.2: Transmission channels of the LTI and LTV limits in Ireland



4.2.2. The possibility of proportionate and dissuasive enforcement of the LTI and LTV limits for housing loans

The powers to enforce the maximum LTI and LTV ratios are almost identical to those for enforcing risk-weighted capital requirements, including the possibility to settle. Hence, only relevant differences will be discussed, which, in fact, are predominantly related to the publication of sanctions. This is governed by section 33BC Central Bank Act 1942, which provides the CBI with more freedom to decide on the publication of sanctions than regulation 56 S.I. 158/2014 does.[1252] This section obliges the Central Bank of Ireland to publish details of violations of LTI and LTV limits which it encounters in an inquiry, as well as details of imposed sanctions, but in the form and manner which it considers appropriate.[1253]

[1252] These differences are a result of the fact that the provisions of the CRD IV apply for violations of risk-weighted capital requirements, contrary to violations of LTI and LTV ratios.
[1253] Cf. section 45(8) Central Bank (Supervision and Enforcement) Act 2013.

Another measure to enforce LTI and LTV caps is that the CBI can require financial service providers to make appropriate redress to their customers if they have suffered, are suffering, or will suffer loss or damage due to widespread or regular (1) violations of LTI and LTV limits or (2) provision of unsuitable loans to consumers.[1254] This redress cannot 'exceed the amount of the loss suffered or anticipated to be suffered, together (where appropriate) with interest at such rate as is so specified.'[1255] Moreover, the customer who suffers losses or damages due to a violation of LTI and LTV caps by a bank, can start a procedure for damages.[1256] These measures create additional incentives to comply with the caps. Yet, it might be difficult to calculate the damage incurred by consumers.

Like capital requirements, LTI and LTV limits in Ireland can be enforced with proportionate and dissuasive administrative measures.[1257] These enforcement measures are strong enough to deter. Moreover, the obligatory publication of details of violations and sanctions – albeit with discretionary choices about the form and manner – adds to the deterring effect by being a form of naming-and-shaming. Furthermore, the directions can be exercised precautionary, if a lender is likely to violate the LTI and LTV requirements. Therefore, there are sufficient enforcement possibilities.

4.2.3. Independent application, enforcement and amendment of the LTI and LTV limits

S.I. 47/2015 has a broad, but clear legal basis that allows the CBI to adopt regulations applying to regulated financial service providers.[1258] The macroprudential aim of the borrower-based caps is clear, and corresponds to the mandate of the central bank.[1259] The CBI can make its decisions relatively independently, but the Department of Finance may be able to influence these decisions, as discussed in sub-section 3.3.1. Pressure of the Minister for Finance on the CBI is not just a figment of the imagination. In September 2015, after a meeting with representatives of the construction industry, the Minister for Finance publically expressed the opinion that LTI and LTV caps should be loosened, while

[1254] Respectively section 43(1)(f) and 43(1)(c) Central Bank (Supervision and Enforcement) Act 2013. Although this measure can be applied as well in case of violations of rules on risk-weighted capital requirements, it is difficult to prove that customers suffered from low risk-weighted capital requirements. Therefore, this measure is ill-suited for enforcing these capital requirements.
[1255] Section 43(3) Central Bank (Supervision and Enforcement) Act 2013.
[1256] Section 44 Central Bank (Supervision and Enforcement) Act 2013. This is also possible if a customer suffers losses due to violations of capital requirements, but it is unlikely to demonstrate such a loss, unless a bank goes bankrupt.
[1257] Cf. sub-section 3.2.2.2.
[1258] According to section 48(1) Central Bank (Supervision and Enforcement) Act 2013 (*supra,* footnote 787), the CBI 'may make regulations for the proper and effective regulation of regulated financial service providers.' Section 48(2) continues with listing the provisions that may be made by the regulations referred to in section 48(1). See in particular section 48(2)(l).
[1259] Cf. sub-sections 3.3 and 4.2.1.

he was at the same time involved in the procedure for selecting the new governor of the Central Bank.[1260] Other ministers joined in criticising the CBI for these regulations on LTI and LTV limits.[1261] Nevertheless, the Central Bank insisted in not changing the regulations, until after a review, which was finished in November 2016.[1262] The former governor of the CBI, who stepped down in November 2015, has been praised for ensuring independence and firmly standing against government pressure.[1263] The Irish Examiner (2015a) writes that experts say that the major challenge of the new governor, Philip Lane, 'will be to face down the waves of industry and political pressure for the Central Bank to loosen its mortgage lending restrictions'. It seems that he more or less succeeded in doing this: after the review, rules were only loosened to a minor extent.[1264]

There is little that restricts or guides the use of discretion by the Central Bank of Ireland when deciding about applying, enforcing, or amending the borrower-based caps. There is only one requirement which restricts and guides the CBI when using its competence to make (and amend) regulations applying to regulated financial service providers: regulations must be 'effective and proportionate having regard to the nature, scale and complexity of the activities of regulated financial service providers or the class or classes of regulated financial service provider to whom the regulations apply.'[1265] This provision leaves ample room for interpretation for the Central Bank of Ireland. Also, in principle, the choice for particular instruments is free. So, the CBI enjoys wide administrative discretion in a strict sense, as well as interpretative discretion. The Central Bank of Ireland has published its process of macroprudential decision-making.[1266] Although clarity about this process can help the CBI in taking a decision, there is no guided discretion mechanism with selected indicators and thresholds, like with the countercyclical capital buffer.[1267] More guidance might help to reduce the inaction bias.

[1260] Beesley (2015).
[1261] Taylor (2015), Irish Examiner (2015b).
[1262] Beesley & Bardon (2015), Irish Examiner (2016)
[1263] Taylor (2015), Irish Independent (2015).
[1264] Since 1 January 2017, the LTV limit for first-time buyers is 90%, while 5% of the total monetary amount of the supplied loans may have a higher ratio. Before 1 January 2017, the LTV limit was 90% up to a house value of € 220,000 and 80% above this value, while 15% of the total monetary amount of the supplied loans was allowed to exceed these limits. For second and subsequent borrowers the LTV limit remained 80%, but 20% instead of 15% of the total monetary amount of the supplied loans may have a higher LTV ratio.
[1265] Section 50 Central Bank (Supervision and Enforcement) Act 2013.
[1266] Central Bank of Ireland (2014b), pp. 9-12. The process starts with risk assessments, based upon statistical analyses and the biannual Macro-Financial Review. If there is evidence of systemic risk, appropriate instruments are selected, taking into account a range of economic and legal factors, including the risks of leakage and the scope of the instruments. The calibration of the instruments will be based on a combination of quantitative and qualitative analyses and judgment. Subsequently, the instruments are implemented, with timing as an important consideration. Finally, their effectiveness is monitored and evaluated.
[1267] Cf. sub-section 3.3.2.1

The CBI does not need approval by another actor when using its power of adopting regulations applying to regulated financial service providers, but it must consult the Minister for Finance and provide the minister with a draft proposal of the ratios.[1268] The CBI may consult with such other persons as it considers appropriate.[1269] Irish law does not attach formal consequences to the outcome of these consultations.

The various central bank acts do not create a mechanism to override decisions of the Central Bank of Ireland by the Minister for Finance or the Houses of the Oireachtas. This creates a shield against too much political interference. Still, regulations adopted by the CBI based on this power 'shall be laid before each House of the Oireachtas as soon as may be after they are made.'[1270] In general, laying Statutory Instruments before the Houses of the Oireachtas is meant to enable the legislature to annul them, in order to protect their prerogatives.[1271] However, section 51(2) Central Bank (Supervision and Enforcement) Act 2013 does not attach consequences to this laying before the Houses of the Oireachtas, contrary to provisions elsewhere which explicitly enable annulment within 21 sitting days.[1272] So, this requirement is no impediment to the independence of the Central Bank of Ireland, while it increases its transparency, and facilitates holding it to account.

Yet, the role of the Houses of the Oireachtas might change in the future, as a member of the Irish lower house has introduced a Bill to amend provisions related to this regulatory power of the CBI. The proposed provisions prohibit the CBI to proceed with draft regulations, unless written views and proposed amendments of both the Minister for Finance and the relevant Joint Committee of the Houses of the Oireachtas have been received, considered and responded to in detail.[1273] The Explanatory Memorandum to this Bill reveals that the member of the Irish lower house proposed the amendments, because he views the adopted LTV and LTI limits as disproportionate for certain homeowners, and seeks to ensure that the central bank 'engage[s] more fruitfully with both the Minister for Finance, and the relevant Joint Committee of Houses of the Oireachtas on'[1274] the effects on and needs of society, while maintaining its independence. As long as it is ensured that regulations of the CBI cannot be obstructed – for instance, by endlessly delaying the response – the proposed

[1268] Section 49(1)(a) Central Bank (Supervision and Enforcement) Act 2013.
[1269] Section 49(1)(c) Central Bank (Supervision and Enforcement) Act 2013.
[1270] Section 51(2) Central Bank (Supervision and Enforcement) Act 2013.
[1271] Hunt (2010), p. 82.
[1272] Cf. sections 61C-61D Central Bank Act 1942.
[1273] Potential new section 49(1) Central Bank (Supervision and Enforcement) 2013, as proposed by the Central Bank (Supervision and Enforcement) (Amendment) Bill 2016, available at https://www.oireachtas.ie/documents/bills28/bills/2016/2516/b2516d.pdf (last visited 4 March 2017).
[1274] *Ibidem.*

amendments have to be welcomed, since the independence of the CBI remains protected, while duties to explain action are reinforced.

4.3. Direct LTV limits in Germany

The German banking sector consists of three main pillars: private banks, public banks, which are, to a large extent, savings banks (*Sparkassen*), and cooperative banks.[1275] Besides these actors, several other types of banks exist, including *Bausparkassen* (building and loan associations).[1276] Currently, a LTV limit only applies to lending by *Bausparkassen,* but a legal basis for a LTV limit with a broader scope of application has been created in March 2017.[1277] In the *Bauspar* system, households 'make regular contractual savings contributions over many years, and when the contract matures, they receive not only the accumulated capital plus interest, but also a mortgage loan at a fixed rate.'[1278] Traditionally, in Germany, people finance their home by mortgage credit from a bank (50-60%), a *Bauspar* mortgage loan (20-30%), and with own savings (20-30%).[1279] In this construction, the *Bauspar* loan is subordinate to the loan from the primary mortgage lender.[1280] Currently, the business model of *Bausparkassen* is under pressure. The incentive to enter into a *Bauspar* contract has diminished, as saving has become unattractive due to the low interest rates in combination with fixed fees.[1281]

4.3.1. Determinacy and completeness of LTV limits in Germany

4.3.1.1. The LTV limit for Bausparkassen

The *Bausparkassen* are regulated by the *Bausparkassengesetz* (BauSparkG) (Act on building and loan associations), and the *Bausparkassen-Verordnung* (BausparkV) (Regulation on building and loan associations).[1282] *Bausparkassen* are not only allowed to grant loans to borrowers after they have fully accumulated their savings, but also prior to that time, and beyond the amount of accumulated

[1275] Gilquin (2014), p. 420.
[1276] *Ibidem.*
[1277] Cf. Ausschuss für Finanzstabilität (2015), pp. 8-10.
[1278] Kofner (2014), *p. 272. Cf. section* 1(1) of the *Bausparkassengesetz* (BauSparkG), BGBl. I, 1991, 454, available at http://www.gesetze-im-internet.de/bausparkg/.
[1279] Verband der Privaten Bausparkassen (2014), p. 15; http://www.housing-finance-network.org/index.php?id=338 (last visited 23 July 2015).
[1280] Verband der Privaten Bausparkassen (2014), p. 15.
[1281] Cf. Immobilien & Finanzierung (2016).
[1282] The BausparkV, BGBl. I, 2015, 2576, is available at http://www.gesetze-im-internet.de/bausparkv_2015/index.html. For English translations of the BauSparkG and the BausparkV, see http://www.bausparkassen.de/index.php?id=101 (both last visited 10 February 2016).

savings.[1283] These loans can only be provided under certain conditions, which include a LTV limit.[1284] In particular, section 7(1) BauSparkG requires that loans, insofar they are not backed by savings, are secured by a mortgage with a maximum LTV ratio of 100%, unless additional guarantees are provided. Until December 2015 this LTV ratio was 80%. The increase of the LTV limit was part of a broader reform of the BauSparkG, which intended to enable the *Bausparkassen* to cope with the low-interest environment which endangered their profits.[1285] The increase was proposed by the industry.[1286] The BauSparkG includes a provision on collateral valuation, which stipulates that the value shall only be determined by lasting qualities of the house, and shall be lower than the market value.[1287]

The BauSparkG creates three exceptions for granting an unsecured loan to a household, meaning that the LTV limit does not apply, if:

1. The borrower provides sufficient alternative collateral;[1288]
2. The loan amount does not exceed € 30,000, and the borrower agrees not to hinder a future establishment of a mortgage on the house by selling the house or providing someone else with a lien (so, the *Bausparkasse* must be able to secure the loan in the future, if necessary);[1289]
3. Providing a secured loan seems not necessary due to the small amount of the loan (≤ € 30,000).[1290]

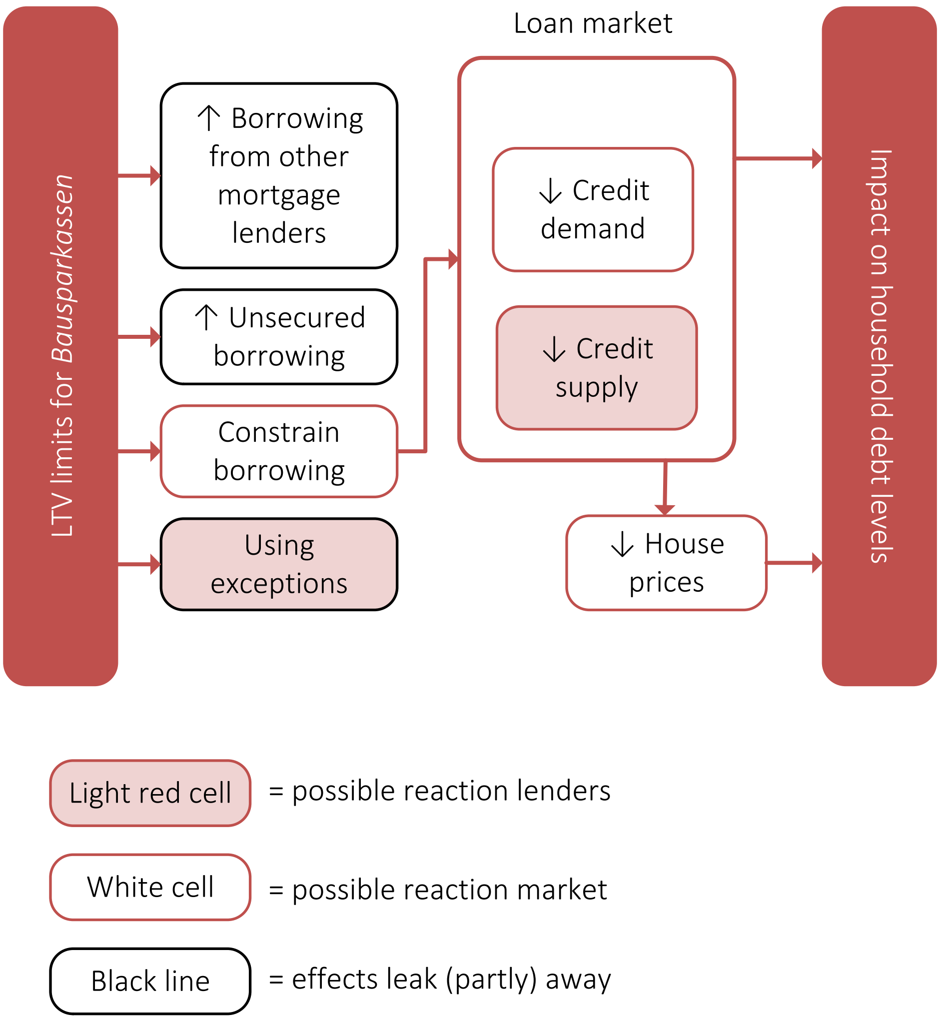
A *Bausparkasse* may grant not more than 30% of all the loans using these last two exceptions, and not more than 45% using any of the three exceptions.[1291]

The provision containing the LTV limit of 100% is determinate. On the contrary, the wording of the first exception to the LTV limit lacks determinacy, since it is vague what counts as sufficient alternative collateral. Still, the three exceptions are accompanied with relative protective conditions, such as the maximum amounts. This is an indication of completeness. Also, the rules apply to all *Bausparkassen.*

[1283] § 4(1)-(2) BauSparkG.
[1284] For these requirements, see sections 4(2) and 7 BauSparkG and §§ 1, 6 and 6a BausparkV.
[1285] See e.g. Börsen-Zeitung (2015); Wefers (2015). Cf. Deutsche Bundesbank (2015), pp. 36-39; Yildirim (2015), pp. 258-259.
[1286] The original proposal for the reform (available at http://dip21.bundestag.de/dip21/btd/18/064/1806418.pdf) did not provide for an increase of the LTV cap: this was included after the industry argued in favour of it. The various contributions are available at http://dip21.bundestag.de/dip21/btd/18/064/1806418.pdf. The adopted act is published in the *Bundesgesetzblatt,* Jahrgang 2015, Teil I, Nr. 54, p. 2399 (available online at http://www.bgbl.de/xaver/bgbl/start.xav?startbk=Bundesanzeiger_BGBl&jumpTo=bgbl115s2399.pdf). Cf. http://www.bundestag.de/dokumente/textarchiv/2015/kw48-pa-finanzen/395592 (all last visited 10 February 2016).
[1287] § 7(7) BauSparkG.
[1288] § 7(3) BauSparkG.
[1289] § 7(4)(1) BauSparkG and § 12(1) BausparkV.
[1290] § 7(4)(2) BauSparkG and § 12(1) BausparkV.
[1291] § 12(2) and 13 BausparkV.

However, currently credit supply by other banks is not subject to borrower-based caps. This creates risks, even though practices in the German mortgage lending market are relatively conservative.[1292] Figure 4.3 shows the transmission channels of the LTV limit for *Bausparkassen.* It reveals that the LTV cap can contribute to constraining lending, but that circumvention is easy, either by taking mortgage loans from other lenders, or by resorting to unsecured loans.

Figure 4.3: Transmission channels of the LTV limit for Bausparkassen *in Germany*



[1292] On the culture of German housing finance: Hamm (2008), pp. 47-48; Kofner (2014), pp. 270-272. But see Immobilien Zeitung (2015), which indicates that some lenders are adopting less conservative practices.

4.3.1.2. The macroprudential LTV limit

Because of the limitations to conduct macroprudential policy with capital-based instruments, and the absence of other suitable macroprudential instruments, while systemic risk can arise in the real estate sector, the *Ausschuss für Finanzstabilität* (Financial Stability Committee, see Box 3.2) on 30 June 2015 recommended to create the legal framework for LTV, DSTI and DTI caps, together with the possibility to restrict the maturity of loans.[1293] Much later,[1294] in October 2016, a legislative proposal was published.[1295] This proposal was largely in line with the recommendation. In March 2017, the Bundestag adopted the act supplementary act on financial supervision law (the *Finanzaufsichtsrechtergänzungsgesetz*), which amends several other acts.[1296] However, compared to the recommendation and the legislative proposal, the act has been watered down considerably, apparently *inter alia* due to pressure from the financial sector.[1297] It does not anymore include the possibility to set DSTI and DTI limits. The legal framework for the LTV limit has not been established to activate the LTV limit directly after its creation, but to enable BaFin to activate it immediately when necessary.[1298]

The legal framework for the LTV limit

The *Finanzaufsichtsrechtergänzungsgesetz* contains the legal framework for two – instead of the envisaged four – instruments, namely the LTV limit and the restrictions on the maturity of loans. Barring exceptions, the LTV limit governs the combined debt resulting from a residential real estate financing transaction.[1299] This is not limited to secured debt. When valuing the house for calculating the LTV ratio, the market value at the time of the transaction needs to be used. § 194 *Baugesetzbuch* (Federal Building Act) defines the market value as the price of the property, in the ordinary course of business, in accordance with the legal situation and actual characteristics of the property, without

[1293] Ausschuss für Finanzstabilität (2015), pp. 1-5, 8-11 (references to the page numbers in the German version, but there is also an English translation of the recommendation).

[1294] Since a recommendation of the Financial Stability Committee is subject to a comply-or-explain principle (§ 3(2) and 3(4) FinStabG (*supra,* footnote 212)), the federal government was asked to notify by 31 December 2015 whether and how it intends to implement the recommendation, and to create the legal foundations for the caps by 31 March 2016 (Ausschuss für Finanzstabilität (2015), p. 20).

[1295] For the legislative proposal and subsequent amendments, see: http://dipbt.bundestag.de/extrakt/ba/WP18/788/78822.html (last visited 4 April 2017).

[1296] *Ibidem.* For the press release of the *Bundestag,* see: http://www.bundestag.de/dokumente/textarchiv/2017/kw13-de-finanzaufsicht/499918 (last visited 4 April 2017).

[1297] The amendments made by the *Bundestag* are largely in line with the opinion of the German association of banks, which is available at https://bankenverband.de/fachthemen/bankenaufsicht-und-bilanzierung/stellungnahme-zum-finanzaufsichtsrechterganzungsgesetz/ (last visited 4 April 2017).

[1298] Ausschuss für Finanzstabilität (2015), p. 5. Cf. Berlin (2015), Maurer (2015).

[1299] § 48u(2)(1) KWG.

consideration of unusual or personal circumstances.[1300] Since the market value is based on the current price of a house, it offers less protection against boom dynamics than the mortgage lending value. The act also creates the possibility to impose various restrictions on the loan maturity. A maximum term can be set for loans which are completely redeemed at maturity.[1301] For other types of loans it can be required that a certain fraction of the loan must be repaid in a given period. This reduces the indebtedness of households over time.[1302]

If BaFin uses these instruments, it must announce at which moment lenders have to comply with the restrictions. They must be granted a reasonable period to comply.[1303] Simultaneously, BaFin has to set the parameters for four exemptions, which determine which loans will not be covered by the restrictions. These exemptions are:

1. An *excess quota*, meaning that every lender is allowed to supply a certain percentage of non-compliant loans.[1304] BaFin must set this percentage. The *excess quota* may vary over time. The *excess quota* is similar to the Irish proportionate margin. Although the exact design may turn out to be different in the relevant details;[1305]
2. A *de minimus* threshold, meaning that one or more of the restrictions do not apply to loans below a certain amount.[1306] According to the Explanatory Memorandum, this exemption is justified because these small loans probably cause few losses for commercial lenders, and the impact on financial stability is thus limited.[1307] Meanwhile, in order to avoid circumvention – e.g. by offering several small loans which individually are below the threshold, but together above it – there must be a maximum to volume of mortgage loans which a lender, in a given period, may supply while using this exemption. BaFin must determine the *de minimus* threshold. Yet, during the process of

[1300] The *Baugesetzbuch*, BGBl. I, 2004, 2414, is available at https://www.gesetze-im-internet.de/bbaug/index.html. The market value is further regulated in the *Verordnung über die Grundsätze für die Ermittlung der Verkehrswerte von Grundstücken* (Regulation on the principles for the determination of the market value of property), BGBl. I, 2010, 639, available at https://www.gesetze-im-internet.de/immowertv/ (both last visited 27 August 2016).
[1301] § 48u(2)(2) KWG.
[1302] These restrictions were also intended to limit the possibilities for circumventing the DSTI cap, but that function is redundant now BaFin cannot to set DSTI limits. Cf. Ausschuss für Finanzstabilität (2015), p. 12.
[1303] § 48u(2)(5) KWG.
[1304] § 48u(3)(1) KWG.
[1305] The Irish proportionate margin means that a certain percentage of the total *monetary amount* of newly supplied loans may be non-compliant loans. Because it is a percentage of the value, effectively the amount above the restrictions is restricted as well. If the German excess quota would allow a certain percentage of the *number* of newly supplied loans to exceed the LTV limit, there is no restriction on the amount above the limit.
[1306] § 48u(3)(2) KWG.
[1307] *Supra,* footnote 1295).

adopting the act, the *Bundestag* added a provision which obliges BaFin to set the value of the *de minimus* threshold at minimally € 50,000 (and also added the next two exemptions);[1308]

3. If the LTV ratio does not exceed 80%, and the mortgage loans do not exceed an amount set by BaFin, the restrictions do not apply. BaFin must set this amount at minimally € 200,000. Since this exemption contains a LTV limit, it is mainly relevant as an exemption to the restrictions on loan maturity. *De facto,* BaFin cannot require debt reduction below € 200,000 (€ 160,000 for houses that are € 200,000). Also, it restricts the ability of BaFin to set a LTV limit which is lower than 80%;
4. If the LTV ratio does not exceed 60%, and the loans do not exceed an amount set by BaFin, the restrictions do not apply. BaFin must set this amount at minimally € 400,000.

The restrictions, but not the exceptions, must be reviewed at least every six months.[1309] Their determinacy depends on more concrete definitions, which are currently unknown. These will be adopted by means of secondary law, as will be further discussed in sub-section 4.3.3.2. [1310]

Scope of the proposed LTV, DSTI and DTI limits

§ 48u KWG authorises BaFin to impose the aforementioned restrictions upon credit institutions for the supply of loans for acquiring or building residential real estate which is located in Germany.[1311] An amendment of § 53b KWG ensures that the restrictions apply as well to branches of banks established in the European Economic Area, and to cross-border lending.[1312] This contributes to the completeness of the LTV cap. However, besides the aforementioned variable exemptions, several types of loans are excluded from the scope of the restrictions:[1313]

1. Loans for extending, rebuilding or renovating residential property which is already owned by the borrower;
2. Loans for social housing projects;

[1308] § 48u(3) KWG.
[1309] § 48u(4) KWG.
[1310] § 48u(5) KWG. The Explanatory Memorandum adds that the definitions in these detailed regulations should be informed by EU and international standards (p. 32).
[1311] § 48u(1) KWG.
[1312] Pages 24-25 of the Explanatory Memorandum to the legislative proposal (cf. footnote 1295). Proposed § 48u(7) KWG authorises BaFin to recognise borrower-based caps for secured loans in other countries. This can help to apply foreign measures to, for instance, branches of German banks (pp. 23-24). However, this is not directly relevant for ensuring the effectiveness of German, but of foreign, measures.
[1313] § 48u(3) KWG; page 15 of the Explanatory Memorandum to the legislative proposal (cf. footnote 1295).

3. Follow-up financing of loans which have been granted before the restrictions were enacted, provided that their total amount does not exceed the previously agreed loan amount minus the repayments which have already been made;[1314]
4. Loans for debt restructuring of non-performing loans.

Further rules on these exceptions can be created by regulations. BaFin may allow more exceptions.

Yet, the potential scope of the restrictions is much broader, because other acts have been amended as well. Firstly, § 5(8a) *Kapitalanlagegesetzbuch* (KAGB) (Capital Investment Act) authorises BaFin to impose the LTV and loan maturity restrictions upon companies which manage alternative investment funds.[1315] This does exclude some investment funds, in particular undertakings for collective investment in transferable securities.[1316] However, the latter are not allowed to supply loans anyway.[1317] Secondly, § 308b *Versicherungsaufsichtsgesetzes* (VAG) (Act on the Supervision of Insurance Undertakings) authorises BaFin and the supervisors at the state level – which oversee smaller insurers – to impose the same restrictions upon insurers and pension funds.[1318] It also allows the Minister of Finance to impose these restrictions upon insurers and pension funds which are not subject to supervision.

Data access

Data protection turned out to be a hot potato in the process of creating the borrower-based caps. In order to identify risks and to calibrate effective caps – especially for income-related caps – the supervisor needs to have access to reliable loan-level data.[1319] However, supervisors lacked access to such data for two reasons. Firstly, Germany has no public credit registry, but only a private credit bureau, Schufa. This bureau stores a lot of data, but does not include early arrears.[1320] Moreover, lenders are neither required to provide data to this bureau, nor to consult it.[1321] Secondly, Germany

[1314] § 48u(3)(3) KWG.
[1315] The KAGB, BGBl. I, 2013, 1981, is available at http://www.gesetze-im-internet.de/kagb/ (last visited 17 December 2016). The KAGB implements Directive 2009/65 of the European Parliament and of the Council of 13 July 2009, OJ 2009, L302/32 (UCITS Directive), as later amended by Directive 2014/91 of the European Parliament and of the Council of 23 July 2014, OJ 2014, L 257/186, as well as Directive 2011/61 of the European Parliament and of the Council of 8 June 2011, OJ 2011, L 174/1 (AIFM Directive).
[1316] §§ 17 and 1(2)-(3) KAGB.
[1317] Art. 88(1) Directive 2009/65.
[1318] See §1 VAG for its scope. The VAG, BGBl. I, 2015, 434, is available at http://www.gesetze-im-internet.de/vag_2016/ (last visited 17 December 2016). Pension funds are one of the several types of voluntary occupational pension schemes.
[1319] Cf. International Monetary Fund (2016a), p. 33; International Monetary Fund (2016c), p. 18.
[1320] Pyykkö (2013), p. 28.
[1321] Rothemund & Gerhard (2011), p. 8.

has stringent data protection laws, which limit data access by supervisors.[1322] Despite these limitations, the act does not include additional supervisory powers to access data or to collect data from credit institutions (for insurers and pension funds it does).[1323] Yet, the data issues are less relevant now the German federal legislator did not create the possibility to set DSTI and DTI limits.

Determinacy and completeness of the macroprudential LTV limit

Since the act only contains the legal basis for the restrictions on the LTV ratio and the maturity loans, the determinacy of the measures itself cannot be evaluated. However, the completeness of the rules can largely be assessed.

Some aspects of the new macroprudential rules contribute to their completeness. Firstly, many lenders are covered by the rules. Secondly, the LTV limit covers all debt-financing of a house. This contributes to reducing possibilities for taking out unsecured loans on top of secured loans. Yet, it might be difficult to prove that an unsecured loan is taken out to finance a house. Preventing additional unsecured borrowing would have been much easier with DTI and DSTI caps. Generally, such caps are also more protective than a LTV cap during a boom, since house prices are more procyclical than income. The use of the market value instead of the mortgage lending value also reduces protection against overindebtedness in boom-bust cycles.

The scope of the instruments suffers from various other significant drawbacks as well. With eight exceptions and exemptions, a substantial number of loans will not be covered by the rules. Depending on the exact design, the *excess quota* may result in a total exemption of a certain share of the loans

---

[1322] The most important act at federal level is the *Bundesdatenschutzgesetz* (Federal Data Protection Act), BGBl. I, 2003, 66, available at http://www.gesetze-im-internet.de/bdsg_1990/ (last visited 30 July 2016). For an introduction to this act, see e.g. Jentzsch (2007), pp. 144-149.

[1323] With respect to credit institutions, BaFin and the Bundesbank have to rely on the existing powers of § 44 KWG and § 6 FinstabG. § 44 KWG allows BaFin to request information from banks, related to all their business affairs, as long as the request is proportionate and within the scope of BaFin's regulatory objectives (cf. the discussion of § 44 KWG in Boos et al. (2016)). § 6 FinstabG authorises the Bundesbank to collect additional information, including personal data, from all German corporations involved in financial intermediation and auxiliary financial activities, insofar imperatively necessary (*zwingend erforderlich*) for performing its financial stability functions, and insofar the data cannot be obtained through the exchange of information with other authorities (§ 6 FinStabG in combination with paragraphs 2.32 to 2.67 of Annex A, chapter 2 of Council Regulation 2223/96 of 25 June 1996, OJ 1996, L 310/1). Indeed, BaFin and the Bundesbank may share this information with each other, if necessary for performing their functions (§ 7 KWG and § 5 FinStabG). § 43a VAG allows BaFin to request information from insurers and pension funds, if necessary to perform its functions related to financial stability. However, the data must either be aggregated, or lack personal references. So, while it is possible to gather personal data for calibrating the caps, especially due to the encompassing scope of § 6 FinstabG. However, triggering this provision might be difficult, since the Bundesbank must show that it imperatively needs the requested information.

from a lender from the rules. Then, the riskiest loans could be supplied using this exception. Also, since existing homeowners who wish to borrow to improve their house are excluded from the scope of the rules, they are not protected against overindebtedness which could result from boom-bust dynamics.

4.3.2. The possibility of proportionate and dissuasive enforcement of the LTV, DSTI and DTI limits in Germany

The BauSparkG has created various sanctions for violations of provisions of the act. If a *Bausparkasse* provides loans in violation of the LTV limit, instructions can be given to reconcile its business operations with the rules on the LTV limit.[1324] Furthermore, a manager responsible for violating the LTV limit may be dismissed.[1325] Another enforcement measure is the appointment of a special representative for taking suitable measures to set up and safeguard a proper business organisation and monitor the compliance with orders of BaFin.[1326] The ultimate possible sanction is revoking the license of a *Bausparkasse.*[1327] The BauSparkG and the KWG do no directly enable the imposition of a fine for a violation of the LTV limit that applies to *Bauspar* loans. This means that an important penalty is missing in the enforcement pyramid, reducing the possibilities to impose proportionate and dissuasive sanctions.

With the creation of a legal basis for setting LTV caps, provisions about enforcement have been amended as well. By adding a sentence to § 56(2) KWG, the usual system of administrative fines, as discussed in chapter 3, applies to violations of the new rules by credit institutions.[1328]
For investment funds, a few amendments of the KAGB ensure enforceability. These entail that intentionally or negligently providing a loan in breach of the restriction is an administrative offence, punishable with a fine up to € 1 million. On top of this fixed maximum, the fine can be increased up to 2% of annual turnover, for a legal person or association of persons.[1329] Moreover, a fine can be increased to twice the amount of economic advantage of the violation.[1330] After fines have become

[1324] § 3(1) BauSparkG.
[1325] § 11 BauSparkG; § 36(2) KWG.
[1326] § 45c(2)(5)-(6) KWG. Since *Bausparkassen* are credit institutions, they are subject to the KWG, like other credit institutions (§ 1(1) BauSparkG and § 1(1) KWG).
[1327] § 8 BauSparkG.
[1328] § 56(2)(17a) KWG.
[1329] § 340(2)(1a) and 340(7)(2) KAGB.
[1330] § 340(9) KAGB. With reference to § 30 OWiG, this provision also ensures that investment funds established in another member state of the European Economic Area, but providing services in Germany through a branch or across borders, can be fined if violating the restrictions. The provision also states that violations are barred after three years.

irreversible, BaFin can publish the violation and imposition of the fine on its website, unless some exceptions apply.[1331] So, unlike credit institutions, investment funds can defer publication by appealing the decision to impose a fine. As ultimate sanction, withdrawal of authorisation is possible.[1332] BaFin can also prohibit the responsible manager to exercise its function.[1333]

Insurers and pension funds will face fines up to € 100,000, if intentionally or negligently providing a loan in breach of the restrictions.[1334] BaFin can warn a manager who is responsible for violation of the VAG.[1335] It can require the dismissal of a manager who intentionally or negligently keeps acting against the VAG, despite previous warnings.[1336] In case of serious violations of the VAG, the authorisation of an insurer or pension fund can be revoked.[1337] BaFin shall publish the imposition of these sanctions – together with information about the violation – with undue delay on its website, after they have become irreversible.[1338]

Therefore, proportionate enforcement is possible, although the availability of different sanctions in the enforcement pyramid is somewhat limited. The preconditions for dissuasive enforcement are generally met too, except for the possibility of criminal prosecution. Furthermore, the maximum fine for insurers and pension funds is rather low in comparison with the maximum fines for banks and investment funds, as well as compared to the fines applicable in the Netherlands and Ireland.

4.3.3. Independent application, enforcement and amendment of LTV, DSTI and DTI limits in Germany

4.3.3.1. Independent enforcement and amendment of the LTV limit for Bausparkassen

The LTV limit for *Bausparkassen* is static, and not intended to be adjusted regularly. The most important rules regarding this LTV cap are part of the BauSparkG, and thus need to be adjusted by the legislature. The BausparkV contains some conditions for the three exceptions to the duty to provide secured loans the borrowers. The power to adopt – and thus to amend – the BausparkV is delegated

1331 § 341a KAGB.
1332 § 39(3) KAGB.
1333 § 40(1) KAGB.
1334 § 332(3)(7) and 332(5) VAG.
1335 § 303(1) VAG.
1336 § 303(2)(2) VAG.
1337 § 304(3)(2) VAG.
1338 § 319 VAG.

to the BMF, which is obliged to consult BaFin and the German federal central bank.[1339] Apart from this consultation requirement, which spells out no formal consequences of negative opinions of BaFin or the Bundesbank, no further restrictions or guidance exist for the Minister of Finance. Hence, there are few guarantees to prevent that rules are not aimed at the general interest.

Since the maximum LTV ratio is static, no application of the instruments is required, apart from its enforcement. BaFin is responsible for enforcing the LTV limit.[1340] The influence which the Federal Minister of Finance is allowed to exert on supervisory policies of BaFin has been discussed in sub-section 3.3.1. This is the largest limitation to BaFin's independence in enforcing the LTV cap, since the BauSparkG itself provides BaFin with a relative independent role and thus creates no limitations.[1341]

4.3.3.2. Independent application, enforcement and amendment of the macroprudential LTV limit

The legal basis and the policy objective of the macroprudential LTV limit are clear. This objective is counteracting rising macroprudential risks of strongly increasing house prices or mortgage credit supply, if these threaten financial stability.[1342] BaFin is envisaged to activate and apply the LTV limit. The objectives correspond with BaFin's mandate. However, for none of the three sectors which BaFin supervises (banks, insurers & pension funds, and investment firms) BaFin's mandate includes an explicit macroprudential focus.[1343] Adding this would a better fit with its new tasks, and may increase BaFin's ability and willingness to act.[1344] Some of the restrictions on the LTV cap confine the room of BaFin to act; for instance, to set the level of the LTV cap below 80%.[1345]

Substantial pressure can be expected when BaFin intends to activate the LTV limit, like in the lengthy process of creating the legal basis for this limit, which resulted in the watering down of the legislative proposal. The institutional and procedural aspects of the process of activating the LTV limit are not optimally designed from the perspective of facilitating the ability and willingness to establish a LTV

[1339] § 10 BauSparkG, in particular § 10(4)-(6) for the rules on the exceptions to the LTV limit.
[1340] § 3 BauSparkG.
[1341] See in particular § 3(1) and § 3(3) BauSparkG.
[1342] § 48u(1) KWG.
[1343] With respect to banking supervision, its mandate does not explicitly differentiate between micro- and macroprudential tasks, but includes macroprudential supervision (§ 6(2) and 6(4) KWG). Cf. sub-section 3.3. For investment funds, BaFin is instructed to conduct supervision in accordance with the KAGB, while no overarching objective is defined (cf. § 5 KAGB). For insurers and pension funds, BaFin's mandate is primarily framed in microprudential terms, but includes macroprudential objectives as well (§ 294(1)-(2) VAG).
[1344] §§ 1-2 FinStabG mainly entrust the task of contributing to financial stability to the Bundesbank and the Financial Stability Committee.
[1345] Cf. sub-section 4.3.1.2.

limit in face of substantial pressure. Firstly, BaFin is not completely institutionally independent, as discussed in sub-section 3.3.1. Secondly, some procedural aspects facilitate, but others hamper the ability and willingness of the involved actors to establish a LTV limit, as explained in the next paragraphs.

The first step in the process of establishing a LTV cap, is the adoption of more detailed regulations on (1) the definitions of loans and houses, (2) the concrete calculation and definition of the ceilings and periods and other relevant variables of § 48u(2) KWG, (3) the exceptions, (4) the periodic review of the restrictions, and (5) details on cooperation and data exchange between BaFin and the Bundesbank.[1346] This task is mainly entrusted to political actors, which may be more sensitive to pressure than an independent actor. The Federal Ministry of Finance has been authorised to adopt these regulations, in agreement with the Bundesbank and three other federal ministries (Justice and Consumer Protection, Economic Affairs and Energy, and Environment, Nature, Conservation, Building and Nuclear Safety). This does not require consent of the *Bundestag* and *Bundesrat.*[1347] Consultation of the financial sector is required.

While BaFin is empowered to activate the LTV limit and/or the restrictions on the loan maturity, the Bundesbank and the BMF are also involved in the decision-making process, according to the Explanatory Memorandum (but this is not enshrined in the law itself).[1348] The Memorandum states that BaFin must rely on the analysis and expertise of the Bundesbank for determining to what extent there is a threat to financial stability. The normal procedure is that the Bundesbank informs BaFin and the BMF if it identifies a potential credit bubble. If BaFin considers that the use of the LTV limit is necessary and proportionate to mitigate these risks, a concrete proposal is discussed in the German Financial Stability Committee (the specificities of the cooperation between BaFin and the Bundesbank may change, after the rules on this cooperation will be adopted). This division of tasks has both upsides and downsides. On the one hand, it ensures that financial stability is on the agenda of several authorities. On the other hand, the risk of inaction is increased, because the authority with the primary financial stability mandate, the Bundesbank, does not decide about activating the caps. Also, since the Financial Stability Committee decides with unanimity about recommendations, every actor within this committee has a veto right. This makes it more difficult for BaFin to exercise its powers.[1349]

[1346] § 48u(5) KWG. The Explanatory Memorandum adds that the definitions in these detailed regulations should be informed by EU and international standards (p. 32).
[1347] § 48u(5) KWG (cf. § 80 *Grundgesetz* (Basic Law), available at https://www.gesetze-im-internet.de/gg/index.html).
[1348] Page 30 of the Explanatory Memorandum.
[1349] Cf. sub-section 3.3.1.

Furthermore, § 48u(6) KWG obliges BaFin to consult the three aforementioned federal ministries and several associations of the industry before it adopts or amends the LTV limit. Moreover, at least six weeks before the restrictions are adopted, the BMF must explain the reasons for adopting or amending the LTV limit before the committee on financial supervision of the *Bundestag*. The fact that the BMF, which is politically responsible for BaFin, has to explain these reasons, presupposes a close cooperation between BaFin and the BMF in these matters, or at least that BaFin firstly has justified its actions towards the BMF. These requirements increase the accountability of BaFin. Simultaneously, they might become an additional hurdle to adopt a LTV limit, especially since the relatively low independence of BaFin makes it more difficult to resist the substantial pressure that it would face if it intends to activate or lower the LTV. It also seems relatively unlikely that BaFin would activate a LTV limit which the BMF is not willing to defend before the committee on financial supervision of the *Bundestag.*

The Financial Stability Committee recommended guiding decisions on activation and deactivation of the caps by indicators.[1350] To this end, suitable indicators need to be identified, and learning effects over time must be incorporated.[1351] § 48u(1) KWG provides some general guidance for BaFin, which restricts and partly steers its decisions on activating the LTV limit. BaFin can only do this if and insofar as this is necessary to prevent a (1) disruption of the German financial system or a (2) threat to the financial stability in Germany. This is especially the case if house prices, mortgage credit supply, or LTV ratios of new loans strongly increase.[1352] If the detailed rules which will be adopted provided for more concrete guided discretion, the decision-making process will improve, by being geared towards action.

All in all, the involvement of all these actors increases the hurdles for imposing effective restrictions. Developing a guided discretion mechanism may mitigate this concern, by steering the process toward action if risks are increasing. The fact that primary law points to three concrete developments that may trigger the activation of the LTV limit is already a start of a guided discretion mechanism.

[1350] *Ibidem,* pp. 16-18.
[1351] *Ibidem.*
[1352] § 48u(1) KWG.

4.4. Concluding and comparative remarks on credit-based instruments

The Netherlands, Ireland and Germany have opted for different approaches of establishing DSTI, LTI and LTV caps. While the Irish and German approaches are somewhat comparable, the Dutch approach is noticeably different. In Ireland and Germany, the borrower-based caps are macroprudential; in the Netherlands they are part of conduct of business regulation. The risk of a macroprudential approach is that certain vulnerable individual consumers are protected insufficiently, whereas the downside a conduct of business approach is that neglecting the financial or housing cycle leaves consumers more vulnerable than borrowers and lenders believe. These dissimilar approaches also lead to different outcomes with respect to the fulfilment of the preconditions for effectiveness, as summarised in table 4.3 below. The Netherlands has implemented some aspects of EU consumer protection in the area of financial services into its conduct of business rules, and has built the LTV, DSTI and LTI caps upon this implemented legislation.[1353] Consequently, the Dutch caps benefit from the wide scope of consumer protection law, but cannot be applied to areas where EU consumer law granted exceptions to the scope of its rules. In most cases, these exceptions are not particularly relevant for LTV, DSTI and LTI limits, but monitoring risks in these areas is recommended. The scope of the Irish and German borrower-based caps is wide as well.

Design choices for the LTV, DSTI, LTI and/or DTI limits in the three member states have implications for the balance between ensuring protection, and avoiding overregulation and unnecessary restrictions. In the Netherlands, DSTI, LTI and LTV caps are binding for individual borrowers, but exceeding the caps is allowed, if certain conditions are fulfilled. In Ireland, exceeding the maximum ratios for individual consumers is allowed, subject to a proportionate margin. If the LTV cap will be activated in Germany, also a certain share of the loans may exceed the limit. The Irish broad-brushed instead of detailed approach leaves more responsibility for borrowers and lenders, which has both its merits and demerits. On the one hand, credit providers are induced to internalise responsible lending behaviour.[1354] Very detailed rules can eliminate the sense of responsibility and stimulate creative compliance. Indeed, in the Netherlands, lenders sometimes seem to simply follow the rules. On the other hand, this comes with the risk of abuse of the leeway, which might result in irresponsible lending. In particular, this risk can materialise with the Irish undifferentiated LTI cap of 3.5. This limit may not only be too restrictive for some categories of households, but as well too lax for low-income borrowers,

[1353] Cf. footnote 985 and sub-section 5.1.2.

[1354] There are similarities with self-regulation, although discretion is much more limited in this situation than under self-regulation. Nonetheless, one of the rationales for self-regulation is that regulatee might perceive its own rules as more reasonable than those imposed by the regulator, which might lead to more compliance (see e.g. Coglianese & Mendelson (2012), p. 152).

who usually are only able to spend a relatively small share of their income on housing. In the Netherlands DSTI and thus LTI caps are lower for low-income categories of households, and hence more protective for these vulnerable people. The Dutch rules are also more specific about what counts as income, which functions as safeguard against stretching the concept. However, in contrast, they allow taking future income into account, which reduces protection. In both member states, lending can be accommodated to the needs of individual borrowers. In the Netherlands, this requires explicit justification, which increases the protection of borrowers. In Ireland, the regulatory burden is probably lighter, since the rules are less complex and less prescriptive.

In Ireland, mortgage lenders are not required to take other credit into account. In Germany, both secured and unsecured debt resulting from a residential real estate financing transaction is restricted by the LTV cap, which helps to limit circumvention. However, it might be difficult to enforce the rules for unsecured credit. DSTI and DTI caps would be better able to prevent circumvention. In the Netherlands lenders have to factor in existing credit costs (but no debt resulting from arrears on e.g. energy payments).[1355] Dutch subscribers to the VFN and NVB codes of conduct on consumer credit have to apply the norms of the code of conduct for mortgage credit when supplying unsecured credit that is meant to finance a house.[1356] However, a gap is created by the fact that these codes of conduct refer to the code of conduct for mortgage credit, instead of to the regulatory norms. The regulatory rules are sometimes different from those in the code of conduct for mortgage credit. The latter, for instance, allows a LTV ratio of 106%.[1357]

The three member states have granted regulatory and supervisory powers to enact and apply borrower-based caps to different actors. This has implications for their effectiveness and the degree of accountability. In Ireland, both regulatory and supervisory powers are possessed by the central bank, only subject to consultation requirements. Independence is high, but accountability requirements are relatively low. In Germany, the legislature has created the legal basis for LTV cap, which will be applied by BaFin, probably subject to a form of guided discretion. The adoption of the legal basis by the legislature provides for democratic legitimacy of the measures, and *ex ante* control on BaFin, since the act includes a range of restrictions. Because a supervisor activates the cap, in theory this combines in the best way the demands of independence, accountability, and guided discretion. Accountability is also relatively high, because parliamentary discussion is required before the LTV cap will be activated or amended. However, due to the limitations to BaFin's independence, this creates

[1355] Cf. sub-sections 4.1, 4.2.1, 4.3.1.
[1356] Cf. sub-section 4.1.1.1.
[1357] Cf. sub-section 4.1.1.2.

the risk that activating the LTV limit will be difficult. Simultaneously, this construction shows the high interest which politics attaches to being involved in the process of activating macroprudential measures. This is confirmed by the fact that also in Ireland, a member of the lower house has proposed an act which requires the central bank to actively respond to the parliament before using its regulatory powers.

In the Netherlands, the government has adopted the legal basis for the borrower-based caps, and the Minister of Finance applies them, based upon input of an expert body, Nibud, and after consultation with the supervisory authorities, but without being legally bound by any input. This approach involves risks with respect to ensuring an adequate level of the DSTI, LTI and LTV limits, especially if political and industry pressure increases. Irish recent history shows that financial stability may suffer if an actor is not only responsible for ensuring financial stability, but also for promoting the financial service industry.[1358] Entrusting the task of setting DSTI and LTV limits – primarily in the interest of consumer protection, but secondary also to ensure financial stability – to a political institution like the Ministry of Finance carries a similar risk, as this ministry has comparable conflicting interests as the Central Bank of Ireland previously had. Section 7.3 will further discuss how to reconcile independence, accountability and a willingness to act for macroprudential authorities.

[1358] Cf. sub-section 4.2.3.

Table 4.3: Summary of the analysis of borrower-based caps

<table>
<tr><th>Determinacy and completeness</th><th>Possibility proportionate and dissuasive enforcement</th><th>Room for independent application, enforcement and amendment</th></tr>
<tr><td colspan="3">Qualitative evaluation, from high to low: yes, mostly, partly, barely, no</td></tr>
<tr><td>Determinacy:

• NL: rules on consumer credit: mostly (yet, a breach of a rule in a code of conduct is not necessarily a breach of art. 4:34 Wft); rules on mortgage credit: yes
• IE: yes
• DE: to be seen

Completeness:

Encompassing scope:
• NL: rules on consumer credit: mostly (due to minimum norm); rules on mortgage credit: yes
• IE: mostly
• DE: partly (many lenders and not only secured credit, however lot of exceptions, no DSTI & DTI limits)

Absence gaps and silence:
• NL: mostly (but differences between rules for consumer and mortgage credit)
• IE: barely (circumvention via unsecured loans)
• DE: partly (risky loans supplied via excess quota, use market value, difficult to prevent unsecured borrowing)

Exceptions are subject to clear and protective conditions:
• NL: yes
• IE: mostly (exception for borrowers with negative equity could be more protective)
• DE: to be seen</td>
<td>Proportionate enforcement:

Availability whole range of sanctions, from light to severe:
• NL, IE: yes
• DE: mostly

Dissuasive enforcement:
Availability high administrative fines:
• NL, IE: yes
• DE: yes (but maximum fine for insurers and pension funds is rather low in comparison with those for banks)

Mandatory publication of sanctions, apart from specific exceptions:
• NL, IE, DE: yes

Possibility to sanction individuals:
• NL, IE, DE: yes

Availability threatening sanctions, like withdrawal licence:
• NL, IE, DE: yes

Possibility criminal conviction:
• NL, IE, DE: no</td>
<td>Ability and willingness to act:
Instrument has clear legal basis:
• NL: codes of conduct: barely; Trhk: yes
• IE: yes
• DE: yes

Well-defined policy objectives:
• NL: codes of conduct: mostly; Trhk: partly (relationship consumer protection and financial stability not entirely clear)
• IE: yes
• DE: yes

Corresponds to clear mandate supervisor:
• NL: barely (Minister of Finance has no mandate for consumer protection, and implicitly for financial stability); AFM: yes
• IE: yes
• DE: mostly (macroprudential mandate is not explicit)

Framework provides room for action:
• NL: for Minister of Finance: yes; for DNB and the AFM: barely.
• IE: yes
• DE: partly

Operational independence:
• DNB, AFM: yes
• CBI: mostly (Minister for Finance can exert influence)
• BaFin: barely/partly (constrained by legal and technical oversight BMF)

Use of guided discretion:
• NL: partly (de facto, not de jure)
• IE: barely
• DE: partly

Accountability mechanism:
• NL: Minister: mostly (towards parliament); NVB, VFN, NTO: barely (but de facto to AFM and Minister); AFM: barely (not specifically for enforcing these rules)
• IE: partly (consultation Minister for Finance, public)
• DE (BaFin): yes (information requirements towards BMF, relationship with FSC, parliamentary discussion, consultation)</td></tr>
</table>

5. Lending restrictions in consumer law

Rules for influencing the amount of money that households can borrow are not only created within the ambit of financial regulation, but also within the domain of consumer law. In historical and theoretical perspective, this is quite remarkable. Consumer law is namely part of private law, which governs the relationships between private parties. Traditionally, the starting point of private law is the freedom of contract: parties can agree among themselves under what terms they form contracts.[1359] Consumer law lays down restrictions on this freedom in order to protect the consumer, which is perceived as the weaker party. This weakness may be caused by an array of factors, including the consumer's lack of bargaining power, knowledge and experience compared to the professional party.[1360] For some time, behavioural deficiencies have been considered relevant as well. In past decades, the dominant rationale underlying this government intervention was the presence of market failures like asymmetric information.[1361] Simplified, the idea was that mandatory disclosure brings the consumer on equal footing with the professional. Apart from that, the consumer was considered capable of entering into agreements. The underlying rationale is different when a government prohibits certain (credit) agreements, because some conditions are (not) met or a threshold is exceeded, even if both parties – in this case the lender and the borrower – would like to conclude the agreement. Then, the consumer is protected against his own shortcomings. This paternalistic approach means a departure from neoclassical economic assumptions to a behavioural economic perspective. Acknowledging behavioural deficiencies is probably realistic.[1362] Still, such prohibitions have a far-reaching nature.

When examining the lending restrictions in consumer law, this chapter follows the structure of the analytical framework chosen for this study. The subsections discuss (1) the determinacy and completeness of the rules, (2) the proportionality and dissuasiveness of the enforcement measures and (3) the independence in applying, enforcing and amending these lending restrictions, respectively. Each subsection commences with examining the EU law aspects of the topic under consideration and continues with analysing the Dutch, Irish and German legal situation.

[1359] Cf. Reifner et al. (2010), pp. 91-95.
[1360] Cf. sub-section 2.3.3.1; Reich (2016), section II(C).
[1361] In addition, several EU directives granted consumers a right to withdrawal for various situations or products. This started with Council Directive 85/577 of 20 December 1985, *OJ* 1985, L 372/31. Eidenmüller (2011) lists the directives which in 2011 included this right (p. 3), and further discusses this right and the possible underlying rationale.
[1362] Cf. sub-section 2.1.2.2.

5.1. Determinacy and completeness of lending restrictions in consumer law

5.1.1. Lending restrictions in EU consumer law

Two EU directives are directly concerned with the supply of credit to households: the so-called Consumer Credit Directive (CCD) and the Mortgage Credit Directive (MCD), adopted in 2008 and 2014 respectively.[1363] Both directives contain provisions to protect and increase the capabilities of consumers who borrow, such as rules on mandatory disclosure and minimum contractual rights. However, there are significant differences between the two directives, *inter alia* regarding the provisions on assessing the creditworthiness of a consumer, and the consequences of this assessment. These differences mainly stem from the fact that the MCD has been adopted in the post-crisis era.[1364] Whereas EU consumer legislation historically predominantly aimed at fostering the internal market and protecting consumers, preventing financial instability became an important additional objective after the crisis.[1365] This led to stricter and more protective rules regarding credit supply. Still, both directives have been adopted based on what is currently art. 114 TFEU, which allows for the adoption of measures to establish or improve the functioning of the internal market.[1366] Arguably, financial stability and a high and equivalent level of consumer protection contribute indeed to the integration of credit markets.[1367]

Both directives use the concept of responsible lending – albeit that the final version of the CCD mentions it only once, in recital 26 – without defining it. This concept is closely linked to preventing over-indebtedness and can be understood as lending while taking into account the interests of

---

[1363] *Supra,* footnote 55. Directive 2008/48 has repealed the previous directive on consumer credit, Council Directive 87/102 of 22 December 1986, OJ 1986, L 42/48.

[1364] Compare recitals 3-9 of the preamble of Directive 2008/48 with recitals 2-7 of the preamble of Directive 2014/17.

[1365] Mak (2013b), pp. 179-180.

[1366] Interestingly, neither directive explicitly refers to art. 169 TFEU, which can be a legal basis for EU legal acts aimed at consumer protection, either in conjuction with art. 114 TFEU or not.

[1367] Schäfer (2014) discusses some questions about the use of art. 114 TFEU as a legal basis for the MCD (pp. 211-212). He rebuts the argument that a common market in mortgage credit is almost lacking, since only 1% of the transactions crosses borders, arguing that harmonisation might contribute to establishing such a market. He moreover responds to the argument that the MCD will mainly improve the functioning of national credit markets, that, even if this would be the case, this will nonetheless contribute to the stability of the whole internal market. Jørgensen (2015) doubts whether the internal market will be achieved for consumer and mortage credit, especially due to the low appetite to borrow abroad. She also questions the use of art. 114 TFEU as legal basis for the MCD, because this directive seems mainly targeted at financial stability and is a minimum harmonisation directive, which does not help to remove obstacles to free trade (pp. 760-762). Some scholars argue that maximum harmonisation directives in the field of consumer protection are actually more aimed at fostering the internal market and helping suppliers, than protecting consumers (Cf. Donnelly & White (2013), pp. 9-10; Brown (2015), pp. 569-570).

borrowers, in particular their repayment capabilities.[1368] This concept has some (implicit) assumptions about borrowers and lenders. Firstly, it presumes that borrowers are not fully able to avoid overborrowing. So, consumers are considered vulnerable to making wrong decisions.[1369] In the context of borrowing, this is a realistic point of departure in light of the findings of behavioural economic research and the literature on over-indebtedness.[1370] Still, not every consumer is equally vulnerable. Secondly, the concept of responsible lending assumes that lenders supply loans to consumers who lack repayment capabilities. Normally, this is not in the lenders' own interest, but lenders might have distorted incentives due to competitive pressure, conflicting incentives coming from their sales targets, fees or possibilities to pass on risks.[1371] Indeed, anecdotal evidence suggests that competitive pressure led to lower lending standards in Ireland, prior to the crisis.[1372] In addition, lenders might provide credit that can be paid back, but strangles households. It is thus realistic to assume that lenders not always lend responsible, as also revealed during the crisis. Ergo, policies to protect consumers against themselves are certainly valuable.

5.1.1.1. Lending restrictions in the Consumer Credit Directive

The Consumer Credit Directive stipulates rules governing the credit supply by a creditor, being someone granting credit in the course of his trade, business or profession, to a consumer, meaning a natural person, acting outside his trade, business or profession.[1373] Barring certain exceptions, the rules only apply to credit agreements involving a total amount of minimum € 200 and maximum € 75,000, provided that the credit is not secured by immovable property.[1374] Excluded are, among others, overdraft facilities where credit has to be repaid within a month, and credit which is granted free of interest and other charges. In addition, the rules of the CCD apply to unsecured credit agreements for the renovation of a residential immovable property, even if the total amount of credit exceeds € 75,000.[1375] Therefore, although a wide range of credit types is covered, there are certain gaps. Whether these gaps create important risks or allow for circumvention depends a lot on national practices. It

---

[1368] Elsewhere, the European Commission (2009c) states that '[r]esponsible lending means that credit products are appropriate for consumers' needs and are tailored to their ability to repay.' (p. 3). On the responsible lending concept and the absence of a definition: World Bank (2013), pp. 3-4; Riefa (2014), p. 48; FInCoNet (2014), p. 15; Kalamees et al. (2015), pp. 29-30; Mak (2015), pp. 411-413; Ferretti et al. (2016), pp. 65-66.
[1369] See e.g. Reich (2016) on the vulnerable consumer.
[1370] Cf. sub-sections 2.1.2.2 and 2.1.2.4.
[1371] Cf. sub-section 4.1.1.1; Kalamees et al. (2015), p. 30.
[1372] Honohan (2010), para. 6.9 and 6.39. Cf. Norris & Coates (2014), pp. 304-305.
[1373] Art. 3(a)-(b) Directive 2008/48.
[1374] Art. 2(1), 2(2)(a) and 2(2)(c) Directive 2008/48.
[1375] Art. 2(2a) Directive 2008/48, as added by art. 46 Directive 2014/17.

matters how frequently credit of the excluded types is provided. For instance, in Germany, many consumer credit stems from hire purchase agreements, free of interest.[1376]

Art. 8 CCD instructs member states to ensure that a creditor assesses the creditworthiness of a consumer, before concluding a credit agreement and before significantly increasing the amount borrowed. According to art. 8(2) CCD, member states must ensure that a creditor is obliged to update the financial information about the consumer if the amount of credit is changed. However, the CCD attaches no consequences to this undefined and undetermined creditworthiness assessment.[1377] There is no obligation to abstain from lending in certain situations or if certain conditions are met. In other words: the CCD does not impose lending restrictions.

This creditworthiness assessment must be based on 'sufficient information', where appropriate received from the consumer, and where necessary obtained from a credit registry or credit bureau. According to the CJEU, the creditor must assess whether the available information is adequate for verifying the creditworthiness, but retains the freedom to decide whether it is necessary to scrutinise the veracity of information supplied by the consumer.[1378] Consequently, there is no obligation to verify in every case whether the supplied information is correct. Neither is it prescribed how a creditworthiness assessment must be conducted – by means of a sophisticated credit scoring model or not – and which information must be used in the assessment. This is a sign of incompleteness; these rules neglect that it matters which factors are taking into account in a credit-scoring model.[1379]

In the first Commission proposal for the CCD, in 2002, the obligations for lenders went further than in the final version of the CCD. A lender was obliged to assess '*by any means at his disposal*, whether the consumer (…) can reasonably be expected to discharge [his] obligations under the agreement.'[1380] So, in the proposal, lenders were obliged to use all possible information, instead of sufficient information. Moreover, according to this proposal, the lender should advice the consumer on the most appropriate type and total amount of credit, taking *inter alia* his financial situation into account.[1381] However, these two expressions of responsible lending were watered down and removed respectively, under pressure

[1376] Verbraucherzentrale Bundesverband (2015), p. 32.
[1377] Cf. Ferretti (2015), pp. 363-364; Rott (2014a), p. 220.
[1378] Case C-449/13 *CA Consumer Finance SA v. Bakkaus and Bonato* [2015], para. 36-39.
[1379] Cf. sub-section 2.3.3.2.
[1380] Art. 9 of the proposal for the CCD: see Commission (2002). Italics added.
[1381] Art. 6(3) of the proposal for the CCD: see Commission (2002).

of mainly the financial industry, but also also a result of privacy concerns raised by a consumer organisation.[1382]

Because of the absence of mandatory consequences of the creditworthiness assessment, and the watering down and removal of the aforementioned expressions of responsible lending, some criticise the CCD 'for insisting on relying on the ability of informed, confident and rational consumers as drivers of economic efficiency but not caring about the socially and financially vulnerable consumers such as those who become over-indebted.'[1383] This is indeed true, since vulnerable households are barely protected against themselves, even though this might be necessary, as explained above. Consequently, this undefined and vague obligation to assess a consumer's creditworthiness, with several incomplete rules and no attached consequences, is neither fish nor fowl: the directive refers to the responsible lending concept, but does not (consistently) incorporate it in its rules.

Therefore, due to the vagueness of the obligation to verify a consumer's creditworthiness, the actual impact of this provision largely depends on the national transposition of the CCD.[1384] For that reason, the question is to what extent member states are allowed to adopt more stringent rules on verifying a consumer's creditworthiness. In principle, the CCD aims at full harmonisation.[1385] Within the scope of the Directive, member states are thus not allowed to introduce national provisions other than those provided for by this directive. However, not all areas are subject to full harmonisation, according to art. 22(1) CCD.[1386] In the literature, this feature of partial full harmonisation is coined targeted harmonisation.[1387] The provision regarding the creditworthiness assessment explicitly allows a stricter rule, namely requiring lenders to consult a credit registry or bureau for assessing the creditworthiness of consumers.[1388] Arguably, member states are also allowed to include in national legislation a duty to deny credit in case of a negative outcome of a creditworthiness assessment: since the CCD does not

---

[1382] Niemi (2009), p. 96; Franken (2009), pp. 134-141; Rott (2014b), p. 688. The financial industry expressed worries about the costs and the nature of its responsibilities, arguing that it was responsible for providing the consumer with information about the characteristics of the credit, but not for advicing him about the most appropriate credit. The privacy concerns of the consumer organisation were related to the obligation to check the credit registry/bureau.
[1383] Ferretti (2015), p. 364; Ferretti et al. (2016), p. 66. Note that there is a large literature on the image of the consumer in EU legislation and the case-law of the CJEU. See e.g. Unberath & Johnston (2007), pp. 1250-1251; Mak (2012, 2013c), Domurath (2013), Reich (2016).
[1384] Cf. Ramsay (2011), p. 348.
[1385] Art. 22 and recitals 9-10 of the preamble of Directive 2008/48 and para. 38 of Case C-602/10 *Volksbank România* [2012], ECLI:EU:C:2012:443.
[1386] Cf. Case C-565/12 LCL *Le Crédit Lyonnais SA v. Kalhan* [2014], para. 42.
[1387] Ramsay (2011), p. 347; Reich & Micklitz (2014), p. 41.
[1388] Art. 8(1) and 22 Directive 2008/48. Cf. recitals 9-10 of its preamble.

include any the details on the creditworthiness assessment, and is silent about attaching consequences to it, member states have some room for choosing the form and methods to implement this provision, as long as it contributes to achieving the objective of the directive.[1389] One of the objectives is preventing irresponsible lending.[1390] The vague terms applied by art. 8 CCD, such as 'sufficient information' and 'any significant increase' provide member states with some freedom in the implementation of the directive as well, namely by specifying what is sufficient and significant, as long as it does not lead to stricter rules within the scope of fully harmonised rules.[1391]

5.1.1.2. Lending restrictions in the Mortgage Credit Directive

The MCD aims at fostering the internal market and restoring financial stability, as well as ensuring responsible lending.[1392] It is more protective than the CCD, reflecting the post-crisis emphasis on responsible lending, and the larger influence of consumer groups in the process of drafting this directive.[1393] Directive 2014/17 applies to credit which is secured by a mortgage on residential immovable property, and is supplied by a natural or legal person acting in the course of his trade, business or profession to a consumer.[1394] However, some forms of secured credit agreements have been excluded from its scope.[1395] This includes several types of equity release credit agreements, which are consequently neither covered by the MCD, nor by the CCD.[1396] An equity release credit agreement allows a borrower to receive a lump sum or periodic payments, which has to repaid by a sum deriving from the future sale of the house, usually after the borrower's death. Still, consumers can face repayment problems with equity release credit agreements. Member states may choose to exclude

[1389] Mak (2013a) also discusses this issue: 'Some Member States, such as the Netherlands and Belgium, had already introduced duties to deny credit in such cases before the adoption of the 2008 Consumer Credit Directive. There has been some discussion in both Member States as to whether such a strict duty fits with the regime of the Directive and, importantly, its full harmonisation character. Since the Directive does not stipulate the consequences of a negative creditworthiness assessment, Member States may be allowed to maintain their own legislation on this point. Nevertheless, the Netherlands and Belgium remain exceptions.' (p. 40). Biemans (2012) argues that the CCD intentionally did not set rules for all aspects of a credit agreement, leaving member states with room to regulate other aspects, which are not dealt with in the CCD. Wösthoff (2010) argues that art. 8 CCD is too imprecise to be a maximum harmonisation provision, because this imprecise character can lead to differences between various member states regarding the implementing legislation and hence the criteria (p. 91).
[1390] Recital 26 of the preamble of Directive 2008/48.
[1391] Actually, a study on the implementation of the CCD, ordered by the Commission, explicitly assessed whether member states clarified these vague concepts: Risk and Policy Analysts Limited (2013), pp. 101-105.
[1392] Recitals 3-7 of the preamble of Directive 2014/17.
[1393] Ramsay (2016), pp. 159-161.
[1394] Art. 3(1)(a) and 4(1)-(2) Directive 2014/17. The MCD uses the same definition of a consumer as the CCD.
[1395] Art. 3(2) Directive 2014/17.
[1396] Art. 3(2)(a) Directive 2014/17 and art. 2(2)(a) Directive 2008/48.

bridging loans from the scope of the MCD.[1397] Therefore, the scope of these rules is quite complete, but there are certain gaps. This might create risks for consumers.

The substantial rules on the creditworthiness assessment

Like the CCD, the MCD instructs the member states to ensure that a creditor assesses the creditworthiness of a consumer before concluding a credit agreement. A lender must assess a consumer's creditworthiness again when the credit sum is significantly increased, based upon updated information.[1398] However, this obligation is more detailed, and goes much further than under the CCD. In addition, unlike the CCD, the MCD defines what a creditworthiness assessment is, namely 'the evaluation of the prospect for the debt obligation resulting from the credit agreement to be met.'[1399]

Mid-2015, the EBA issued guidelines on the creditworthiness assessment, which took effect after the transposition deadline of the MCD (21 March 2016).[1400] These (non-binding) guidelines further specify some aspects of the rules on the creditworthiness assessment and will be discussed below, together with the rules of the MCD itself. Box 5.1 below explains why the EBA can issue these guidelines, and to whom they are directed.

According to art. 18(1) MCD, the credit assessment must be thorough, and take appropriate account of all relevant factors. The information on which the assessment is based, must at least include the consumer's income and expenses, as well as other relevant financial and economic circumstances.[1401] Recital 55 of the preamble of the MCD adds that reasonable consideration must be given to possible future negative income shocks. The EBA guidelines further specify that a lender should make prudent allowances for potential negative scenarios in the future, such as reduced income due to retirement, increased interest rates, and large repayment sums in the final term(s).[1402] Elsewhere, the EBA guidelines state that retirement must be taken into account when the loan term extends beyond the expected retirement age of the borrower.[1403] The expenses which need to be taken into account

[1397] Art. 3(3)(d) Directive 2014/17. For the definition of a bridging loan, see art. 4(23) Directive 2014/17.
[1398] Art. 18(6) Directive 2014/17.
[1399] Art. 4(17) Directive 2014/17. Cf. art. 18(1) Directive 2014/17.
[1400] The EBA Guidelines on creditworthiness assessment are available at https://www.eba.europa.eu/regulation-and-policy/consumer-protection-and-financial-innovation/guidelines-on-creditworthiness-assessment/ (last visited 8 March 2017).
[1401] Art. 20(1) Directive 2014/17. Regarding the expenses, guideline 5 EBA Guidelines on creditworthiness assessment states that the lender 'should make reasonable allowances for committed and other non-discretionary expenditures, such as the consumer's actual obligations, including appropriate substantiation and consideration of the living expenses of the consumer.'
[1402] Guideline 6 EBA Guidelines on creditworthiness assessment.
[1403] Guideline 4.3 EBA Guidelines on creditworthiness assessment.

according to the EBA guidelines are the committed and other non-discretionary expenditures, like actual obligations, including appropriate substantiation and consideration of living expenses.[1404] Note that the original Commission proposal imposed more detailed obligations, namely to include at least 'the consumer's income, savings, debts and other financial commitments' into the assessment.[1405] However, the final version of the MCD does not require taking existing debt and savings into account, but gives member states or lenders the freedom to decide how to assess the creditworthiness.[1406] Still, the EBA guidelines mention some factors that *may* be included, such as the outstanding amount of debt and evidence on missed payments.[1407]

Box 5.1: The basis and addressees of the EBA Guidelines on creditworthiness assessment

The EBA is allowed to issue the Guidelines on creditworthiness assessment, because it is bestowed with certain tasks in the area of consumer protection and financial activities, and may issue guidelines and recommendations in the exercise of this task.[1408] However, the EBA can only issue guidelines which are directed towards competent authorities in the sense of the CRR, and financial institutions, which are credit institutions, investment firms and financial conglomerates as defined in the EU legislation about financial regulation and supervision.[1409] These competent authorities and financial institutions must make every effort to comply with these guidelines, whereas the former are also obliged to explain non-compliance.[1410] For these reasons, the guidelines on creditworthiness assessment are addressed to these competent authorities, insofar as they are empowered to ensure application and enforcement of (parts of the) MCD, and to financial institutions.[1411] However, the EBA tries to extend the scope of these guidelines by demanding the competent authorities to inform other authorities which are responsible for applying and enforcing (parts of the) MCD about these guidelines, and ask them to consider to comply with these guidelines.[1412]

[1404] Guideline 5 EBA Guidelines on creditworthiness assessment.
[1405] Art. 14(1) of the proposal for a Directive: see European Commission (2011b).
[1406] In the public consultation process, both financial services industry federations and member states expressed the opinion that lenders should be free to decide which factors are taken into account in the creditworthiness assessment (European Commission, 2009d, pp. 10-11).
[1407] Guideline 4.1 EBA Guidelines on creditworthiness assessment.
[1408] Art. 9(2) Regulation 1093/2010.
[1409] Art. 4 and 16(1) Regulation 1093/2010.
[1410] Art. 16(3) Regulation 1093/2010.
[1411] Art. 6 EBA Guidelines on creditworthiness assessment.
[1412] Art. 7(a)-(b) EBA Guidelines on creditworthiness assessment.

The MCD does not specify how a creditworthiness assessment has to be conducted. A lender might use any method or model, from a full-fledged credit-scoring model to an indicator of debt to disposable income.[1413] The requirement to take income and expenses into account in the creditworthiness assessment is positive in light of the findings of the literature review in sub-section 2.3.3.2. The MCD demands too that other relevant financial and economic circumstances are included in the assessment. If this means that existing debt and general economic conditions are considered, this requirement suffices. Yet, this is not necessarily the case. It is telling that the explicit requirement to take existing debt into account has not been included in the final text of the MCD. In addition, a lender can interpret the phrase 'relevant economic circumstances' in a manner that does not include general economic conditions. This is unfortunate, as the literature on credit scoring clearly concludes that the biggest flaw of the credit-scoring models is that general economic conditions have not been considered.[1414] Hence, the requirements of the MCD on information which has to be taken into account in a creditworthiness assessment fall short of including all necessary factors. The current rules, after being watered down, leave some room to lenders to only take certain factors into account in the assessment. Nevertheless, a supervisor can require lenders to include all these factors, by persisting that they are relevant.[1415]

Art. 18(3) MCD requires that a creditworthiness assessment must not predominantly rely on the fact that the LTV ratio is lower than 100%, or the assumption that the value of the house will rise, unless the loan is meant for building or renovating the house. So, a LTI ratio is considered more important than a LTV ratio for assessing the creditworthiness of a consumer. It is indeed true that a LTI ratio is more relevant for determining whether a household is able to pay the monthly financing costs of a loan.[1416]

The MCD attaches consequences to the credit assessment: a creditor is only allowed to lend when the assessment indicates that the consumer will likely meet the obligations of the credit agreement, in the manner required under that agreement.[1417] Again, repayment capability is considered the key factor; not the LTV ratio. There are several reasons for requiring lenders to assess a consumers'

[1413] Only a debt-to-income ratio will not suffice, since expenses need to be taken into account.
[1414] It is true that this would require advanced and sophisticated models, which smaller lenders possibly cannot afford, like smaller banks use the Standardised Approach and not the IRB Approach for assessing credit risk (cf. sub-section 3.1.1)
[1415] Cf. section 5.3.
[1416] Cf. sub-section 2.3.1.2. In the public consultations, representatives of consumer organisations also argued this (European Commission, 2009d, pp. 9-10).
[1417] Art. 18(5)(a) Directive 2014/17.

creditworthiness and oblige them to deny credit if the consumer is likely unable to repay the credit. Firstly, the Commission fears that consumers will make wrong choices, out of “short-termism”.[1418] Secondly, it worries that lenders may lend carelessly, due to *inter alia* possibilities to transfer the risks to third parties, competitive pressure on underwriting standards, or reliance of the value of the house instead of on repayment capabilities.[1419] Indeed, these risks are real.

The duty to deny credit contributes to reducing these risks, which is why the inclusion of this duty in the MCD has to be welcomed. Still, it cannot prevent all circumvention. This is the case, because phrases like ‘are likely to be met’ and ‘shall not rely predominantly on’ are imprecise and inherently vague. Therefore, it depends a lot on the national implementation of the MCD what this duty to deny credit will mean in practice.[1420] If this implementation does not give more clues, its meaning will depend on the interpretation by lenders and supervisors. Then, the vagueness can enable lenders to choose a favourable interpretation, or to disagree with supervisors about the interpretation. This might undermine the purpose of these rules and can lead to creative compliance. Nevertheless, a certain degree of vagueness in this principle-like rule cannot be avoided. Not all the relevant factors and circumstances can *a priori* be detailed and delineated; certainly not in a directive at EU level. Therefore, the practice of lenders and supervisors will further detail these obligations. Moreover, circumvention of the requirements is possible by supplying unsecured credit alongside secured credit, because the CCD attaches fewer conditions and no consequences to the creditworthiness assessment.

Procedural conditions, property valuation, and minimum harmonisation

Apart from these requirements about the substance of the creditworthiness assessment, the MCD imposes procedural conditions. The information on which the credit assessment is based, must be obtained from relevant sources, including the consumer himself and, if applicable, the credit intermediary.[1421] Appropriate verification of the information is required, if necessary by reference to independently verifiable information.[1422] The guidelines of the EBA add that a lender must take

[1418] European Commission (2011d), p. 203.
[1419] *Ibidem;* European Commission (2011c), p. 15.
[1420] Ferretti (2015) evaluates the nature of the duty to deny credit as ‘far from clear’, meaning that it is unclear whether the obligation is public or private, and what the consequences are of violating it (p. 366). This depends on the national implementation, since member states can choose to transpose some provisions of the MCD by means of, for example, prudential law and others through, for instance, civil or criminal law (recital 83 of the preamble of the MCD). Member states are free to adopt rules on the type of sanctions imposed for violations, as long as they are effective, proportionate and dissuasive (art. 38 MCD) (cf. section 5.2).
[1421] Art. 20(1) Directive 2014/17. Member states must also ensure that credit intermediaries accurately submit the necessary information provided by the consumer to the relevant lender (art. 20(2) Directive 2014/17).
[1422] Art. 20(1) Directive 2014/17.

reasonable steps to verify 'the consumer's underlying income capacity, the consumer's income history and any variability over time' and also adds some requirements about consumers with irregular income.[1423]

Lenders must clearly and straightforwardly specify to consumers which information they need to supply, whereas member states must ensure that consumers are aware of the need to supply correct information.[1424] Lenders must document and maintain the procedures and information on which the credit assessment is based.[1425] The EBA guidelines add that this information must be maintained for at least the duration of the credit agreement and must be readily available for the authorities.[1426] However, member states are not required to ensure that lenders use appropriate processes, as was stipulated in the Commission proposal for the MCD.[1427]

Finally, art. 19 MCD contains rules about property valuation. Member states must ensure that valuation standards are reliable and that using these standards is obligatory. Moreover, sufficient independence of the appraisers must be ensured in order to enable an impartial and objective valuation. According to recital 26 of the preamble of the MCD, these valuation standards can be complied with by law, but also by self-regulation. These valuation requirements are very general, and do thus not necessarily ensure prudent valuation.

The provisions on the creditworthiness assessment are subject to minimum harmonisation, so member states have the right to adopt more stringent rules in this regard.[1428] Member states have the freedom to choose the types of law, regulations and administrative provisions for transposing these provisions, and they may choose different types of laws for different provisions; for example, prudential law for one provision and consumer law for another.[1429] All in all, a lot of the actual details in the obligations of these provisions depend on their transposition in national law and whether or not the EBA guidelines are respected.

1423 Guideline 1.1 EBA Guidelines on creditworthiness assessment. In addition, guideline 1.2 adds that '[i]n the case of consumers that are self-employed or have seasonal or other irregular income, the [lender] should make reasonable enquiries and take reasonable steps to verify information that is related to the consumer's ability to meet his/her obligations under the credit agreement, including profit capacity and third-party verification documenting such income.'
1424 Art. 20(3)-(4) Directive 2014/17.
1425 Art. 18(2) Directive 2014/17.
1426 Guidelines 2.1 and 2.2 EBA Guidelines on creditworthiness assessment.
1427 *Supra,* footnote 1405.
1428 Art. 2 Directive 2014/17. Cf. recital 55 of the preamble of the MCD, which explicitly states that member states should be able to set e.g. LTV and LTI caps, and which encourages them to implement the FSB Principles for Sound Residential Mortgage Underwriting Practices of the Financial Stability Board (2012).
1429 Art. 42 and recital 83 of the preamble of Directive 2014/17.

5.1.2. Determinacy and completeness of lending restrictions in Dutch consumer law

In the Netherlands, the duty to conduct a creditworthiness assessment is included in art. 4:34 Wft, the legislation based upon it, as well as in the associated codes of conduct, as discussed in section 4.1. This provision contains a duty to deny credit if providing credit would be irresponsible in the light of overextension of credit. This duty concerns not only mortgage credit, but also consumer credit. Therefore, it goes further than required in the CCD. Lenders have to establish their own criteria for preventing an overextension of credit to consumers. The law does not substantiate any further requirements for these own criteria. However, for consumer credit several codes of conduct function as minimum requirements.[1430] For mortgage credit, lenders have to apply regulatory DSTI, LTI and LTV limits.[1431] So, in the Netherlands the obligations of the CCD and MCD, which are relevant for this study, have been transposed into financial law, rather than consumer law.[1432] Apart from a few remarks in the next paragraph, reference is made to section 4.1 of this study for the discussion of these rules. That section concluded that, overall, the rules are relatively determinate and complete, although there is room for some improvements.

Already before the adoption of the MCD, the Dutch rules on assessing the creditworthiness of consumers were largely compliant with the rules of the MCD on these issues. Henceforth, only minor amendments of the Dutch regime were required to incorporate these rules.[1433] Nevertheless, the Dutch rules did – and still do – not contain a duty to take the possibility of future income decreases into account, as recital 55 of the preamble of the MCD and the EBA guidelines require.[1434] The Dutch rules on documentation require that information about the consumer and his situations needs to be documented and maintained for at least five years.[1435] In addition, the criteria for assessing the creditworthiness must be documented and maintained.[1436] Arguably, this fulfils the documentation requirement of art. 18(2) MCD, which does not mention a term for maintaining the information. However, it does not meet the EBA guidelines, which specify that the information must be maintained for the duration of the credit agreement.

[1430] This stance of the AFM, the Dutch conduct of business supervisor, is accepted by courts. Cf. sub-section 4.1.1.1.
[1431] Cf. sub-section 4.1.1.2.
[1432] For a discussion of other aspects of the Dutch transposition of the CCD, see e.g. Biemans (2013). For more information on the transposition of the MCD, see e.g. Giphart (2014) and Braspenning & Mak (2015).
[1433] Cf. Giphart (2014), pp. 140-141; Mak (2015), pp. 425-428; Braspenning & Mak (2015), p. 81.
[1434] Braspenning & Mak (2015), p. 81.
[1435] Art. 33 Bgfo.
[1436] See art. 4:34(1) Wft and art. 4(1)(b) Trhk.

5.1.3. Determinacy and completeness of lending restrictions in Irish consumer law

In Ireland, there are four pieces of legislation that contain rules on assessing a consumer's creditworthiness in order to ensure that a consumer only borrows as much as he is able to repay. These are the Statutory Instruments 281/2010 and 142/2016, which implement the CCD and MCD respectively, as well as the Consumer Protection Code 2012 (CPC 2012), and finally, the Consumer Protection Code for Licensed Moneylenders.[1437] In addition, there was judicial consideration of the question of whether the tort – i.e. non-contractual civil wrongdoing – of reckless lending existed in the Irish civil system.[1438] However, the High Court decided that this tort does not exist in Irish law.[1439] Hence, apart from the regulatory obligations discussed in the remainder of this sub-section, there is no duty in Irish law that requires abstaining from lending beyond a certain amount.

5.1.3.1. The implementation of the CCD and the MCD in Irish law

As is common in Irish implementation of secondary Union law, both the CCD and MCD have been transposed by adopting a new Statutory Instrument, which closely follows the wording of the respective directive. However, the new S.I.'s have not been integrated into the text of existing acts or Statutory Instruments.[1440] Therefore, the discussion of the rules on creditworthiness assessment in these Statutory Instruments will be kept short, with reference to the CCD and MCD.

Regulation 11 S.I. 281/2010 transposes art. 8 CCD into Irish law, by largely copying the wording of that provision of the directive. Regulation 11(1) of this S.I. states that a lender shall 'assess the consumer's creditworthiness on the basis of sufficient information, where appropriate obtained from the consumer and, where necessary, on the basis of a consultation of the relevant database' before concluding a credit agreement. In addition, regulation 11(2) S.I. 281/2010 obliges lenders to assess the

[1437] S.I. 281/2010 is available at http://www.irishstatutebook.ie/eli/2010/si/281/made/en/print, S.I. 142/2016 via http://www.irishstatutebook.ie/eli/2016/si/142/made/en/print, the Consumer Protection Code 2012, its addendum and the Consumer Protection Code for Licensed Moneylenders via https://www.centralbank.ie/regulation/consumer-protection/other-codes-of-conduct. Statutory Instruments are a form of secondary legislation. Note that in primary legislation, the Consumer Credit Act 1995 aims to protect borrowing consumers, but it does not include provisions on assessing a consumer's creditworthiness, nor lending restrictions. This act is available at http://www.irishstatutebook.ie/eli/1995/act/24/enacted/en/html (all last visited 29 April 2017).
[1438] Kenna & Lynch-Sally (2014), p. 306.
[1439] *ICS Building Society v Grant* [2010] IEHC 17, para. 6. Cf. Heslin (2014); Donnelly (2015), pp. 293-294; Breslin (2013), pp. 214-215.
[1440] Of course, the new S.I.'s refer to existing acts or S.I.'s, but they are not integrated in existing legal texts. This method of implementing directives does not support the clarity of the total legal framework, as also observed by Donnelly & White (2014), p. 406.

consumer's creditworthiness if the credit sum will be significantly increased. The obligation in S.I. 281/2010 to assess a consumer's creditworthiness has almost the same scope as under the CCD, but is slightly widened in a specific area: unlike stipulated in the CCD, it applies also to a 'credit agreement in the form of an overdraft facility where the credit has to be repaid on demand or within 3 months'.[1441] All natural and legal persons who grant or promise to grant credit in the course of their trade, business or profession are subject to the rules of S.I. 281/2010.[1442]

Regulations 19-21 S.I. 142/2016 transpose art. 18-20 MCD into Irish law by repeating these provisions, almost *verbatim*. S.I. 142/2016 applies to same types of secured credit, and excludes the same types of equity release credit agreements as the MCD.[1443] The Irish Department of Finance did not use the possibility to exclude bridging loans from the scope of this S.I., although this is allowed by the MCD.[1444] All natural and legal persons who grant or promise to grant credit in the course of their trade, business or profession are subject to the rules of S.I. 142/2016.[1445]

The Irish implementation of the rules on creditworthiness assessment in the CCD and MCD does not provide additional clarity about the meaning of several vague phrases in these directives, because these phrases have simply been repeated. Henceforth, it will depend on the interpretation of lenders and the Central Bank of Ireland, as supervisor, and in the end on national courts and the CJEU, how these phrases are understood, and how protective they really are. It might be difficult to establish whether these kinds of vague obligations are breached.[1446]

5.1.3.2. The Consumer Protection Codes

Information requirements and suitability assessment in the Consumer Protection Code 2012

In 2012, the Central Bank of Ireland adopted the Consumer Protection Code 2012, based upon its power to draw up codes of practice, which it received by means of, *inter alia,* section 117(1) Central Bank Act 1989 and section 8H(1)(f) Consumer Protection Act 1995.[1447] It replaced the Consumer

---

[1441] Regulation 3(2)(b) S.I. 281/2010 and art. 2(3) Directive 2008/48.
[1442] Regulation 6 S.I. 281/2010.
[1443] Regulation 5 S.I. 142/2016.
[1444] Art. 3(3)(d) Directive 2014/17.
[1445] Regulation 3 S.I. 142/2016.
[1446] Cf. Barrett (2011), p. 73.
[1447] See Chapter 1 CPC 2012. The Central Bank Act 1989 is available at http://www.irishstatutebook.ie/eli/1989/act/16/enacted/en/index.html and section 8H was inserted in the Consumer Credit Act by means of the Central Bank and Financial Services Authority of Ireland Act 2003, which is available at http://www.irishstatutebook.ie/eli/2003/act/12/enacted/en/html (all last visited 4 April 2016).

Protection Code 2006, which has been adopted to 'develop a practical and coherent set of rules and guidance with the overriding objective of ensuring the protection of consumers when dealing with financial services providers.'[1448] The CPC 2012 contains general principles, common requirements for all kinds of activities, and requirements for specific activities.[1449] The general principles include, for instance, the obligation to act in the best interests of the customers, and to comply in letter and spirit with the Consumer Protection Code.[1450] The fifth chapter of the CPC 2012 stipulates requirements for knowing the consumer and assessing the suitability of a financial product or service in general, and credit in particular. The latter includes an affordability check. The requirements in this fifth chapter are considerably more detailed than in the Consumer Protection Code 2006.[1451]

Provision 5.1 CPC 2012 obliges a lender to gather and record sufficient information from the consumer, before offering, recommending, arranging or providing a loan, if this information is relevant for assessing the suitability of the loan. [1452] This gathered information should contain details about the consumer's personal circumstances, such as employment status, dependents, and known future changes. Also details about the financial situation of the consumer, including his income, debts and financial commitments need to be compiled. A lender must gather and maintain a record of details of any material changes to a consumer's circumstances before offering a subsequent loan to the consumer.[1453] A lender must endeavour to have the consumer certify the accuracy of the provided information.[1454] A lender cannot hide behind the argument that a consumer refuses to provide the information: in that case a lender is obliged to abstain from offering a loan.[1455] Yet, this last provision does not apply to credit falling within the scope of the MCD.[1456]

Under the heading of suitability requirements, chapter 5 of the CPC 2012 contains both specific provisions about assessing the affordability of credit, and general provisions about assessing the suitability of all kinds of financial products and services. The provisions on the *affordability assessment* are relatively detailed and practical. First of all, the compiled information must be taken into account.

[1448] Loughlin & Murphy (2007), p. 15. Cf. the Introduction in Chapter 1 of the Consumer Protection Code 2012; Murphy & O'Halloran (2012), p. 93.
[1449] Cf. Loughlin & Murphy (2007), p. 15.
[1450] Provisions 2.2 and 2.12 CPC 2012 (*supra,* footnote 1437).
[1451] Donnelly & White (2014), p. 398.
[1452] Provision 5.1 CPC 2012. Note that the level of the information must be appropriate in relation to the nature and complexity of the product or service.
[1453] Provision 5.3 CPC 2012.
[1454] Provision 5.5 CPC 2012.
[1455] Provision 5.4 CPC 2012.
[1456] See the addendum to the CPC 2012, published in July 2016 (*supra,* footnote 1437).

Secondly, there are specific conditions for the calculations. For example, it should be assessed whether a consumer at minimum is able to repay the loan if the interest rate will increase with 2 percentage points.[1457] However, this rule does not apply in case of a mortgage with a fixed-rate period of at least five years.[1458] Instead, this obligation is further specified for interest-only mortgages, variable interest rate mortgages, and mortgages with an introductory interest rate.[1459] The CPC 2012 does not impose quantitative limits for the amount that can be borrowed by a consumer, nor a duty to deny credit in case of a negative outcome of the assessment. Nevertheless, for credit which is not covered by the MCD, the lender 'must take account of the result of the affordability assessment when deciding whether a personal consumer is likely to be able to repay the debt for that amount and duration in the manner required under the credit agreement.'[1460]

Besides the affordability assessment, a lender must conduct a *suitability assessment.* It must at least be examined whether the credit fits into the consumer's needs, objectives and risk profile and whether he is able to repay the debt in the required manner.[1461] If the consumer is offered several types of credit to choose from, the most suitable range of options must be included.[1462] Prior to providing the credit, a lender must give the consumer a written statement that explains why this loan is suitable, and even the most suitable option. This statement must fulfil a range of conditions.[1463]

Hence, most requirements in the Consumer Protection Code 2012 go further than these in the MCD, but it is the other way around for some other rules. For instance, the CPC 2012 requires taking other debts and financial commitments into account, as well as known future changes in personal circumstances. Moreover, detailed information must be gathered, and a lender is not allowed to provide a loan if a consumer refuses to provide this information. However, the CPC 2012 does not require taking expenses into account, like the MCD does. In addition, the duty to verify the information by means of a check by the consumer lags behind the obligation in the MCD, which requires appropriate verification of the information, including through 'including through reference to independently verifiable documentation when necessary'.[1464] Neither the MCD, nor the CPC 2012 signal the need to include general economic conditions in the assessment. These rules show that there

[1457] See provisions 5.9-5.14 CPC 2012
[1458] Provision 5.9(b) CPC 2012
[1459] Provisions 5.9, 5.11, 5.12 and 5.14 CPC 2012.
[1460] Provision 5.13 CPC 2012, and the addendum of July 2016 to the CPC 2012 (*supra,* footnote 1437).
[1461] Provision 5.16 CPC 2012.
[1462] Provision 5.17 CPC 2012.
[1463] Provision 5.19-5.23 CPC 2012.
[1464] Art. 20(1) Directive 2014/17.

is a world to win for the MCD. Overall, the CPC 2012 is more detailed, less vague and thus more protective than the MCD, except for – most importantly – the absence of a duty to deny credit.

Information requirements and suitability assessment in the Consumer Protection Code for Licensed Moneylenders

Moneylenders are lenders who supply short-term, highly expensive loans.[1465] They are subject to a distinct code of practice, the Consumer Protection Code for Licensed Moneylenders (CPCLM). An examination of this code of practice is relevant, because moneylending is common: in 2005, 10% of the Irish people above 20 years had been customer of a moneylender, while repayment problems occurred in 16% of the cases.[1466] The Consumer Protection Code for Licensed Moneylenders contains general principles, similar to those included in the CPC 2012, as well as specific requirements, among other things, concerning knowing the consumer and suitability.

The requirements concerning knowing the consumer and assessing its suitability in the CPCLM are comparable to those in the CPC 2012, but much less specific. A moneylender is obliged to gather and record sufficient information from the consumer before providing credit. 'The level of information gathered should be appropriate to the nature and complexity of the product or service being sought by the consumer, but must be to a level that allows the moneylender to provide a professional service.'[1467] Information about material changes must be gathered and recorded before providing a subsequent loan. The moneylender must endeavour to have the consumer certify the accuracy of the provided information.[1468] This code, unlike the CPC 2012, contains neither rules on the required details of this information, nor the obligation to abstain from lending if the consumer refuses to provide information. A moneylender must ensure that credit offered to a consumer is suitable for that consumer, in light of the available information.[1469] No further conditions are attached to the suitability assessment. Prior to providing the credit, a lender must give the consumer a written statement that explains why the loan is suitable.[1470]

These rules reveal a weighing of the interests of consumer protection and avoiding overburdening the moneylender. Consequently, these provisions of the Consumer Protection Code for Licensed

[1465] Donnelly (2011), p. 130. The formal definition of a moneylender can be found in section 2 of the Consumer Credit Act 1995.
[1466] Donnelly (2011), p. 131.
[1467] Provision 2.10 Consumer Protection Code for Licensed Moneylenders.
[1468] Provision 2.13 Consumer Protection Code for Licensed Moneylenders.
[1469] Provision 2.15 Consumer Protection Code for Licensed Moneylenders.
[1470] Provision 2.16 Consumer Protection Code for Licensed Moneylenders.

Moneylenders offer far less protection than those in the CPC 2012. The rules are not determinate and complete, due to their vagueness and their lack of detail.

The scope of the duties in the Consumer Protection Codes

The Consumer Protection Code for Licensed Moneylenders has a specific scope: moneylenders. Instead, the Consumer Protection Code 2012 has a broad scope. All regulated financial service providers, except for credit unions, are subject to the Code when providing credit to consumers in Ireland, apart from certain exceptions.[1471] However, the CPC 2012 neither applies to credit with an amount of less than € 200, nor to hire purchase or consumer purchase agreements, or moneylending. Chapter 5 of the CPC 2012 does not apply to agreements falling within the scope of S.I. 281/2010, which transposes the Consumer Credit Directive, because the CCD is a maximum harmonisation directive.[1472] Therefore, consumer protection actually diminishes, because the CPC 2012 offers more protection than the CCD.[1473] Loans falling within the scope of the MCD are not exempted. Therefore, such loans are subject to two partly different and overlapping regimes. All in all, the scope of the CPC 2012 in terms of persons governed is broad. However, its scope in terms of governed credit types is more restricted, especially due to the unfortunate, but unavoidable exclusion of loans falling within the scope of S.I. 281/2010.[1474]

Finally, there is another specific exception to the requirements of chapter 5 of the CPC 2012, which depends on the actual circumstances under which the loan is taken out. These requirements do not apply if a consumer specified both the product and the lender by name, has not received any assistance from the regulated entity, and the loan is non-mortgage credit of maximum € 75,000.[1475] Similarly, the provisions concerning knowing the consumer and suitability assessment in the Consumer Protection Code for Licensed Moneylenders do not apply if a consumer 'has specified both the product and the moneylender and has not received any advice.'[1476] So, when a lender acts as a takeaway facility for loans, these aspects of consumer protection are not offered. Although it makes sense to avoid overburdening of lenders who have no active role in the lending process, this means that the consumer

[1471] Chapter 1 and 12 of the CPC 2012. For the definition of a regulated financial service provider, see sub-section 4.2.1 and footnote 1219.
[1472] See the section Application in Chapter 1, and the beginning of chapter 5 of the CPC 2012.
[1473] Cf. Donnelly & White (2013), pp. 9-10.
[1474] Exempting all hire purchase agreements from the scope of the CPC 2012 was avoidable. Most, but not all of these agreements will fall within the scope of S.I. 281/2010 (cf. art. 2(2)(d) Directive 2008/48).
[1475] Provision 5.24 CPC 2012.
[1476] Provisions 2.10, 2.15 and 2.16 of the Consumer Protection Code for Licensed Moneylenders.

lacks protection against over-indebtedness. It assumes that consumer act rationally, without behavioural biases, which may not necessarily be the case.

5.1.4. Determinacy and completeness of lending restrictions in German consumer law

The CCD and – especially – the MCD transform the traditional view in German contract law that each consumer is responsible for his own actions, even if acting irrationally.[1477] This explains why some German academics observe a tendency to paternalism in the MCD, among other things, in the shape of the duty to deny credit in case of a negative outcome of the creditworthiness assessment.[1478]

The provisions of the CCD and MCD about assessing a consumer's creditworthiness are implemented in the German civil code, the *Bürgerliches Gesetzbuch* (BGB), as well as in the banking act, the KWG.[1479] This has consequences not only for enforcement and the involved authorities, but also for the completeness of the rules. The motive for implementing these provisions not only in the KWG, but also in the BGB, is ensuring adequate consumer protection.[1480] Including the rules in the BGB namely extends their scope beyond the lenders subject to the public supervisory regime of the KWG. It also enables private enforcement of these rules.[1481] Moreover, BaFin has no mandate for consumer protection, as a result of which implementation in public law only would not suffice to ensure protection of consumers.[1482] Nevertheless, in the first instance, art. 8 CCD was primarily implemented in the KWG, and only to a small extent in § 509 BGB. This latter provision covered only non-gratuitous financial assistance – which means a postponement of payment or a similar construction – and excluded consumer credit.[1483] This changed with the implementation of the MCD in March 2016. Then, § 509 BGB was repealed, and all types of non- gratuitous consumer credit and financial assistance are now governed both by the BGB and the KWG, while gratuitous types are covered by the BGB only.[1484]

[1477] Rott et al. (2011), p. 163. Cf. Hofmann (2010), p. 1783.
[1478] Buck-Heeb (2015), p. 186.
[1479] The BGB, BGBl. I, 2002,42, 2909; BGBl. I, 2003 I, 738, is available at https://www.gesetze-im-internet.de/bgb (last visited 27 July 2016). Since 2001, Germany integrated EU consumer law normally in the BGB, instead of implementing it in separate acts, in order to ensure the unity and doctrinal purity of German law (Rott, 2012, pp. 1354, 1362, 1367).
[1480] See pages 62 and 96-97 in the Explanatory Memorandum for the act for implementing the MCD, available at http://dip21.bundestag.de/dip21/btd/18/059/1805922.pdf (last visited 16 March 2016).
[1481] Cf. section 5.2.
[1482] Hofmann (2010), p. 1784; Rott et al. (2011), p. 163; Barta & Braune (2014), p. 329.
[1483] See pages 95-96 in the Explanatory Memorandum of the proposal for the act for implementing the CCD, available at http://dip21.bundestag.de/dip21/btd/16/116/1611643.pdf (last visited 8 March 2016); Rott et al. (2011), p. 163; Wösthoff (2010), p. 146.
[1484] Art. 1(32) and 1(28) *Gesetz zur Umsetzung der Wohnimmobilienkreditrichtlinie und zur Änderung handelsrechtlicher Vorschriften.* This act is published in the BGBl. I, 2016, 396, available online at http://www.bgbl.de/xaver/bgbl/start.xav?startbk=Bundesanzeiger_BGBl&jumpTo=bgbl116s0396.pdf (last

5.1.4.1. The implementation of the rules about the creditworthiness assessment in private law

At the basis of the German implementation of the rules about assessing a consumer's creditworthiness, as included by the CCD and MCD, in the BGB lies a distinction of two, mutually exclusive, categories of non-gratuitous consumer loans.[1485] These are general (unsecured) consumer loans and (secured) mortgage loans, respectively. For both categories of consumer loans a creditworthiness assessment is mandatory – combined with a duty to deny credit, depending on its outcome – before advancing the loan, and before significantly increasing its amount.[1486] Since March 2016, German law regarding general consumer loans goes further than the CCD requires, as the directive does not impose a duty to deny credit. The German legislature attaches this binding consequence to the creditworthiness assessment in order to achieve the purpose of protecting a consumer against over-indebtedness and bankruptcy.[1487]

More specifically, a lender is only allowed to provide general consumer credit (or significantly increase the amount of credit) if there is no substantial doubt (*keine erheblichen Zweifel*) that the borrower will meet the obligations related to the credit contract. For mortgage credit, a lender is allowed to supply the loan (or significantly increase its amount) if the borrower will likely (*wahrscheinlich*) meet the obligations related to the credit contract.[1488] The German legislature opts for another degree of required certainty about the prospect that a borrower will meet his obligations for general consumer credit than for mortgage credit, because of differences between the CCD and MCD. A higher criterion for mortgage credit is chosen, since the MCD imposes more substantial conditions on the methods for assessing a borrower's creditworthiness, which enable a lender to predict the likelihood of default better than for general consumer credit.[1489]

§ 505b BGB sets requirements concerning the basis for the creditworthiness assessment. If necessary, a creditworthiness assessment for a general consumer loan can be based upon information from the consumer and credit registries, if necessary.[1490] There are no further requirements about the

visited 16 March 2016). The German academic literature was highly critical about the situation that the obligation to assess a consumer's creditworthiness was not included in the BGB until March 2016: see e.g. Hofmann (2010); Rott et al. (2011); Herresthal (2014); Barta & Braune (2014); Rott (2015), p. 11, 14.

[1485] § 491(2)-(3) BGB. Cf. pages 61 and 75-76 of the Explanatory Memorandum of the act for implementing the MCD: *supra,* footnote 1480.

[1486] § 505a BGB.

[1487] See § 505a(1) BGB and pages 97-98 in the Explanatory Memorandum of the act for implementing the MCD (*supra*, footnote 1480).

[1488] § 505a BGB.

[1489] See page 98 in the Explanatory Memorandum of the act for implementing the MCD (*supra*, footnote 1480).

[1490] § 505b(1) BGB.

information, or the situations when consulting a credit registry is necessary. This creates risks, and might hamper the ability of the rules to protect consumers. In case of a mortgage loan, the lender must assess the creditworthiness of a consumer by means of a detailed examination of necessary, sufficient and appropriate information about income, expenses and other financial and economic circumstances of the borrower.[1491] In case of a mortgage loan, this information must be appropriately verified, documented and maintained.[1492] The Explanatory Memorandum clarifies that this information must be maintained as long as claims can be brought against the lender for assessing the creditworthiness incorrectly. In case of incorrect or prematurely destroyed information, a presumption of proof for the borrower can arise. If the documentation requirement is violated, this can even result in shifting the burden of proof to the benefit of the borrower, since this indicates that no creditworthiness assessment is conducted. Then, the lender must prove that he nevertheless conducted a creditworthiness assessment.[1493] The creditworthiness assessment may not mainly (*hauptsächlich*) be based on the assumption that the house value will rise, or on the fact that the LTV ratio is lower than 100%, unless the loan is meant for financing the construction or renovation of the house.[1494] All this correctly implements the requirements of art. 18 and 20(1) MCD. The requirements of art. 20(2)-(4) MCD have been implemented in another act, namely in the *Einführungsgesetzes zum Bürgerlichen Gesetzbuche* (Introductory Act to the Civil Code).[1495]

§ 505c BGB implements art. 19 MCD on the requirements for property valuation. It requires lenders to use reliable standards for property valuation and to ensure that both internal and external valuers are professionally competent and independent of the lending process in order to enable an objective assessment of the house value.

All in all, the German implementation of the rules on assessing a consumer's creditworthiness before advancing a mortgage loan in the BGB closely follows the requirements of art. 18-20 Directive 2014/17, without substantial differences that lead to another level of protection than the rules of the MCD. However, the German duty to deny credit related to the general consumer loans goes further than the

---

[1491] § 505b(2) BGB.
[1492] § 505b(4) BGB.
[1493] See pages 99-100 in the Explanatory Memorandum of the act for implementing the MCD (*supra*, footnote 1480).
[1494] § 505b(2) BGB.
[1495] This act (BGBl. I, 1994, 2494; BGBl. I, 1997, 1061) is available at http://www.gesetze-im-internet.de/bgbeg/. Art. 20(2) MCD is implemented in section 247(1) of that act, whereas art. 20(3)-(4) MCD is implemented in section 247(13b)(2) of that act (see art. 2(3)(a) and 2(3)(n) *Gesetz zur Umsetzung der Wohnimmobilienkreditrichtlinie und zur Änderung handelsrechtlicher Vorschriften* (supra, footnote 1484) and pages 111 and 119 of the Explanatory Memorandum of this act (*supra*, footnote 1480)).

CCD requires. Consequently, it provides additional consumer protection. Simultaneously, this reduces the room for replacing consumer credit for mortgage credit by exploiting the much lighter rules of the CCD. The *Bundesrat* was critical about vague (*unbestimmten*) legal concepts as "likely" (*wahrscheinlich*) and "mainly" (*hauptsächlich*), which might result in either inability to prevent certain risks or too restrictive interpretations.[1496] However, since these concepts emanate from the MCD, they are still used in the final act. The German legislature neither further clarify or specify these concepts, nor other concepts like income and expenses. In the first year after their implementation, the vagueness of the rules indeed provoked questions about their interpretation and about the factors which have to be taken into account when assessing a consumer's creditworthiness.[1497] In order to increase legal certainty, the legislature added a new provision to the BGB. It allows the Federal Ministries of Finance and Justice & Consumer Protection to jointly issue a regulation that clarifies (1) which factors are relevant for the creditworthiness assessment, and (2) which procedures have to be followed and how information must be collected and examined.[1498] This only applies to a creditworthiness assessment in case of an application for mortgage credit. In principle, increased determinacy due to this guidance will increase the effectiveness of the rules by limiting room for circumvention.

The scope of rules on the creditworthiness assessment in the BGB is wider than required under the CCD and MCD, as it includes all non-gratuitous consumer loan agreements concluded between an entrepreneur and a consumer, barring a few exceptions.[1499] In line with the CCD and MCD, an entrepreneur is a natural or legal person acting in exercise of his or its trade, business or profession and a consumer is a natural person who enters into a legal transaction for purposes that predominantly are outside his trade, business or profession.[1500] Unlike the CCD, the rules apply to unsecured loans above € 75,000.[1501] Furthermore, the rules for general consumer loans are extended to non-gratuitous financial assistance, i.e. a postponement of payment or a similar (hire purchase) construction.[1502] In

---

[1496] See pages 12-13 of the *Stellungnahme des Bundesrates und Gegenäußerung der Bundesregierung,* available at http://dip21.bundestag.de/dip21/btd/18/062/1806286.pdf (last visited 24 March 2016). These concepts are incorporated in§ 505a BGB and § 505b(2) BGB.
[1497] Explanatory Memorandum to art. 6 *Finanzaufsichtsrechtergänzungsgesetz* (pp. 40-41) (*supra,* footnote 1295).
[1498] § 505e BGB. Cf. § 18a(10a) KWG.
[1499] § 491 BGB. These exceptions are listed in § 491(2)(5) BGB and the last two sentences of section 491(3) BGB. For example, loans with a total amount below € 200 and student loans are excluded from these rules (on the latter, see Heider (2014)).
[1500] § 13-14 BGB. For more on the definition of a consumer, which was changed in the BGB with the implementation of the CCD, see Tonner (2013), p. 446.
[1501] The CCD allows member states to extent the scope of its rules to loans above € 75,000 (art. 2(2)(c) and recital 10 of the preamble of the CCD).
[1502] § 506(1) BGB.

addition, the rules governing the creditworthiness assessment are *mutatis mutandis* applied to gratuitous loans and financial assistance to consumers – i.e. credit with zero interest – in order to protect these consumers as well against over-indebtedness.[1503] This is important, since more than half of German consumer credit consists of these types of agreements.[1504] The CCD and MCD exclude this type of credit from their scope.[1505] In first instance, equity release agreements were covered by the rules of the BGB, but in 2017 the act was amended to explicitly exclude them.[1506] All in all, the German legislature opted for creating an encompassing scope for these rules.

5.1.4.2. The implementation of the rules about the creditworthiness assessment in public law

With the transposition of the MCD into German law, a new provision has been added to the banking act: § 18a KWG, which implements the obligation to assess a consumer's creditworthiness in public law. § 18(2) KWG, which has been added to the KWG when the CCD was transposed, has been repealed.[1507]

Substantially, § 18a KWG is largely comparable to §§ 505a-505c BGB, often using identical phrases.[1508] Some notable differences exist between the BGB and KWG with respect to the obligation to assess a consumer's creditworthiness. Firstly, in the KWG, the obligation to verify the information which underlies the creditworthiness assessment, applies to all non-gratuitous consumer loans, and not only to mortgage loans.[1509] Secondly, the period for which the procedures and information on which the creditworthiness assessment is based must be recorded is now explicitely stated: at least five years.[1510] The most important differences concern two aspects of the scope of the rules. § 18a KWG only applies

[1503] § 514(1) and § 515 BGB. Cf. pages 144-145 of the Explanatory Memorandum to the changes to the proposal for the act implementing the MCD, available at http://dip21.bundestag.de/dip21/btd/18/075/1807584.pdf (last visited 24 March 2016).
[1504] See page 32 of the statement of the Verbraucherzentrale Bundesverband (2015), a German consumer organisation, before the *Bundestag*.
[1505] Art. 3(2)(c) Directive 2014/17.
[1506] Art. 6 *Finanzaufsichtsrechtergänzungsgesetz* and pp. 38-40 of its Explanatory Memorandum (*supra,* footnote 1295).
[1507] Art. 12(1)-(3) *Gesetz zur Umsetzung der Wohnimmobilienkreditrichtlinie und zur Änderung handelsrechtlicher Vorschriften* (*supra*, footnote 1484).
[1508] Compare, for instance, § 18a(1)-(2) KWG with § 505a BGB, § 18a(3) KWG with § 505b(1) BGB, § 18a(4) KWG with § 505b(2) BGB and § 18a(7) with § 505c BGB. Note that § 18a(6) KWG implements parts of art. 9 MCD about knowledge and competence requirements for staff. This is important in the context of supplying credit, but not directly related to the creditworthiness assessment, and thus not further taken into account in this study.
[1509] § 18a(3) KWG. Cf. § 505b(3) BGB, which only applies to mortgage loans.
[1510] § 18a(5) in combination with section 25a, sixth sentence, number 2 KWG. Cf. § 505b(4) BGB.

to credit institutions.[1511] In addition, while the rules of the KWG cover non-consumer credit and financial assistance, they are not extended to gratuitous consumer credit and financial assistance, contrary to the rules of the BGB.[1512]

Additional conditions related to the creditworthiness assessment that follow from the EBA guidelines have not been enshrined in law, neither in the KWG, nor in the BGB. It was not considered necessary to mention them, since § 7(b)(1) KWG already instructs BaFin to comply with EBA guidelines or to explain deviations from them.[1513] Currently, it is not clear whether BaFin and German banks will comply with these specific EBA guidelines, or whether they will choose to explain non-compliance.

5.2. The possibility of proportionate and dissuasive enforcement of lending restrictions in consumer law

Traditionally, consumer law is enforced by private actors, either by means of litigating or arbitrating. Yet, during the last decades, public means of enforcing consumer law have increasingly been introduced. Hence, the intertwinement of public and private enforcement of European consumer law has received attention of a growing academic literature, together with other new – private – means of enforcement, such as collective legal action and out-of-court settlement.[1514] Enforcement cultures in consumer law differ substantially between member states. Rott (2007) provides an example: 'Germany has traditionally emphasized private enforcement of consumer rights by individuals, complemented by collective action and has a culture of litigation, whereas alternative dispute resolution is much more important in the Netherlands.'[1515]

Private and public means of enforcing consumer law have their own advantages and disadvantages, which matter for their potential dissuasive effect. Firstly, the possibilities to detect violations differ. A consumer may lack information that a rule is breached.[1516] For instance, he might not know that a

[1511] See e.g. § 18a(1) KWG. For a definition of credit institutions, see § 1(1) KWG. § 18a KWG applies as well to branches of credit institutions established in another member state (§ 53b(3)(3) KWG).
[1512] § 18a(1) and 18a(9) KWG.
[1513] See page 33 of the *Stellungnahme des Bundesrates und Gegenäußerung der Bundesregierung* (*supra*, footnote 1496).
[1514] See e.g. Micklitz & Stadler (2006), Van Boom & Loos (2007), Betlem (2007), Cafaggi & Micklitz (2008, 2009), Cherednychenko (2014a,b,c, 2015a,b), Cortés (2015), Micklitz (2015) and Verheij (2015).
[1515] Rott (2007), p. 305.
[1516] Van den Bergh & Visscher (2008), p. 14. Cf. Micklitz (2013), who argues that a civil system for enforcing of consumer rights assumes that a 'consumer is aware of his rights and knows that the judicial system is open to him.' (p. 334).

creditworthiness assessment is mandatory. The more complex rules are, the more this becomes a problem. Instead, a public authority is aware of the rules and, generally, has investigative powers to detect violations.[1517] However, when a regime of public enforcement is in place, a consumer might lack incentives to report violations to the public authority, due to the absence of the opportunity to receive damages. All in all, information availability favours public enforcement. However, the strengths of public and private enforcement can be combined when allowing public authorities to grant compensation, or when enabling the use of publically gathered information in courts that award damages.[1518]

Secondly, the incentives to act against violations differ, affecting the likelihood that lenders can get away with violations. In case of private enforcement, the consumer is incentivised to act by the prospect of receiving damages. However, required efforts, litigation fees, and the risk that the loser must pay all the litigation costs can provide strong reasons to refrain from starting a procedure.[1519] Some of these disadvantages can be tackled by allowing collective legal action, in which costs and efforts can be shared, or out-of-court settlement, which reduces costs and efforts.[1520] However, free-rider behaviour may occur: consumers might choose to wait until others act.[1521] Costs are a smaller obstacle when a public authority is responsible for enforcement. However, this authority might be prone to regulatory capture, especially if enforcement powers are highly concentrated in one agency.[1522] This can lead to inaction.[1523]

Thirdly, the dissuasiveness of the available measures differs between private and public means of enforcement. Private enforcement procedures usually provide for remedies instead of sanctions. Rott (2007) characterises the difference between these two concepts: 'Remedies deal with the enforcement of rights that are conferred on individuals (…). In contrast, sanctions look at the obligations or prohibitions imposed on a person or an entity [and] (…) aim to ensure that the violator is dissuaded from non-compliance.'[1524] Normally, remedies are corrective and thus not higher than the

[1517] Weber & Faure (2015), pp. 529-531.
[1518] *Ibidem,* p. 545.
[1519] Faure et al. (2009), pp. 172-173, 181; Cherednychenko (2014a), pp. 53-54; Weber & Faure (2015), p. 531.
[1520] Weber & Faure (2015), p. 531; Van den Bergh & Visscher (2008), pp. 14-19.
[1521] Van den Bergh & Visscher (2008), pp. 16, 21.
[1522] If enforcement powers are highly concentrated in one agency, regulatees need to target only one agency with their efforts to capture it.
[1523] Weber & Faure (2015), pp. 540-541; Cafaggi & Micklitz (2009), p. 406.
[1524] Rott (2007), p. 307.

suffered loss.[1525] Then, a lender who violates certain provisions is never worse off. In contrast, administrative enforcement might enable the imposition of highly deterrent fines.[1526]

Finally, public enforcement enables a wider range of moments to interfere with a lender's behaviour: private enforcement takes place *ex post,* whereas public enforcement can be proactive too.[1527]

Concluding, private enforcement by borrowers can put pressure on lenders to comply with their obligations, especially if collective legal action or out-of-court settlement is possible. Nevertheless, a system of public enforcement increases the probability of detecting and acting against violations of consumer law. Furthermore, sanctions are likely to be more deterrent than remedies. However, a lot depends on the actual legal details and, particularly, the extent to which capture can be prevented.

5.2.1. The EU rules on enforcing lending restrictions in consumer law

Both the CCD and MCD contain some rules on enforcement. Member states are required to lay down sanctions for infringements of the national provisions adopted on the basis of the directives. The directives demand that these sanctions are effective, proportionate and dissuasive, but leave it up to the member states which kind of penalties are available, and how they are imposed.[1528] This reflects the principle of effectiveness and the system of decentralised enforcement of EU law, with procedural autonomy for the member states.[1529] The CJEU further ruled that to this end, the principle of sincere cooperation requires that 'Member States must ensure in particular that infringements of EU law are penalised under conditions, both procedural and substantive, which are analogous to those applicable to infringements of national law of a similar nature and importance'.[1530] This is the core of the principle of equivalence. Hence, the type of sanctions and their potential effectiveness may vary a lot among member states. Sanctions can be part of private, public or criminal law.[1531]

[1525] Cherednychenko (2014a), p. 60.
[1526] Weber & Faure (2015), p. 535.
[1527] Cherednychenko (2014a), p. 53-54; Weber & Faure (2015), p. 534.
[1528] Art. 23 Directive 2008/48 and art. 38(1) Directive 2014/17.
[1529] Cf. Leczykiewicz (2012), pp. 51, 53-54; Reich (2014), pp.344-347. See also, *supra,* footnote 91.
[1530] Case C-565/12 *LCL Le Crédit Lyonnais SA v. Kalhan* [2014], para. 44. In addition, the CJEU stated that 'the severity of penalties must be commensurate with the seriousness of the infringements for which they are imposed, in particular by ensuring a genuinely dissuasive effect, while respecting the general principle of proportionality' (para. 45). Cf. Case C-68/88 *Commission v Greece (Greek Maize)* [1989] ECR 2965, para. 24.
[1531] Rott (2007), pp. 317-318.

However, the MCD – contrary to the CCD – includes some other requirements related to the nature of the sanctions. Art. 5(1) of this directive instructs member states to designate public authorities or bodies – recognised or empowered by national law – for ensuring the application and enforcement of the MCD. Art. 5(5) Directive 2014/17 states that these authorities shall exercise their powers directly under their own authority, under the supervision of the judicial authorities, or by application to courts which are competent to grant the necessary decision. So, the MCD mainly opts for public enforcement, but enables enforcement through the system of private law as well, by creating the possibilities to exercise the enforcement powers under supervision of the judicial authorities or by application to courts.[1532] Still, even then public authorities or bodies have a role. On top of that, the authorities that apply and enforce the MCD must have the right to publish the imposition of *any* administrative sanction.[1533] This is a far-reaching right, since in most jurisdictions public disclosure is only possible for severe penalties, such as an administrative fine.

In addition, both the CCD and MCD contain provisions that require member states to ensure that appropriate and effective complaints and redress procedures for the out-of-court settlement of consumer disputes are in place.[1534] Out-of-court settlement of consumer disputes is (partly) governed by other EU legal acts as well, but analysing these legal acts goes beyond the scope of this study.[1535] Whether out-of-court settlement procedures need to be available when a lender violated his duty to assess a consumer's creditworthiness, hinges on the fact whether a borrower can invoke a breach of this obligation against the lender. This depends on the national implementation of this duty in either private or public law. The CCD and MCD do, namely, not explicitly reveal whether the obligation to assess a consumer's creditworthiness has a private or public law character.[1536]

However, not everyone shares this last conclusion. The question of whether EU law gives a consumer the right to an individual private law remedy if the obligation to assess his creditworthiness is breached

---

[1532] See recital 80 of the preamble of the MCD: 'This could enable Member States, in particular where provisions of this Directive were transposed into civil law, to leave the enforcement of these provisions to the abovementioned bodies and the courts.'

[1533] Art. 38(2) Directive 2014/17. This provision adds one exception to the general possibility of publishing the imposed sanction, namely 'unless such disclosure would seriously jeopardise the financial markets or cause disproportionate damage to the parties involved.'

[1534] Art. 24(1) Directive 2008/48 and art. 39(1) Directive 2014/17.

[1535] Cf. Micklitz (2015), who acknowledges their complexity (pp. 498, 508-509). The most relevant legal acts are those on online and alternative dispute resolution for consumer disputes, Regulation 524/2013 of the European Parliament and of the Council of 21 May 2013, OJ 2013, L 165/1 and Directive 2013/11/EU of the European Parliament and of the Council of 21 May 2013, OJ 2013, L 165/63. For a discussion of these legal acts, see Reich (2014) and Cortés (2015). Cf. Wilman (2016).

[1536] Cf. Ferretti (2015), p. 366.

by the lender, was especially debated in the German academic literature after the transposition of the CCD.[1537] On the one hand, among others, Rott et al. (2011) answer this question in the affirmative. They argue that the aim of the creditworthiness assessment is to provide legal protection of individual consumers.[1538] Henceforth, a consumer needs to have the *right* of an individual remedy, even though the provisions on the creditworthiness assessment are only written in terms of a *duty* of the lender. On the other hand, several scholars argue that both directives leave it up to the member states how to enforce these obligations, as long as sanctions are effective, proportionate and dissuasive.[1539] This view is supported by the fact that the decision of the CJEU in Case C-565/12 does not indicate otherwise, even though it confirms that the 'creditor's obligation (…) to assess the borrower's creditworthiness is intended to protect consumers against the risks of over-indebtedness and bankruptcy'.[1540] Moreover, recital 57 of the preamble of the MCD states that member states should be able to monitor compliance with this obligation by means of oversight by public authorities.[1541] Hence, this directive surely does not take private enforcement as the standard. Finally, ensuring the interests of consumers does not necessarily require and thus suppose a right to an individual remedy: this aim can be attained by public means as well. So, this discussion confirms that art. 8 CCD and art. 18-20 MCD do not reveal whether they contain obligations of public or private nature, and that it is thus up to the member states to choose whether a consumer has a right to an individual remedy if these provisions are breached.

5.2.2. The possibility of proportionate and dissuasive enforcement of lending restrictions in Dutch consumer law

The sanctions which can be imposed in the Netherlands for a violation of art. 4:34 Wft and the legislation based upon this provision have already been examined in sub-sections 4.1.2 and 3.2.2.1 of this study. The rules are mainly enforced by administrative measures, but if a lender violates them, private enforcement is possible as well, based upon a breach of a duty of care. Consumers can both litigate or arbitrate. Dutch law provides for publication of an imposed administrative fine or a forfeited

[1537] See e.g. Rott et al. (2011); Herresthal (2014); Barta & Braune (2014); Rott (2015), p. 11, 14; Buck-Heeb (2015), pp. 180-182; Olmor (2016).

[1538] For the CCD, they base this *inter alia* on recital 26 of its preamble and that the obligation to assess a consumer's creditworthiness would be included in the Capital Requirements Directive, if it was a duty of prudential nature (Rott et al. (2011), pp. 165-168).

[1539] Herresthal (2014), p. 499; Buck-Heeb (2015), p. 181; Omlor (2016), pp. 5-8.

[1540] Case C-565/12 LCL *Le Crédit Lyonnais SA v. Kalhan* [2014], para. 42. See further para. 43-45.

[1541] Omlor (2016), p. 6. Omlor also argues that a systemic approach shows that art. 18-20 MCD are part of another chapter than the chapter which confers rights on individuals.

incremental penalty payment.[1542] It has been concluded in the aforementioned sub-sections that the available enforcement measures allow proportionate and dissuasive enforcement.

5.2.3. The possibility of proportionate and dissuasive enforcement of lending restrictions in Irish consumer law

5.2.3.1. Sanctions for violations of the implemented rules of the CCD and the MCD

In Ireland, administrative, civil and criminal enforcement of the duty to assess a consumer's creditworthiness is possible. The rules on penalties in S.I. 281/2010 and S.I. 142/2016, which implement the CCD and MCD, respectively, are largely similar and will, therefore, be discussed jointly. Firstly, the Central Bank of Ireland can use the same administrative penalties as it has at its disposal for enforcing the LTI and LTV limits.[1543] These powers have already been discussed in sub-section 4.2.2, with a reference to sub-section 3.2.2.2.[1544] Publication of imposed administrative sanctions is mandatory.[1545]

Violations of the rules on creditworthiness assessment may have consequences under civil law for both lenders and consumers. The CBI can namely require financial service providers to make appropriate redress to their customers, if they have suffered, are suffering, or will suffer loss or damage due to widespread or regular (1) violations of the rules on creditworthiness assessment or (2) supply of unsuitable loans to consumers.[1546] This redress cannot 'exceed the amount of the loss suffered or anticipated to be suffered, together (where appropriate) with interest at such rate as is so specified.'[1547] This can be multi-party redress, which fills a gap in the Irish system, because although multi-party court cases are possible, they are often cumbersome, and the judgment is non-binding for parties which were not involved.[1548]

[1542] *Supra,* sub-section 3.2.2.1.

[1543] S.I. 281/2010 and S.I. 142/2016 have been added to the list of Statutory Instruments for which the CBI is allowed to use its sanctioning powers when their provisions are contravened (*supra,* footnote 779).

[1544] The adminstrative measures for penalising violations of the rules on creditworthiness assessment are identical to those for penalising violations of the LTI and LTI limits, with the same relevant differences compared to sanctions for penalising violations of the rules on capital requirements.

[1545] While regulation 39(6) S.I. 142/2016 suggest that the CBI is *allowed* to publically disclose any administrative sanction which it it imposes under the Central Bank Act 1942, section 33BC Central Bank Act 1942 *obliges* the CBI to disclose sanctions which it imposes, albeit in the form and manner which it considers appropriate.

[1546] Section 43 Central Bank (Supervision and Enforcement) Act 2013.

[1547] Section 43(3) Central Bank (Supervision and Enforcement) Act 2013.

[1548] Breslin (2015), pp. 15-16. Cf. Donnelly (2015), p. 80.

Moreover, section 44 Central Bank (Supervision and Enforcement) Act 2013 enables a customer to start a procedure for damages, if he suffered losses or damages due to a violation of the rules on creditworthiness assessment.[1549] This provision makes it easier for consumers to claim damages, as Breslin (2015) elucidates: 'A plaintiff can (…) avoid the usual requirements in a professional negligence claim to have an expert report before serving a statement of claim. Furthermore, in particular cases a breach of regulatory duty may very well be easier to prove than a breach of a duty of care.'[1550] The latter is particularly true regarding the assessment of a consumer's creditworthiness, since Irish civil law does not impose the duty (of care) on a lender to advise a borrower about the prudence of taking out a loan, nor does it recognise a duty to act in the consumer's best interest.[1551] Furthermore, the tort of reckless lending does not exists in Ireland.[1552] Only if a lender also acts as adviser, a duty arises to give advice with reasonable care.[1553] It is thus difficult to claim damages for irresponsible lending by means of purely civil law. Due to this new enforcement mechanism, it is less likely that a lender can violate the duty to assess a consumer's creditworthiness without having to pay damages afterwards. This enhances the dissuasiveness of private enforcement, and, consequently, adds an incentive for lenders to comply with the rules on creditworthiness assessment.

Consumers can as well use out-of-court settlement procedures to claim damages. Regulation 40(1) S.I. 142/2016 explicitly designates the task of settling disputes outside the court to the Financial Services Ombudsman.[1554] As far as possible, the Financial Services Ombudsman must resolve complaints by mediation, but he can adjudicate otherwise.[1555] The Central Bank Act 1942 allows the Financial Services Ombudsman to make a wide range of directions towards a lender who violated the rules on the creditworthiness assessment, including demanding a change of his conduct or a payment of compensation.[1556] The maximum compensation which the Financial Services Ombudsman can direct is € 250,000.[1557] This certainly exceeds the benefits that a lender can obtain by breaching the rules on

[1549] Section 44 Central Bank (Supervision and Enforcement) Act 2013.
[1550] Breslin (2015), p. 16.
[1551] Donnelly (2015), pp. 225, 297; Breslin (2013), pp. 205-206.
[1552] Cf. sub-section 5.1.3, in particular footnote 1439.
[1553] Breslin (2013), pp. 205-207; Donnelly (2015), pp. 295-296.
[1554] The Financial Services Ombudsman possesses this power also without this regulation, based upon the Central Bank Act 1942, which allows handling consumer' complaints related to any financial service provided by a financial service provicer. See in particular sections 57BB(a), 57BK(1)-(2) and 57BX(1) Central Bank Act 1942.
[1555] Sections 57CA and 57BB(a) Central Bank Act 1942. Cf. the judgment of the Supreme Court in *J & E Davy v. Financial Services Ombudsman* [2010] IESC 30. The provisions on the Financial Services Ombudsman are inserted in the Central Bank Act 1942 by the Central Bank and Financial Services Authority of Ireland Act 2004, available at http://www.irishstatutebook.ie/eli/2004/act/21/enacted/en/print.html.
[1556] Section 57CI(4) Central Bank Act 1942.
[1557] Regulation 3(b) S.I. 190/2005, which is available at http://www.irishstatutebook.ie/eli/2005/si/190/made/en/print.

creditworthiness when supplying credit to a consumer. The Financial Services Ombudsman enjoys a wide discretion in determining which sanction is appropriate, and hence proportionate.[1558] The Financial Services Ombudsman cannot direct an order for collective redress.[1559]

Finally, lenders who breach provisions regarding the creditworthiness assessment can face criminal sanctions, since both Statutory Instruments criminalise breaching these provisions, except for the valuation requirements in regulation 20 of the S.I. 142/2016.[1560] The magnitude of a criminal penalty depends on the procedure in which the offender is convicted. The Irish system distinguishes between summary and indictable offences. Summary convictions are meant for minor offences, and are given in a court with a judge, but without a jury, whereas indictable convictions are given by a court with a judge and a jury.[1561] A summary trial is also meant to be relatively expeditious and informal.[1562] The maximum penalty in a summary conviction for breaches of the rules on the creditworthiness assessment is a fine of € 4,000 or € 5,000 – for breaching the rules of the CCD and MCD, respectively – a year imprisonment, or both.[1563] Both Statutory Instruments lay down a maximum penalty on conviction on indictment of a fine of €100,000, three years imprisonment, or both.[1564] The Statutory Instruments also provide for fines for each day that a lender continues to breach the rules for which he is convicted.[1565] Individuals working for a lender breaching the rules on the creditworthiness assessment can be punished with the same sanctions, if their consent, connivance, approval or wilful neglect can be proven.[1566] Consenting means being aware of the offence and agreeing with it, whereas connivancing means tacitly agreeing with it. In turn, wilful neglect entails an intentional inaction or omission, while knowing that this inaction results in the breach.[1567]

1558 According to the High Court, the Financial Services Ombudsman should be given 'appropriate latitude (…) in determining what the appropriate remedy is in the circumstances of each individual case.' (*Square Capital Ltd v. Financial Services Ombudsman* [2009] IEHC 407).

1559 Donnelly (2012), p. 257. For more about the Financial Services Ombudsman, see also Donnelly (2012), as well as https://www.financialombudsman.ie.

1560 Regulation 11(3) S.I. 281/2010 and regulations 19(10) and 21(8) S.I. 142/2016.

1561 Cf. art. 38.2 and 38.5 of the Irish Constitution; O'Donnell (2006), pp. 15-16; http://www.citizensinformation.ie/en/justice/criminal_law/criminal_offences/classification_of_crimes_in_criminal_cases.html (last visited 6 August 2016).

1562 *Clune v. Director of Public Prosecution* [1981] ILRM 17.

1563 Regulation 25(1)(a) S.I. 281/2010 in combination with sections 3 and 5(2) of Fines Act 2010, No. 8/2010, which is available at http://www.irishstatutebook.ie/eli/2010/act/8/enacted/en/print.html; Regulation 39(1)(a) S.I. 142/2016 in combination with sections 3 and 4(1) of Fines Act 2010.

1564 Regulation 25(1)(b) S.I. 281/2010 and regulation 39(1)(b) S.I. 142/2016.

1565 Regulation 25(2) S.I. 281/2010 and regulation 39(2) S.I. 142/2016.

1566 Regulation 25(3)-(4) S.I. 281/2010 and regulation 39(3) S.I. 142/2016.

1567 Law Reform Commission of Ireland (2016), pp. 81-82.

Both Statutory Instruments provide the CBI with the right to prosecute violations of the provisions regarding the creditworthiness assessment by means of summary proceedings.[1568] Summary proceedings are a fast-track procedure at the High Court, with – in principle – only written pleadings.[1569] Fast procedures help to alleviate an otherwise cumbersome criminal process, and hence increase the probability that a lender faces a sanction. Consequently, this option adds to the dissuasiveness of the regime.

All in all, the abundance of available sanctions helps to enable proportionate and dissuasive enforcement. Lenders can face a range of administrative penalties that are dissuasive and can be proportionate in relation to violations of the rules on creditworthiness assessment.[1570] The CBI can attach civil consequences to violations of the obligation to assess a consumer's creditworthiness by granting consumers redress. This power of the CBI creates an efficient system of collective redress, which might be threatening to lenders.[1571] Civil enforcement by borrowers is facilitated by section 44 Central Bank (Supervision and Enforcement) Act 2013. Since the risks of receiving administrative sanctions and paying damages do not exclude each other – quite the contrary – lenders face double incentives to abide by the rules. Moreover, both the CBI and consumers can put pressure on lenders to comply with the rules. Finally, the possibility of criminal prosecution – with imprisonment as potential result – on top of the enforcement pyramid, adds to the dissuasiveness of the enforcement regime.

5.2.3.2. Sanctions for violations of the rules of the Consumer Protection Code 2012

The enforcement possibilities for the Consumer Protection Code – which is sometimes described as soft law[1572] – are somewhat different from those for S.I. 281/2010 and 142/2016. Nonetheless, the available administrative enforcement measures are far from soft. Because section 33AN Central Bank Act 1942 penalises contravening a code of practice, the CBI can use the same administrative sanctions to enforce the Consumer Protection Code as it can use to ensure compliance with rules enshrined in

[1568] Regulation 25(5) S.I. 281/2010 and regulation 39(4) S.I. 142/2016.

[1569] See http://www.citizensinformation.ie/en/justice/civil_law/originating_summons.html (last visited 7 April 2016).

[1570] Cf. sub-sections 4.2.2 and 3.2.2.2.

[1571] For merits and demerits of collective legal action, cf. footnote 1520.

[1572] See e.g. Kenna & Lynch-Shally (2014), p. 304. The High Court characterises codes of conducts adopted by the CBI as 'not entirely a species of "soft" law, i.e., purely precatory statements not susceptible of legal enforcement' (*Irish Life and Permanent v. Financial Services Ombudsman* [2012] IEHC 367, para. 55; *Ryan v. Danske Bank* [2014] IEHC 236, para. 14. Cf. *Stepstone Mortgage Funding v. Fitzell* [2012] IEHC 142, para. 5.2).

hard law.[1573] Indirectly, criminal enforcement is possible too. The Central Bank of Ireland can issue a direction in writing which demands observance of the Consumer Protection Code. Not complying with this direction is a criminal offence and can lead to fines of € 2,000 and € 40,000, in case of, respectively, a summary conviction and a conviction on indictment.[1574] This does not really add anything valuable to the arsenal of enforcement measures.

Civil enforcement of the Consumer Protection Code 2012 is difficult, and case law is still developing. In several cases, questions about the civil consequences of violations of the Consumer Protection Code have been raised. According to the High Court, the status of a code of practice in civil law is not yet clear.[1575] Although civil law consequences were attached several times to violations of a code of practice, this concerns only cases where the court had the discretionary power to allow or deny a financial service provider to take possession of a property.[1576] The High Court has made clear that breaches of obligations under the Consumer Protection Code do not render the contract void, nor relieves borrowers from their (repayment) obligations, or lenders from their rights.[1577] Hence, violations of the Consumer Protection Code by a lender do not entitle borrowers to relief, but offer them at best a defence against lenders who start proceedings.[1578] In itself, this is not dissuasive enough to scare lenders off from violating the provisions of the Consumer Protection Code, but it creates an additional risk for the lender. Furthermore, while the CBI can grant redress to borrowers, based upon section 43 Central Bank (Supervision and Enforcement) Act 2013, section 44 of this act – which enables a customer to start a procedure for damages if he suffered losses – does not apply to the Consumer Protection Code.[1579]

So, fewer enforcement measures exist for ensuring compliance with the Consumer Protection Code than for guaranteeing compliance with the obligations to assess a consumer's creditworthiness,

[1573] Cf. Loughlin & Murphy (2007), p. 16; Kenna & Lynch-Shally (2014), p. 306.
[1574] Section 117(3)-(4) Central Bank Act 1989, as amended in Schedule 3 of the Central Bank and Financial Services Authority of Ireland Act 2004. Cf. *Ryan v. Danske Bank* [2014] IEHC 236, para. 13.
[1575] *Irish Life & Permament v. Duff* [2013] IEHC 43, para. 54-72; *Allied Irish Bank v. O'Brien* [2015] IEHC 260; *Ryan v. Danske Bank* [2014] IEHC 236, para. 14. Cf. Kenna & Lynch-Shally (2014), pp. 314-315.
[1576] *Irish Life & Permament v. Duff* [2013] IEHC 43, para. 72; *Ryan v. Danske Bank* [2014] IEHC 236, para. 19-21. Cf. *Stepstone Mortgage Funding v. Fitzell* [2012] IEHC 142; *Bank of Ireland v. Quinn* [2016] IECA 30, para. 49-53.
[1577] *Zurich Bank v. McConnon* [2011] IEHC 75; *Freeman v. Bank of Scotland* [2014] IEHC 284, para. 17-18; *Allied Irish Bank v. O'Brien* [2015] IEHC 260, para. 40, 43.
[1578] *Ryan v. Danske Bank* [2014] IEHC 236, para. 22.
[1579] Section 43 Central Bank (Supervision and Enforcement) Act 2013 allows the CBI to grant redress in case of a prescribed contravention, and a breach of the Consumer Protection Code qualifies as such (section 33AN Central Bank Act 1942). Section 44 Central Bank (Supervision and Enforcement) Act 2013 enables a customer to start a procedure for damages if he suffered losses due to non-compliance with financial services legislation, and the Consumer Protection Code does not qualify as such.

pursuant to the transposed rules of the CCD and MCD. Criminal enforcement does not add new threats, whereas civil enforcement is difficult. Still, the administrative penalties are strong enough to deter, and offer enough proportionate enforcement possibilities.[1580]

5.2.4. The possibility of proportionate and dissuasive enforcement of lending restrictions in German consumer law

The transposition of the CCD into German law provoked an interesting debate among German academics about the available sanctions for penalising a breach of the rules on assessing a consumer's creditworthiness.[1581] One of the debated issues was whether the then available sanctions were effective, proportionate and dissuasive, and fulfilled the *effet utile* principle. There was broad agreement that the answer to this question was negative.[1582] The German legislature responded to the criticism by significantly changing the sanctioning regime with the implementation of the MCD. Currently, German law provides for sanctions in both the BGB and the KWG.

5.2.4.1. Sanctions in private law

The BGB explicates the sanctions which a lender can face if violating the rules on the creditworthiness assessment, as contained in the civil code. In case of a breach the credit agreement is not void.[1583] Instead, together with the transposition of the substantive rules on the assessment of a consumer's creditworthiness, specific sanctions have been introduced in the civil code, in § 505d BGB.

§ 505d(1) BGB introduces two coexisting remedies for the consumer – which are penalties for the lender – which can only be applied if the borrower would be denied the loan if a (correct) creditworthiness assessment would have taken place.[1584] These are (1) an interest rate reduction and (2) the right for the borrower to terminate the credit agreement, without being subject to a prepayment penalty. If the interest rate is reduced, it is diminished to either the prevailing market

[1580] Cf. sub-sections 4.2.2 and 3.2.2.2.
[1581] See e.g. Hofmann (2010); Rott et al. (2011); Herrestal (2014); Barta & Braune (2014); Rott (2015), p. 11, 14; Buck-Heeb (2015), pp. 180-182; Olmor (2016).
[1582] See e.g. Hofmann (2010), pp. 1784-1785; Herresthal (2014), p. 500; Barta & Braune (2014), p. 329; Buck-Heeb (2015), p. 181. A second debated issue was whether a consumer has the right to an individual private law remedy when the obligation to assess his creditworthiness is breached by the lender. This has already been discussed in sub-section 5.2.1.
[1583] See page 100 of the Explanatory Memorandum for the act for implementing the MCD (*supra*, footnote 1480).
[1584] § 505d(1) BGB. It is not relevant whether the borrower actually got into arrears (cf. page 101 of the Explanatory Memorandum for the act for implementing the MCD).

interest rate for *Pfandbriefe* with a term equal to the fixed-rate-period of the loan, or to the three months interbank interest rate (Euribor). The credit agreement must stipulate which option applies. A borrower can also claim reduction of already paid interest.[1585] The Explanatory Memorandum elucidates that this penalty is based upon the idea that the lender should not profit from his misbehaviour, and the borrower should not enjoy the advantages of a loan for free. Therefore, the interest rate is reduced to the rate of an almost riskless investment. Simultaneously, this allows the lender to still cover the costs of extending the loan. Hence, this penalty should provide the lender with incentives to conduct a correct creditworthiness assessment, and the borrower with an individual remedy. It was considered disproportionate to penalise the lender with a total loss of the entitlement to the interest, since it can be difficult to conduct a correct creditworthiness assessment, while right and wrong are not necessarily obvious in this situation. The rationale behind the right of the borrower to terminate the credit agreement without being subject to a prepayment penalty is enabling him to benefit from possibly decreased market interest rates, by refinancing the loan.[1586]

§ 505d(2) BGB attaches another consequence to a lender's failure to assess a consumer's creditworthiness correctly. A lender cannot claim breach of duty (*Pflichtverletzung)* by the borrower, if the borrower cannot meet the obligations related to the credit agreement due to circumstances, which would have precluded the extension of the loan if a (correct) creditworthiness assessment would have taken place. *Pflichtverletzung* is a core notion in the German law of obligations, which needs to be proven in order to be able to claim damages for non-performance or delayed performance.[1587] So, this sanction means that the lender cannot claim interest for late payment, certain legal costs (*Rechtsverfolgungskosten*), and damages related to the arrears. However, a lender can still terminate the contract if a borrower is in arrears, insofar as this right is not limited by § 499(3) BGB.[1588]

§ 505d(1)-(2) BGB do not apply if the incorrect creditworthiness assessment is a result of the borrower who intentionally or with gross negligence withheld information or supplied false information.[1589] §

[1585] Page 102 of the Explanatory Memorandum for the act for implementing the MCD.
[1586] Pages 101-102 of the Explanatory Memorandum for the act for implementing the MCD.
[1587] §§ 280-286 BGB. For an introduction to and discussions of the concept of *Pflichtverletzung,* see e.g. Krajewski (2003), Benicke & Hellwig (2014) and the discussion of §§ 280-286 BGB in the second volume of the *Münchener Kommentar zum Bürgerliches Gesetzbuch:* Säcker et al. (2016).
[1588] See further page 103 of the Explanatory Memorandum for the act for implementing the MCD. This right to terminate the contract is governed by § 490 BGB and § 499 BGB. § 499(3) BGB implements art. 18(4) MCD, which obliges member states to 'ensure that where a creditor concludes a credit agreement with a consumer the creditor shall not subsequently cancel or alter the credit agreement to the detriment of the consumer on the grounds that the assessment of creditworthiness was incorrectly conducted.'
[1589] § 505b(3) BGB. Cf. art. 18(4) and 20(3) Directive 2014/17.

505d BGB applies as well to gratuitous loans and financial assistance to consumers, except for the sanction of reducing interest rates.[1590]

All in all, it can be concluded that this civil sanctioning regime has created the possibility to impose proportionate sanctions, which it explicitly intended. The remedies reduce financial costs for the borrower, which may be very helpful for a consumer which apparently is not creditworthy. The measures also hurt the bank, which is necessary to discourage non-compliance, but not excessively, for instance, by reducing the interest rate until zero. The latter would go further than necessary. This also means that it is debatable whether the sanctions are dissuasive. The interest rate reduction can never put a lender worse off compared to abstaining from lending, except for the opportunity costs (alternative investment possibilities). At the same time, the probability of receiving this sanction is certainly not 100%, and depends on the knowledge of the consumer that a rule was breached and his willingness to litigate. Nevertheless, the other two sanctions can have negative consequences for a lender. Therefore, the combined effect of the three sanctions is likely dissuasive. The lender namely faces the risks of forgoing profits due to the reduced interest rate, losses due the termination of the credit agreement, and the inability to claim breach of duty if a borrower cannot meet his obligations. Especially this latter sanction was considered significant by German experts.[1591] Yet, Knops (2015) identified a pitfall in the application of this sanction: the borrower needs to prove the causality between his inability to meet his obligations and the lender's failure to conduct a (correct) creditworthiness assessment. [1592] This might be difficult to prove, which reduces the likelihood that this sanction is imposed upon a lender. At least, a merit of this last sanction is that it is not dependent on the consumer's knowledge about the violation, and his willingness to start a court procedure.

The degree of dissuasiveness is affected by other factors as well. A lender in breach of his duty to conduct a (correct) creditworthiness assessment does not only face the risk that an individual consumer starts to litigate. German consumers can also use out-of-court dispute settlement procedures – i.e. arbitration – when a lender has breached the obligation to assess the consumer's creditworthiness.[1593] This lowers the bar for a consumer to act when a lender breached his obligations,

[1590] *Supra,* footnote 1503. Note that there is no interest paid for gratuitous loans and financial assistance.
[1591] Knops (2015), p. 12; Verbraucherzentrale Bundesverband (2015), p. 23.
[1592] Knops (2015), p. 13.
[1593] § 14(1) *Unterlassungsklagengesetzes* (UKlaG) (Injunctions Act), BGBl. I, 2002, 3422, 4346, available at http://www.gesetze-im-internet.de/uklag/. Cf. art. 6 of the *Gesetz zur Umsetzung der Wohnimmobilienkreditrichtlinie und zur Änderung handelsrechtlicher Vorschriften* and pages 122-123 of the Explanatory Memorandum for this act (*supra,* footnotes 1484 and 1480). Note that art. 39 Directive 2014/17 requires member states to ensure that appropriate and effective complaints and redress procedures for the

and thus increases the probability that a sanction is imposed on the lender. Therefore, this adds to the dissuasiveness of the system. Consumer organisations can file complaints against lenders too, when rules relating to consumer loans have been violated.[1594] This is called *Verbandsklage.*[1595] However, they cannot claim damages; only injunctive relief.[1596] Therefore, this feature creates additional enforcement possibilities, but its potential in the context of ensuring compliance with the rules about assessing a consumer's creditworthiness must not be overstated.

5.2.4.2. Sanctions in public law

After the transposition of art. 8 CCD in the KWG, it has been concluded in the German literature that no dissuasive sanctions existed to penalise violations of the obligation to assess a consumer's creditworthiness.[1597] Unfortunately, this is still true insofar as it concerns the requirements of the MCD which have been transposed into the KWG: nothing has changed in terms of available *administrative* sanctions. The problem is the lack of options to penalise a violation of § 18a KWG, which contains the obligation to conduct a creditworthiness assessment. BaFin can only issue an order – to the credit institution and its senior management – that is appropriate and necessary for stopping violations.[1598] However, the KWG does not list follow-up sanctions if a credit institution acts against this order. So, BaFin cannot use the enforcement pyramid, because escalating is impossible. Hence, this enforcement measure is not dissuasive, and in case of severe violations neither proportionate.

What follows from this is that in Germany the mandatory creditworthiness assessment can only be enforced dissuasively by means of private law. Although the available civil sanctions are dissuasive, relying on enforcement by means of private law alone has considerable disadvantages.[1599] Borrowers must be aware of the rules on creditworthiness, and must be willing to start a potentially time-consuming court procedure. The the lender's loss of the possibility to claim *Pflichtverletzung,* if he has breached the rules, is the only sanction which is not dependent on initiative of the borrower.

---

out-of-court settlement of consumer disputes are in place. For a brief discussion of § 14 UKlaG, see Micklitz (2013), p. 341. The origin of the UKlaG is Directive 98/27 of the European Parliament and of the Council of 19 May 1998, OJ 1998, L 166/51, which has later been replaced by Directive 2009/22 of 23 April 2009 of the European Parliament and of the Council, OJ 2009, L 110/30 (cf. Benöhr, 2014, pp. 147-149). However, the German legislature greatly widened the scope of the UKlaG*:* otherwise, these provisions would not be included in its scope. Not only the UKlaG provides for out-of-court dispute settlement procedures, but also the *Länder* can create additional procedures: see Micklitz (2013), pp. 338-339.

[1594] §§ 2(1), 2(2)(e), 3(1) and 4 UKlaG.

[1595] See e.g. Koch (2001); Alexander (2009), pp. 593-594.

[1596] See e.g. http://www.iclg.co.uk/practice-areas/class-and-group-actions/class-and-group-actions-2016/germany (last visited 25 March 2016). Cf. Montag (2013), p. 174; Stadler (2014), footnote 30.

[1597] Herresthal (2014), p. 500; Barta & Braune (2014), p. 329; Ferretti et al. (2016), p. 67.

[1598] § 6(3) KWG.

[1599] See the discussion at the beginning of section 5.2.

5.3. Independent application, enforcement and amendment of lending restrictions in consumer law

5.3.1. EU aspects of independent application and enforcement of lending restrictions in consumer law

The CCD does not impose any requirements on the authorities which apply and enforce the national implementation of its rules. Instead, the MCD requires member states to establish public authorities or bodies, recognised or empowered by national law, for applying and enforcing the implemented rules.[1600] Art. 5 Directive 2014/17 excludes self-regulation, by making clear that these authorities may neither be lenders nor credit intermediaries. In addition, the authorities must be granted adequate recourses and powers for investigating and enforcement. These must be exercised under their own authority, under supervision of judicial authorities, or by application to courts which are competent to grant the necessary decision.[1601] So, these requirements aim at guaranteeing independence from the industry, albeit only at a general level.

The MCD ensures that host supervisors have room to act against breaches by lenders established in another member state, by making the authority of the host member state responsible for ensuring compliance with the duty to assess a consumer's creditworthiness.[1602] The authorities in the host member state are also responsible for ensuring that a branch of a credit intermediary which is established in another member state, complies with the requirements of art. 20 MCD.[1603] This prevents dependency on the willingness of a foreign authority to act against violations.

5.3.2. Independent application and enforcement of lending restrictions in Dutch consumer law

In the Netherlands, the Minister of Finance yearly sets the DSTI limits which, together with other rules, specify the obligation to prevent an overextension of credit to consumers. The AFM enforces these

[1600] Cf. sub-section 5.2.1.
[1601] Art. 5(1) and 5(5) Directive 2014/17.
[1602] This is also true for credit institutions, if they supply loans across borders or through a branch, because the creditworthiness assessment is not a prudential requirement in the sense of art. 49 CRD IV, and thus falls outside that regime.
[1603] Art. 34(2) Directive 2014/17 (art. 20 of this directive requires credit intermediaries to accurately submit the necessary information provided by the consumer to the relevant lender). This is an exception to the passporting regime for credit intermediaries, as established in the MCD, in which the home state supervisor has the responsibility for ongoing supervision (art. 29-34 Directive 2014/17).

rules. The aspects of the Dutch legal framework which affect the independent application and enforcement of these rules have been discussed in sub-section 4.1.3.

5.3.3. Independent application, enforcement and amendment of lending restrictions in Irish consumer law

The Central Bank of Ireland is responsible for enforcing the rules of S.I. 281/2010, 142/2016 and the consumer protection codes by means of administrative sanctions, or criminal prosecution.[1604] The degree of the independence of the CBI will influence its supervisory decisions, not only when it comes to enforcement, but also regarding its interpretation and application of the imprecise terms that originate from the CCD and MCD, and which determine the actual impact of the rules. Most aspects of the operational independence of the Central Bank of Ireland have already been discussed in sub-sections 3.3.3 and 4.2.3. One aspect requires clarification, namely the amendment of the rules in the Consumer Protection Code. Section 117(1) Central Bank Act 1989 allows the CBI to amend codes of practices, after consultation with the Minister for Finance. This consultation requirement facilitates its accountability and transparency, without impairing its independence. Hence, within the perimeters as discussed before, the Central Bank of Ireland can relatively independently decide about strengthening or loosening these rules.

The situation for changing the rules of the creditworthiness assessment is different. The CCD and MCD have been adopted at EU level, and implemented in Ireland by means of Statutory Instruments, drafted by the Department of Finance. The power to amend the rules on creditworthiness assessment and the attached consequences is thus in the first instance a matter of the EU legislator. In addition, within the boundaries set by the directives, the Minister for Finance can amend the rules in the Statutory Instruments.[1605] Such a decision will be taken under control of the Irish parliament, which needs to confirm every Statutory Instrument adopted by a Minister within six months.[1606] Henceforth, decisions about amendments will be made with political considerations in mind.

[1604] Regulation 6 S.I. 142/2016 designates the CBI as competent authority to supervise compliance with S.I. 142/2016. Moreover, the CBI is in general responsible for consumer protection in the area of financial services (Section 6A(2)(b) Central Bank Act 1942).
[1605] For instance, he could amend the rules in order to oblige lenders who provide consumer credit, to deny credit to consumers who are not creditworthy (like the Netherlands and Germany have done).
[1606] Sections 2-4 of the European Communities Act 1972, available at http://www.irishstatutebook.ie/eli/1972/act/27/enacted/en/print.

5.3.4. Independent application and enforcement of lending restrictions in German consumer law

The actual impact of the German rules on creditworthiness assessment depends on the interpretation of the imprecise terms by lenders and supervisors, and in the end courts. In the domain of private law, there is no supervisor to guide this interpretation, whereas BaFin can guide this interpretation in the sphere of banking law. Therefore, the degree of involvement by BaFin is crucial. Time will tell how BaFin's supervision will take shape. However, it is conceivable that BaFin will not invest so much effort and sources in this area, since it has no mandate for protecting individual consumers.[1607] Indeed, some describe BaFin's supervision of the lending practices of banks as lax.[1608] However, since March 2017 further guidance on these rules depends less on BaFin and on courts, and more on the Federal Ministries of Finance and Justice & Consumer Protection, because the legislature authorised them to jointly issue a regulation which clarifies some aspects of the creditworthiness assessment in case of an application for mortgage credit. This reduces the aforementioned concerns about BaFin's involvement.

When it comes to enforcement, worries about BaFin's inaction are even stronger. Due to the absence of a mandate for protecting individual consumers, BaFin will probably only act when widespread violations of the obligations related to the creditworthiness assessment affect the solvability of a bank or the stability of the financial system.[1609] It is unlikely to act in case of a breach for the sake of protecting an individual consumer. This is problematic from the perspective of consumer protection. When preventing over-indebtedness is only a means to achieve the end of financial stability, this is less of a concern. The conclusions from this paragraph are underlined by the fact that, at least until the start of 2017, no single case is known where BaFin used its enforcement powers to act against a breach of § 18(2) (now: § 18a) KWG.[1610]

Moreover, the discussion in sub-section 3.3.1 substantiated some concerns about the extent to which BaFin can act independently from political pressure. Such pressure can originate from two political concerns: ensuring consumer protection, or liberating home-owners from perceived restrictions. It is

[1607] Cf. § 4(1a) FinDAG (*supra,* footnote 858).
[1608] Barta & Braune (2014), p. 329.
[1609] Hofmann (2010), p. 1784; Rott et al. (2011), p. 163; Barta & Braune (2014), p. 329. Cf. Micklitz (2013), p. 347. See also an interview with the then president of BaFin: https://www.bafin.de/SharedDocs/Veroeffentlichungen/EN/Fachartikel/2013/fa_bj_2013_03_interview_koenig_verbraucher_en.html (last visited 31 March 2015).
[1610] Ferretti et al. (2016), p. 67.

more realistic to expect pressure to loosen restrictions than the other way around.[1611] All in all, unfortunately, one cannot rely on public enforcement of the rules on the creditworthiness assessment. The regime lacks bite: there are no dissuasive sanctions and the likelihood that BaFin will act against violations is small.

The question is whether civil enforcement actions will have a better fate. In Germany both individual consumers and consumer associations can react to a breach of the obligation to assess a consumer's creditworthiness as laid down in the BGB. Consumer organisations might act, if widespread violations occur. Consumers will act if (1) they know that rules have been breached and if (2) the benefits for acting surpass the costs. The fact that the effectiveness of enforcement depends on these circumstances is a downside of relying on private enforcement.[1612] However, with the increased guidance from the ministries, the rules on mortgage credit become clearer and detecting a breach thus easier. This facilitates enforcement by consumers. All in all, the incentives for actors to enforce the rules on creditworthiness assessment have not been ideally constructed in Germany. Yet, civil enforcement of the rules on mortgage credit may become more of a dissuasive threat to lenders, if the determinacy of these rules increases.

5.4. Concluding remarks on the lending restrictions in consumer law

The post-crisis turn towards responsible lending – preceded by the half-baked appetiser in the CCD – is based on the realistic assumption that a consumer needs protection, due to his vulnerability to making irrational decisions. The related policies can help to avoid over-indebtedness, as they are aimed at protecting consumers, rather than being aimed at preventing systemic consequences only. This comes with a wide scope in terms of persons governed: almost every natural or legal person who grants credit in the course of his trade, business or profession, is covered by the rules. Its principle-like rules allow tailored borrowing restrictions, but create vagueness too. Therefore, the actual impact of the rules depends to a certain degree on the interpretation of lenders and supervisors, and, ultimately, courts. Hence, public oversight and an active role of supervisors are important. This is especially problematic in Germany, considering the mandate and past practice of BaFin. It is recommended to conduct further research in this area within a number of years in order to empirically examine how supervisors interpret these provisions.

[1611] The *Bundesrat* raised indeed concerns about the restrictions resulting from the implementation of the MCD (*supra,* footnote 1496). The voices in the political arena in the Netherlands and Ireland show the same tendency of politicians and others to be concerned about restrictions for home-owners.
[1612] Cf. sub-section 5.2.

Notwithstanding its potential, the concept of responsible lending will benefit from clarification. This can provide more guidance to lenders about the desired behaviour. Furthermore, it is a bit indistinct whether a consumer has a right to a remedy when a lender violates the duty to assess the consumer's creditworthiness. Some may argue that this contradicts the consumer's own responsibilities. Be that as it may, the enforcement regimes differ a lot among member states. Enforcement in the Netherlands is in principle administrative, but civil enforcement is an option as well. With regard to the latter, civil case law on the banks' duty of care and the need to pay damages is not yet unequivocal, which reduces likelihood that damages have to be paid.[1613] Germany has created both civil and administrative enforcement possibilities, but the latter regime will be virtually ineffective. For the former regime, it created new remedies for the consumer, such as the right of an interest rate reduction and the right to terminate the credit agreement, without being subject to a prepayment penalty. If rules become clearer due to guidance from the ministries, civil enforcement may become a dissuasive threat to lenders. In Ireland, administrative, criminal and civil enforcement is possible. Since the Central Bank of Ireland can require financial service providers to make appropriate redress to their customers, administrative and civil enforcement have become intertwined, and the possibility of borrowers to receive redress have been increased. The dissuasiveness of the enforcement measures differs between member states, as discussed in section 5.2. It is recommended, if the available information and data allows this, to assess within a number of years in which member state the degree of compliance is highest.

From the perspective of creating the preconditions for effectiveness, there are two other major concerns. Firstly, a consumer who takes out general consumer credit receives significantly less protection than a consumer who takes out mortgage credit, although there are certainly no fewer problems regarding irresponsible lending in the unsecured credit market.[1614] As Brown (2015) remarks: 'Consumer credit reflects consumers' vulnerabilities to a greater extent than other financial services: essential but expensive for the poor, potentially dangerous for the unwary.'[1615] This is a crucial weakness of the current regime, which needs to be repaired. These differences between the CCD and MCD enable regulatory arbitrage: switching from mortgage credit to consumer credit in order to avoid the rules, although the latter is more expensive and riskier. Member states can improve the transposed rules a bit, but because the rules on creditworthiness assessment in the CCD are mainly subject to maximum harmonisation, member states lack profound possibilities to address this flaw. Hence,

[1613] Cf. sub-section 4.1.2.2.
[1614] Cf. Ramsay (2016).
[1615] Brown (2015), pp. 579-580.

amendment of the CCD is required.[1616] Secondly, the current rules on the creditworthiness assessment in the CCD and MCD are not without gaps. Most prominently, the information requirements are not complete and fail to take into account the findings of the literature on credit scoring regarding the factors which should be included in a creditworthiness assessment. These and the other findings are summarised in table 5.1 below.[1617]

All in all, the adoption of the MCD is a big step, and the adoption of the CCD a small step in the good direction, but there is certainly sufficient room, as well as necessity, for improvement. At least in case of the CCD, this calls for action at the EU level.

[1616] Cf. sub-section 7.1.1.2.

[1617] In line with the discussion in section 5.2, this table includes an evaluation of the available civil sanctions.

Table 5.1: Summary of the analysis of lending restrictions in consumer law

Determinacy and completeness	**Possibility proportionate and dissuasive enforcement**	**Room for independent application, enforcement and amendment**
Qualitative evaluation, from high to low: yes, mostly, partly, barely, no		
Determinacy: • EU: CCD: barely; MCD: partly • NL: rules on consumer credit: mostly; rules on mortgage credit: yes • IE, DE: implementation CCD: barely; implementation MCD: partly • IE: CPC: mostly; CPCLM: barely *Completeness:* Encompassing scope: • EU: CCD: mostly (e.g. no credit free of interest); MCD: mostly (e.g. no equity release) • NL: rules on consumer credit: mostly; rules on mortgage credit: yes • IE: yes (due to the combination of the different rules) • DE: yes Absence gaps and silence: • EU: CCD: barely; MCD: partly (no explicit requirement to take existing debt and general economic conditions into account) • NL: mostly • IE: implementation CCD: barely; implementation MCD: partly; CPC: mostly, CPCLM: barely • DE: partly (duty to deny credit for consumer credit is improvement compared to CCD) Exceptions are subject to clear and protective conditions: • EU, NL, IE, DE: yes	*Proportionate enforcement:* Availability whole range of sanctions, from light to severe: • NL, IE: yes • DE: mostly *Dissuasive enforcement:* Availability high administrative fines: • NL, IE: yes • DE: no Mandatory publication of sanctions, apart from specific exceptions: • NL, IE: yes • DE: no Possibility to sanction individuals: • NL, IE: yes • DE: no Availability threatening sanctions, like withdrawal licence: • NL, IE: yes • DE: no Possibility criminal conviction: • NL, DE: no • IE: yes Availability dissuasive sanctions in private law: • NL: partly • IE: implementation CCD and MCD: yes; CPC and CPCLM: partly • DE: mostly	*Ability and willingness to act:* Instrument has clear legal basis: • EU: mostly • NL: codes of conduct: barely; Thrk: yes • IE: yes • DE: yes Well-defined policy objectives: • EU: mostly • NL: codes of conduct: mostly; Thrk: partly • IE, DE: yes Corresponds to clear mandate supervisor: • NL, IE: yes • DE: barely (BaFin has no mandate to protect individual consumers) Framework provides room for action: • NL, IE: yes • DE: barely (BaFin lacks sanctions) *Operational independence:* • AFM: yes • CBI: mostly • BaFin: barely/partly *Use of guided discretion:* • NL, IE: barely • DE: no *Accountability mechanism:* • NL, IE, DE: barely (not specifically for enforcement)

6. The tax treatment of debt

Where the previous chapters analysed rules that specifically aim at restricting debt, tax rules governing the treatment of debt have not necessarily been designed for that purpose, but nevertheless directly influence the amount of debt that consumers can borrow. Recent reforms of these rules have often been intended to reduce borrowing incentives and to limit debt.

This chapter analyses the tax treatment of debt, and will not as such focus on tax rules on housing.[1618] However, mortgage interest deductibility cannot be isolated from these rules.[1619] Therefore, table 6.1 provides an overview of the relevant tax rules in each member state of the European Union. This table is based upon information from the IBFD Tax Research Platform.[1620] A remarkable finding from a comparison of this table and the pre-crisis information from 2007 as documented in Wolswijk (2010) is that many member states significantly reformed their regime for mortgage interest deductibility in recent years.[1621] For instance, in Portugal and Spain mortgage interest payments were deductible at a rate of 40% and 45% respectively, in 2007. Currently, in both countries interest payments are not deductible anymore for newly granted mortgages, while relief on interest payments for existing loans is available at a rate of only 15%.[1622] Also Greece completely abolished mortgage interest deductibility, while Italy replaced the option to deduct interest payments at rates up to 45% with a tax credit of 19%. Furthermore, in Finland the part of the interest costs which can be deducted has been gradually limited: until 2011 it was possible to deduct 100% of the interest costs.[1623] This was limited to 85% in 2012 and subsequently reduced with 5 percentage points for each year, reaching a maximum of 25% in 2019.[1624]

[1618] Cf. sub-section 2.3.2.
[1619] Cf. sub-section 2.1.1.2.
[1620] The data is obtained in April 2017 from the database of the IBFD (International Bureau of Fiscal Documentation): http://online.ibfd.org/kbase (see the country information on individual taxation).
[1621] See Wolswijk (2010), tables 8.1 and A8.2.
[1622] The cut-off date for existing and new loans is 31 December 2011 in Portugal and 31 December 2012 in Spain.
[1623] At a rate of 30%.
[1624] See *inter alia* the database of the IBFD: http://online.ibfd.org/kbase

Table 6.1: Tax treatment of housing in EU member states

Country	Mortgage interest rate deductibility	Taxing imputed rents	Capital gains tax on homes	VAT on new homes	Real estate /property tax	Transfer tax, registration levies and/or stamp duties
Austria	N [A]	N	N	N	Y (<1%)	Y (3.5%)
Belgium	Y (at 45%)	Y	N	Y	N	Y (10-12.5%)
Bulgaria	Y (at 10%) [B]	N	N	Y	Y (<0.225%)	Y (<3%)
Croatia	N	N	N	Y	N	Y (5%)
Cyprus	N	N	N [C]	Y	N	Y (3-8%)
Czech Republic	Y (15-22%)	N	N	Y [D]	Y	Y (4%)
Denmark	Y (up to ±27%)	Y	N	Y	Y (1-3%)	Y (0.6-2.1%) [E]
Estonia	Y (at 20%)	N	N	Y	N	Y (<0.2%)
Finland	Y (at 30-34% for 45% (25% as of 2019) of the interest payments) [F]	N	N	N	Y (0.41-0.9%)	Y (4%)
France	N	N	N	Y	Y	Y (5.1-5.8%)
Germany	N	N	N	N	Y (1.0-2.8%)	Y (3.5-6.5%)
Greece	N [G]	Y	Y (15%)	Y	Y	Y (3%)
Hungary	N	N	Y (0-25%)	Y	Y	Y (4%)
Ireland	Y (0-30%) → N (in 2018) [H]	N	N	Y [I]	Y (0.2%)	Y (1%) [J]
Italy	Y (19%)	Y	N	Y [K]	Y (0.5-1.1%)	Y (9%)
Latvia	N	N	N	Y	Y (0.2-0.6%)	Y (2%)
Lithuania	Y (at 15%)	N	N	Y	Y (0.3-3.0%)	N
Luxembourg	Y (up to 42%) [L]	N [M]	N	Y	Y	Y (7%)
Malta	N	N	N	N	N	Y (7%)
Netherlands	Y (up to 50% in 2017) [N]	Y	N	Y	Y	Y (2%)
Poland	N [O]	N	N	Y	Y	Y (2%)
Portugal	N (but Y at 15% up to € 296 if mortgage loan is contracted before 1-1-12)	N	N	N	Y	Y
Romania	N	N	N	Y [P]	Y (0.1-0.2%)	Y (2-3%)
Slovak Republic	N	N	N	Y	Y	N
Slovenia	N	N	Y	Y [Q]	Y (0.3-1.1%)	Y (2%)
Spain	N (but Y at 15% if house acquired before 1-1-13)	N	N	Y [R]	Y	Y (6-6.5%)
Sweden	Y (at 30%)	N	Y (30%) [S]	N	Y (<0.75%)	Y (3.5%)
United Kingdom	N	N	N	N	Y	Y (0-12%)

Source: IBFD (cf. footnote 1620). [A] Only interest for constructing or renovating a house is deductible. [A] If married and younger than 35 year when signing the mortgage contract. [C] Up to a certain amount, tax is exempted. [D] A reduced VAT-rate of 15% for applies to houses supplied under social policy, which includes smaller houses. [E] Apart from these percentages, also a fixed amount has to be paid. [F] The portion of the interest payments which is deductible is gradually reduced from 85% in 2012 to 25% in 2019. [G] Abolished with effect of 1 January 2013. [H] Gradually outphased; applicable rate depends on date at which mortgage is taken out. Mortgage relief is abolished for all mortgages with effect from 1 January 2018. [I] A reduced rate of 13.5% applies. [J] A rate of 2% applies if the value of the house is larger than €1 million. [K] A reduced rate of 4-10% applies. [L] Up to an amount of € 2000 per year. [M] Abolished as of 1 January 2017. [N] The maximum rate is gradually reduced with 0.5 percentage point per year from 52% in 2014 till 38% in 2042. [O] Interest payments for mortgage loans taken until 2006 are deductible. [P] A reduced rate of 5% applies to houses supplied under social policy. [Q] A reduced rate of 8.5% applies to houses supplied under social policy, which includes smaller houses. [R] A reduced rate of 10% applies. [S] Deferall is possible under conditions.

The structure of the sections will mirror the analytical framework used in this study. Firstly, the determinacy and completeness of the rules on the fiscal treatment of debt will be discussed, followed by an examination of the possibilities to enforce these rules in a proportionate and dissuasive manner. Finally, the independence in amending, applying and enforcing these rules is analysed.

As it becomes clear from the table, Germany does not allow deduction of (mortgage) interest from the income tax. Consequently, this chapter does not contain separate sub-sections on the German tax treatment of debt. In the past, an own house subsidy (*Eigenheimzulage*) could be received in Germany for maximum eight years, upon fulfilling certain conditions.[1625] Yet, from 1 January 2006 it is no longer possible to apply for an *Eigenheimzulage.*[1626] Due to the maximum beneficial period of eight years, homeowners are no longer entitled to this subsidy. Besides, the *Eigenheimzulage* was not a form of mortgage interest deduction, but a tax subsidy which was independent of the manner of financing the residence.[1627] As such, it did not directly stimulate debt-financing of an own home.

In Germany, there is still a subsidy related to home-ownership, the *Wohnungsbau-Prämie,* which entails that people who contribute at least € 50 in a year to a *Bauspar* savings account, receive a subsidy of 8.8% of their saving contribution, at least over their savings up to € 512 (€ 1024 for a couple).[1628] So, the maximum yearly subsidy is € 45 (€ 90 for a couple). This subsidy is only available for people with a low-to-medium income, namely not higher than € 25,600 (€ 51,200 for couples).[1629] Hence, this subsidy stimulates homeownership by incentivising people to use the *Bauspar* system to save for buying a house. Indirectly, this can encourage borrowing, because savings through the *Bauspar* system are generally accompanied by a mortgage loan, when an own home is acquired. However, these incentives are not only indirect, but also small, due to the low maximum yearly amount of the subsidy. Therefore, the *Wohnungsbau-Prämie* does not require additional discussion.

[1625] See in particular §§ 1-9 of the *Eigenheimzulagengesetz*, BGBl. I, 1997, 734, available at http://www.gesetze-im-internet.de/eigzulg/.
[1626] § 19(9) *Eigenheimzulagengesetz*. Cf. Hillman (2006) and Schmidt (2008).
[1627] § 9(2) *Eigenheimzulagengesetz*.
[1628] § 3 *Wohnungsbau-Prämiengesetz* (Housing Subsidies Act), BGBl. I, 1997, 2678, available at http://www.gesetze-im-internet.de/wopg. See sub-section 4.3 of this study for a brief explanation of the *Bauspar* system.
[1629] § 2a *Wohnungsbau-Prämiengesetz.*

6.1. Determinacy and completeness of the rules on tax treatment of debt

Before discussing national rules on the tax treatment of debt, the question is how EU tax law affects their determinacy and completeness. In the EU, legal acts on taxation have mostly been adopted under the shared competence regarding the internal market.[1630] Allowing or prohibiting households to deduct interest expenses from their taxable income is part of a country's income tax policy and thus concerns direct taxation. There are no treaty provisions enabling the harmonisation of direct taxes.[1631] Henceforth, until now only a handful of directives concerning direct taxes have been adopted, all based upon art. 115 TFEU, which requires unanimity in the Council.[1632] None of these directives are relevant for the tax treatment of debt. So, EU law mainly affects direct taxation by means of negative integration, whereby the CJEU rules that certain national measures are prohibited, because of their negative impact on one of the four freedoms, and thus on the internal market. In its case law on direct taxes, the CJEU currently mainly relies on the "discrimination" rather than on the "obstacle" approach.[1633] This means that the Court reviews whether a measure discriminates between domestic and foreign individuals or undertakings rather than examining whether a measure constitutes a free movement obstacle. Consequently, the case law of the CJEU is, in principle, only relevant in cross-border situations, and not in purely internal situations. An influential and controversial case regarding mortgage interest deductibility (MID) in a cross-border situation is *Renneberg.*[1634] Basically, the CJEU decided that member states must offer non-residents who earn almost all their income in the member state of employment the same tax advantage regarding MID as residents.[1635] Apart from the fact that this body of case law only affects cross border situations, the issue discussed in *Renneberg* is not particularly relevant for this study, because it does not directly affect the determinacy and completeness of rules that restrict household debt levels. Accordingly, this body of case law will not be further discussed.

[1630] Terra & Wattel (2012), p. 7. This competence is enshrined in art. 4(2)(a) TFEU.
[1631] Terra & Wattel (2012), pp. 16-17; Adamczyk (2013), pp. 24-25. For indirect taxes, art. 110-113 TFEU are available as legal basis.
[1632] Terra & Wattel (2012), p. 17. Art. 114 TFEU cannot serve as legal basis for adopting legal acts on direct taxes, due to art. 114(2) TFEU, which excludes fiscal provisions.
[1633] Terra & Wattel (2012), pp. 58-63.
[1634] Case C-527/06 *Renneberg* [2008] ECR I-7735. For a critical discussion, see e.g. Terra & Wattel (2012), pp. 70-73. The issue at stake was whether denying a person who earns almost all his income in another member state, the possiliby to deduct mortgage interest is a violation of the provisions on the free movement of workers and capital.
[1635] Case C-527/06 *Renneberg* [2008] ECR I-7735, para. 60-64, 83. So, in *Renneberg,* the CJEU extended its *Schumacker* line of reasoning to MID (Case C-279/93 *Schumacker* [1994] ECR I-5535).

6.1.1. Determinacy and completeness of the Dutch rules on tax treatment of debt

Compared to other EU member states, the Netherlands has a relatively generous regime of mortgage interest deductibility, as table 6.1 shows. Since 1 January 2013 a reformed regime is in force, reducing deduction possibilities. Simultaneously, a transitional regime is in place till 1 January 2043 for existing mortgage debt. Consequently, the Dutch regime for deducting mortgage interest has become even more complex than it already was.[1636] This section starts with outlining the current rules on MID that affect the level of debt that households can take on and discusses the transitional regime insofar as necessary for understanding the determinacy and completeness of the rules. Likewise, conditions and exceptions are only analysed insofar as relevant for the overarching aim of this study. In addition, the rules concerning non-mortgage debt are briefly examined.

While MID stimulates debt-financing of an own home, another tax rule incentivises financing of an own home partly with non-debt. People aged 18-40 years can namely once receive € 100,000 without having to pay gift tax, if the gift is for buying or improving an own home, or reducing the own home debt.[1637] Normally the gift tax for this amount ranges between 10% and 30%.[1638]

6.1.1.1. The main features of the tax treatment of debt, in particular mortgage interest deductibility

Firstly, the position of the rules on MID within the Dutch income tax system needs to be clarified. The Dutch income tax system distinguishes three categories – Boxes – of taxable income, respectively taxable income from (1) work and dwelling, (2) substantial interest and (3) savings and investments. Primary dwellings and associated loans are located in Box 1, if satisfying certain conditions. All other debt – including consumer debt – is part of Box 3, which taxes income from savings and investments.[1639]

In Box 3, a tax of 30% is levied on the assumed yield over the tax base of savings and investments at 1 January of each year.[1640] Previously the assumed yield was 4%, but on 1 January 2017 a refined system

[1636] Cf. Albert (2013), p. 459; Arends & Bitter (2013).
[1637] Art. 33(5) and 33(7) *Successiewet* (Inherentance Act), available at http://wetten.overheid.nl/BWBR0002226. Some conditions apply: see art. 5 *Uitvoeringsregeling schenk- en erfbelasting* (Regulation on gift- and inherentance tax), available at http://wetten.overheid.nl/BWBR0027018.
[1638] Art. 24(1) Successiewet. The tax percentage is 10%, 18%, or 30%, depending on whether the gift comes from parents, grandparents, or others, respectively.
[1639] In rare situations, a debt can be part of Box 2, when borrowing in order to obtain substantial interest.
[1640] Art. 2.13 and 5.2(1) Wet IB 2001.

for calculating the assumed yield came into force, to align better with actual yields in recent years.[1641] The tax base consists of the value of the assets minus the economic value of the debts which are part of Box 3.[1642] Any part of the value of the tax base below € 25,000 (2017) (per person) is not taxed.[1643] Belongings which households use for personal aims are not counted as assets, unless they are predominantly meant as investment.[1644] For instance, a car and furniture are not part of the tax base. Only debt above € 3000 reduces the tax base, while debt below that amount – or € 6000 if two persons are fiscal partners – is disregarded.[1645]

The rules for taxing primary dwellings in Box 1 are totally different. Supposed advantages from a primary dwelling – imputed rent – are taxed at 0.75% of their value for most houses, but this percentage is lower for very cheap, and higher for very expensive houses.[1646] The imputed rent is based upon the official appraisal value of the house, as determined in accordance with the *Wet waardering onroerende zaken* (Wet WOZ) (Act on Real Estate Valuation).[1647] Associated costs for obtaining this income-generating house are deductible from taxable income. Therefore, interest on mortgage debt and costs for obtaining mortgage loans can be deducted, at least if satisfying the conditions of the *Wet inkomstenbelasting 2001* (Wet IB 2001) (Act on income tax 2001) and the legislation based upon this act.[1648]

Interest over mortgage debt is under certain conditions deductible from taxable income at – in principle –the marginal tax rate. The marginal rates in Box 1 differ per bracket: 36.55% for income up to € 19,981 (first bracket), 40.8% for income between € 19,982 and € 67,071 (second and third bracket) and 52% for any income above the lastmentioned amount (fourth bracket) (percentages and amounts

[1641] Then, there are two classes, I and II, which each a different assumed yield, of 1.63% and 5.39% respectively. The taxable part of the tax base up to € 75,000 is for 67% assigned to yield class I and for 33% to yield class II. The part of the tax base between € 75.000 and € 975.000 is for 21% assigned to yield class I and for 79% to yield class II. Finally, any part of the tax base above € 975.000 is fully assigned to the second yield class (see art. II(C) Belastingplan 2016 and pages 9-14 of the Explanatory Memorandum to the *Belastingplan 2016*, available at https://zoek.officielebekendmakingen.nl/stb-2015-538.html and https://www.rijksoverheid.nl/documenten/kamerstukken/2015/09/15/belastingplan-2016 respectively (last visited 10 March 2017)).
[1642] Art. 5.3(1) and 5.3(3) of Wet IB 2001.
[1643] Art. 5.2(1) and 5.5 of Wet IB 2001.
[1644] Art. 5.3(2)(c) Wet IB 2001.
[1645] Art. 5.3(3)(f) Wet IB 2001.
[1646] Art. 3:112(1) Wet IB.
[1647] Art. 3:112(2) Wet IB. The Wet WOZ is available at http://wetten.overheid.nl/BWBR0007119.
[1648] Art. 3.110, 3.112 and 3.120 Wet IB 2001, available at http://wetten.overheid.nl/BWBR0011353.

of 2017).[1649] However, since 1 January 2014 the rate at which mortgage interest payments can be deducted for the fourth bracket is reduced with 0.5 percentage point a year to 38% in 2042, which is the intended tax tariff in the second and third bracket at 1 January 2018.[1650] In 2017, the maximum rate for deducting mortgage interest is 50%.

Overall, the deductible costs are much higher than the taxed imputed rents.[1651] Consequently, home ownership and borrowing are strongly subsidised and stimulated. Moreover, the supposed advantages from a primary dwelling – imputed rent – are not taxed insofar as they are larger than the costs of the primary dwelling – the deductible interest and costs.[1652] Hence, if a homeowner has little or no mortgage debt for which interest can be deducted, the taxation of imputed rent is partly or completey waived.[1653] This rule, in force since 1 January 2005, aims at incentivising households to redeem their debt and to reduce debt-financing of their home.[1654]

6.1.1.2. Eligibility conditions for deducting mortgage interest

With the view to reduce borrowing incentives, the Wet IB 2001 and related legislation have attached eligibility conditions – to qualify for MID – to the house, to the deductible interest and costs, and last but not least, to the mortgage debt for which interest can be deducted. Some of the rules governing these conditions are quite specific, but require nevertheless discussion, insofar as they are directly related to the amount of interest payments which can be deducted.

Firstly, for interest and costs being eligible for MID, the house for which the mortgage loan is taken out, needs – in principle – to be owned by the debtor and must be his main residence, not temporarily,

---

[1649] See https://belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/prive/inkomstenbelasting/heffingskortingen_boxen_tarieven/boxen_en_tarieven/overzicht_tarieven_en_schijven/ (last visited 10 March 2017).
[1650] This is enshrined in art. 2.10(2) and 2.10a(2) Wet IB 2010 and a result of *the Wet maatregelen woningmarkt 2014 II* (*Staatsblad,* 2013, 583) available at: https://zoek.officielebekendmakingen.nl/stb-2013-583.html (last visited 8 August 2016). Cf. Fiscale Encyclopedie De Vakstudie Inkomstenbelasting, Aantekening 1.23 (via Kluwer Navigator). For examples of the consequences, see Van den Berg (2013).
[1651] The advantages of owning an own home are taxed at a rather low rate, according to *inter alia* the Centraal Planbureau (2010, pp. 57-58) and Wieser & Mundt (2014, p. 257), in light of the reasoning that it is taxed because it is an investment good and thus a source of income. Cf. Van der Paardt (2013), pp. 126-127.
[1652] Art. 3.123a Wet IB 2001.
[1653] The reduction is equal to the difference between what the homeowner should have paid as imputed rent, and what he can deduct in relation to his house (art. 3.123a(1) Wet IB 2001). In other words: if the amount of imputed rent is higher than the amount of deductible interest and costs, the former is set equal to the latter.
[1654] Cf. Kastelein & Sour (2014), p. 491; Bruijsten & Van Rij (2007).

but permanent. These two issues are further delineated in the Wet IB 2001 and by case law.[1655] In addition, conditions have been attached to the deductible interest and the deductible costs for obtaining mortgage loans. Interest and costs have to burthen the borrower; meaning that he really has to pay it.[1656] Therefore, it is not allowed to receive a reduction via the backdoor. Traditionally, deductible costs are fees, notarial costs, registration fees for the cadaster, and the like.[1657] Art. 3.120(3)-(5) Wet IB 2001 contains some limitations on the time at which costs can be deducted, in order to avoid tax planning, but not on the total amount of deductible expenses.[1658]

There are rules in place to prevent the deduction of interest payments on credit that is not used for financing an own home. Only interest paid for the so-called *eigenwoningschuld* (own home debt) is deductible.[1659] Debt qualifies as own home debt if certain conditions have been fulfilled, and is part of Box 3 otherwise.[1660] Firstly, the debt must be taken out in relation to the house.[1661] This is the case if the loan is incurred for (a) buying an own house, up to the amount which it costs to acquire the house, (b) improving or maintaining an own house, up to the amount which it costs to improve or maintain the house and insofar as there is written evidence for these costs and (c) paying for the costs of acquiring the loans mentioned under (a) and (b), with for commission a maximum of 1.5% of the amount of the obtained mortgage loan and of € 3630.[1662] So, if the amount of a mortgage loan is raised and the money is used for consumption, it is not allowed to deduct interest payments for this part of

[1655] Art. 3:111(1) Wet IB. Interest for debt related to a house which is for sale, but was the main residence in at least one of the last three years can also be deducted. The same is true for a house which is empty or under construction, but meant as main residence in one the coming three years (art. 3.111(2)-(3) Wet IB). A house qualifies as under construction if construction work has started (Hoge Raad 3 October 2014, para. 3.3.1-3.3.7, NL:HR:2014:2872). The specific and detailed rules are not directly related to the deduction of interest and thus not of prime interest for this study: for a further discussion, see e.g. Kastelein & Sour (2014), pp. 444-454.
[1656] Besluit (decree) CPP2006/412M of 12 november 2006, *Staatscourant* 2006, nr. 228, available at: https://zoek.officielebekendmakingen.nl/stcrt-2006-228-p13-SC77766.html. See also section 5.2 of Besluit DGB2010/921 of 10 June 2010, *Staatscourant* 2010, nr. 8462, available at: https://zoek.officielebekendmakingen.nl/stcrt-2010-8462.html (both last visited 6 August 2016). Cf. Kastelein & Sour (2014), p. 462. Note that the term "interest" is not defined in the Wet IB 2001, but only in case law (see HR 6 April 1938, B nr. 6634; HR 15 July 1980, *BNB* 1980/315).
[1657] Kastelein & Sour (2014), p. 459. See also the decrees mentioned in the previous footnote.
[1658] Art. 3.120(5) Wet IB 2001 states that commission is deductible in the year of obtaining the loan up to 1.5% of the amount of the obtained mortage loan and up to € 3630. Higher fees have to be spread over the entire term of the redemption (Art. 3.120(3)-(5) Wet IB 2001. Cf. Kastelein & Sour (2014), pp. 459-460).
[1659] Art. 3.120(1) Wet IB 2001.
[1660] Cf. Van Mourik (2013), p. 663.
[1661] Art. 3.119a(1)(a) Wet IB 2001.
[1662] Art. 3.119a and 3.123 Wet IB 2001. According to art. 3.119a(2)(c) Wet IB 2001 interest on debt which is used to pay for commission is only deductible insofar the commission is not higher than the percentage and amount of art. 3.120(5) Wet IB 2001, i.e. 1.5% of the amount of the obtained mortage loan and up to € 3630.

the loan.[1663] It does not matter tor the eligibility for MID who supplied the loan; this can be family.[1664] Still, the burden to prove that a loan is meant for acquiring, maintaining or improving an own home is on the borrower who claims deductibility of interest for the debt.[1665]

Since 1 January 2013, a new condition reduces deduction possibilities and previously existing incentives to abstain from redemption. Debt only qualifies as own home debt if the entire loan is redeemed in maximum 30 years, amortising each month no less than the monthly amount under an annuity scheme.[1666] The amortisation obligation must be really satisfied, which is yearly verified.[1667] In case of refinancing (part of) the own home debt, the existing amortisation schedule has to be continued in order to avoid circumvention.[1668] If the outstanding amount of debt is higher than allowed according to the amortisation schedule, due to temporary arrears, the borrower does not immediately loose the right to deduct interest, but receives a year to undo the repayment backlog.[1669] If the borrower is still in arrears after that year, interest paid for that loan becomes ineligible for MID, unless he plausibly shows that the arrears are a result of (1) a lack of repayment ability or (2) an unintentional mistake.[1670] Only in these two situations interest remains deductible, if fulfilling certain conditions.[1671] A loan which became ineligible for MID due to a repayment backlog is moved to Box 3.[1672] If the repayment backlog is repaired, the loan can become part of the own home debt again.[1673]

However, for mortgages taken out before 1 January 2013, redemption was and remains no condition for being eligible for deducting interest. Because redemption was not mandatory before 2013,

[1663] Kastelein & Sour (2014), p. 464.
[1664] See e.g. Hoge Raad 3 April 2015, ECLI:NL:HR:2015:809.
[1665] See e.g. Hoge Raad 22 October 2004, para. 3.4-3.7, NL:PHR:2004:AH9156). Cf. Hoge Raad 27 April 2007, para. 3.3, NL:HR:2007:BA3865; Hof Amsterdam 13 October 2011, para. 4.8-4.10, NL:GHAMS:2011:BU1584; Hof Amsterdam 8 March 2012, para. 4.2.c, NL:GHAMS:2012:BV8669; Hof 's-Hertogenbosch 28 August 2013, para. 4.7-4.8, NL:GHSHE:2013:3928; Hof Arnhem-Leeuwarden 3 September 2013, para. 4.2-4.3, 4.7, 4.10, NL:GHARL:2013:6476; Hof Amsterdam 13 March 2014, para. 4.5, NL:GHAMS:2014:1086; Hof Amsterdam 19 February 2015, para. 4.2.4-4.2.5; NL:GHAMS:2015:547.
[1666] Art. 3.119a(1)(b)-(c) Wet IB 2001. With an annuity mortgage, the monthly gross debt service costs remains the same during the amortisation period. However, the part of the costs consisting of interest payments decreases over time.
[1667] This is verified for each loan; not for aggregrate own home debt, because not all debt has necessarily the same start date and maturity (art. 3.119c(1) and (7) Wet IB 2001. Cf. Van Mourik (2013), p. 664).
[1668] Art. 3.119c(3) Wet IB 2001. Cf. Van Mourik (2013), p. 664-665.
[1669] Art. 3.119e(1) Wet IB 2001.
[1670] Art. 3.119e(2) Wet IB 2001.
[1671] Art. 3.119e Wet IB 2001. Cf. Kastelein & Sour (2014), pp. 481-483; Arends & Bitter (2013).
[1672] Art. 3.119e(4) Wet IB 2001.
[1673] See especialy art. I(C) in the *Voorstel van wet ter Wijziging van enkele belastingwetten en enige andere wetten (Overige fiscale maatregelen 2016)* and para. 4.1 in the attached Explanatory Memorandum, available at https://www.rijksoverheid.nl/documenten/kamerstukken/2015/09/15/overige-fiscale-maatregelen-2016 (last visited 6 August 2016).

mortgages designed to profit maximally from the MID were commonplace, with as common feature that capital was built up on a separate account, and, normally, after thirty years used for (partial) redemption.[1674] Under the transitional arrangements and a range of conditions, interest on these types of mortgage loans is deductible for a maximum of 30 years after taking out the loan, at least for the part of the debt which existed at 31 December 2012 (called "existing own home debt").[1675] Since any new debt is subject to the new rules, two regimes will coexist. When borrowers redeem (part of) their existing debt, the amount qualifying as existing own home debt diminishes.[1676] However, refinancing existing own home debt with a similar new loan is allowed without losing the right to deduct interest.[1677]

Thirdly, if a person borrows from a lender without information duty, the borrower needs to fulfil some information requirements towards the *Belastingdienst* (Tax Administration) in order to be eligible for MID.[1678] This obligation is relevant when someone borrows from, for example, family members or foreign lenders.[1679] The information is the date of taking the loan, its size at that time, its contractual duration and amortisation scheme, the monthly interest rate, and finally some information to identify the lender.[1680]

Several types of debt are excluded from the own house debt; *inter alia* debt taken out for paying the interest on mortgage debt – so, interest over interest is not deductible – and debt with a maturity exceeding thirty years.[1681] In addition, there are rules to avoid that people benefit more than thirty years from MID when moving: if a homeowner moves to a cheaper house, or starts to rent and the

---

[1674] There are three main types of these mortgages. With these mortgage types the homeowner respectively (1) takes an endowment insurance, pays premiums and receives a lumpsum at the end to redeem the loan, (2) has a blocked savings account, which is unblocked at the end to redeem the loan or (3) has an investment account and uses the yield to redeem the loan (Gradus (2012), Kastelein & Sour (2014), pp. 492-494).
[1675] Art. 10bis.1, 10bis.2, 10bis.9 and 10bis.10 Wet IB 2001. Under some conditions also loan taken out in the first months of 2013 qualify as existing own home debt (art. 10bis.1(2)m 10bis.2(2) and 10bis.2b Wet IB 2001). For the conditions, see art. 10bis.1 to 10bis.12 Wet IB 2001. These are not directly relevant for this study, but are discussed in, among others, Kastelein and Sour (2014), pp. 494-516. Cf. Snoeks & Van Mourik (2014).
[1676] Art. 10bis.1(3) Wet IB 2001.
[1677] Art. 10bis.1(3) Wet IB 2001. More specifically, this right to deduct interest is retained if debt existing on 31 December 2012 partly or completely is redeemed and refinanced not later than in the next calender year.
[1678] Art. 3.119a(1)(d) in combination with 3.119g(1) Wet IB 2001.
[1679] On the information duty of Dutch businesses, including banks, see in particular art. 52-53 of the *Algemene wet inzake rijksbelastingen* (AWR) (General act on state taxes), available at http://wetten.overheid.nl/BWBR0002320.
[1680] Art. 17b *Uitvoeringsregeling inkomstenbelasting 2001*, available at: http://wetten.overheid.nl/BWBR0012031.
[1681] Art. 3.119a(6) Wet IB 2001. Also excluded are debt to the partner and and debt for buying (part of) a house from a partner, if the total debt increases due to this transaction. For more information, see Kastelein & Sour (2014), pp. 469-471.

previous own home debt is therefore higher than the current or non-existing own home debt, the difference is registered, together with the remaining amortisation duration in months. This is called the *aflossingsstand* (redemption position).[1682] If the person at a later moment takes out a new mortgage loan, the maximum period of thirty years for MID will not start from scratch, but will continue with the freezed amortisation duration for the part not exceeding the redemption position.

Another provision, created in 2004, seeks to prevent that borrowers who move finance their new house completely with debt – in order to benefit from MID – and not partly with the proceeds of the sale of their previous house.[1683] If a homeowner moves, a so-called *eigenwoningreserve* (own home reserve) is created. This is the difference between the selling price of the house and the amount of own home debt at that moment, minus the costs for selling the house.[1684] A positive own home reserve is subtracted from the new own home debt.[1685] For example, if someone sells a house for € 200,000, his own home debt was € 110,000 before the sale and the costs for selling are € 5,000, his own home reserve is € 85,000. If he buys a new house for € 220,000, his maximum own home debt becomes € 135,000. An own home reserve expires after three years if it cannot be settled with the own home debt.[1686]

The provisions of the Wet IB 2001 contain more rules on moving, rules for partners and the situation that several people live together in one house, and rules on (temporary) letting, but these will not be discussed in this chapter, since they are not of direct relevance for this study.[1687] Furthermore, not only interest and costs are deductible under the conditions discussed in this sub-section, but also periodic payments related to *erfpacht* (leasehold) and *recht van opstal* (leasehold estate) of an own home are deductible, without further limitations.[1688] This gave rise to constructions to avoid the limitations to interest deduction. However, these constructions were on the radar of the Tax Administration and the

---

[1682] Art. 3.119d(1) Wet IB 2001. Cf. Kastelein & Sour (2014), pp. 479-481.
[1683] Kastelein & Sour (2014), p. 467. Cf. Bruijsten & Van Rij (2007).
[1684] Art. 3.119aa(1) Wet IB 2001. Cf. Kastelein & Sour (2014), p. 467. Note that an existing own home reserve is reduced if moving to a more expensive house: the reduction is equal to the difference between the price of the house and the own house debt (art. 3.119aa(2)(a) Wet IB 2001).
[1685] Art. 3.119a(3) Wet IB 2001.
[1686] Art. 3.119aa(3) Wet IB 2001. So, if someone rents a house for more than three years, his own home reserve expires.
[1687] On partners and several people living together in one house, see e.g. art. 3.111(8)-(9), 3.115, 3.119a(4), 3.119c(9), 3.119d(4) and 3.121 Wet IB 2001. On moving, see especially art. 3.119f Wet IB 2001. On (temporary) letting, see art. 3.113 and 3.114 Wet IB 2001.
[1688] Art. 3.120(1)(c) Wet IB 2001.

legislator, and the Supreme Court has recently struck down such a construction.[1689] Eerenstein (2015) and the case notes on these recent cases of the Supreme Court provide more information on (the diminished prospects of) these constructions.[1690]

Lastly, there is one important exception to the rule that interest may only be deducted if it concerns own home debt: in case a borrower is confronted with residual debt after selling his own home in the period of 29 October 2012 till 31 December 2017, interest and costs for this residual debt are deductible for fifteen years.[1691]

6.1.1.3. Evaluating the determinacy and completeness of mortgage interest deductibility in the Netherlands

It is beyond doubt that the Dutch regime for MID incentivises households to borrow when buying a house. It is equally true that a range of conditions limits the deduction of interest. This sub-section evaluates to what extent these conditions and other rules regarding MID are determinate and complete.

Firstly, there are differences in the determinacy of conditions. Some lack vagueness and are thus determinate. An example is the rule that the tax on imputed rent is reduced when it is larger than the deductible costs. However, several other conditions are – more or less – indeterminate. Firstly, borderline cases cannot be avoided when interpreting the condition that the debt must be taken out for maintaining or improving the house. This is evidenced by the substantial amount of case law related to this requirement.[1692] Although this vagueness creates uncertainty for borrowers, it is not necessarily problematic for the effectiveness of this condition, because of the requirement that a person who claims deductibility must prove that the debt is related to his house. Putting the burden of proof on the borrower reduces the possibilities to abuse the inherent degree of vagueness. Moreover, for some types of loans, specifically meant for financing maintenance or improvement of an own home, the bank directly checks the invoices, before providing the money. One of the reasons that banks adopted this practice is their responsibility for supplying information to the Tax Administration about deductible interest.[1693] If provisions are somewhat vague, their interpretation by the Tax Administration, and

[1689] Hoge Raad, 10 October 2014, ECLI:NL:HR:2014:2927, *BNB* 2015/38 or *FED* 2014/100. Cf. Hoge Raad, 19 September 2014, ECLI:NL:HR:2014:2694, *BNB* 2015/11.
[1690] *Ibidem.*
[1691] Art. 3.120a Wet IB 2001.
[1692] Many of the cases referred to in footnote 1665 concern this condition.
[1693] *Supra,* footnote 1679.

especially courts, becomes more important. So, enforcement is more relevant in these circumstances. Therefore, at the moment that enforcement is weak, this possibility to deduct mortgage interest might provide borrowers with an opportunity to deduct too much interest.[1694]

Another source of indeterminacy is the complexity of the Dutch regime of MID, which is hard to grasp. This regime becomes especially complex when all kind of rules interact, for instance, these on existing and current own home debt, the own home reserve and moving. Albert (2013) provides various examples of the difficulties which might arise in these situations. Due to this complexity, the system of MID becomes opaque and difficult to understand. This might impede its determinacy.[1695] In general, complexity can facilitate creative compliance. Nevertheless, professionals should be able to understand the rules. The complexity does not seem to be of a degree that creative compliance is facilitated, or that it is difficult to assess whether a borrower abides by the rules or not.

The abundance of specific rules on MID suggests that the regime is relatively complete. Indeed, many rules have been adopted to close loopholes. For instance, the rules on own home reserve intend to avoid that people indirectly finance consumption by a mortgage loan by using profit from the sale of the previous house for consumption, and take on new mortgage debt for buying the new house. Comparably, the rules on the redemption position greatly contribute to avoiding that borrowers profit longer than thirty years from MID. The condition that interest has to burthen on the borrower closes the door for discounts via the backdoor. All this contributes to the completeness of the rules.

Moreover, several exceptions are subject to protective conditions. The time conditions attached to the possibility to deduct interest and costs for residual debt are an example. A protective condition regarding the obligation to redeem the mortgage loan is that the borrower in case of arrears needs to prove, on pain of losing the right to deduct interest, that the arrears are a result of either a lack of repayment ability or an unintentional mistake. Also, a protective condition is attached to the possibility to deduct interest on loans taken for financing the costs of acquiring own home debt: a loan for financing commission is only part of the own home debt up to 1.5% of the amount of the obtained mortgage loan, and up to € 3630. This prevents that interest is labelled as commission in order to circumvent the prohibition to deduct interest over interest. However, circumvention of this prohibition is possible up to the aforementioned amounts. Yet, it is incoherent to prohibit deducting interest paid over interest, but to allow the costs of acquiring own home debt to be part of the own home debt.

[1694] This will be further discussed in sub-section 6.2.1.3.
[1695] Cf. sub-section 1.4.2.3.

Actually, such costs and interest are not fundamentally different, because both are costs related to homeownership, and a remuneration for borrowing. Moreover, allowing deducting interest paid on loans for financing the costs of acquiring own home debt is incoherent with the regulatory LTV ratio, which is gradually reduced to 100% (as of 1 January 2018). It provides incentives in the opposite direction as the LTV ratio, namely to borrow more. In fact, even when the regulatory LTV ratio reaches 100%, it is possible to deduct interest for own home debt up to 101.5%.[1696] This is possible, because the definition of mortgage credit in the Bgfo and the definition of own home debt in the Wet IB 2001 are different: hence, the LTV ratio restricts only secured credit, whereas unsecured credit can be part of the own home debt.

Moreover, the completeness is undermined by the fact that certain rules can be circumvented. For instance, the redemption position can be influenced by redeeming a large part of the loan just before selling the house. By doing so, the freezed amortisation duration has to be continued for a lower amount, and a new amortisation period of thirty years starts for a larger amount of “new” own home debt. Nevertheless, generally the rules hamper easy circumvention. For example, circumventing the own home reserve is possible by renting a house for more than three years before moving to a more expensive own house, but this is quite cumbersome.

Overall, the Dutch regime of MID incentivises households to borrow, notwithstanding the taxation of imputed rent and the rules which restrict the deduction possibilities to a certain extent. A lot of conditions contribute to the completeness of the rules. Nevertheless, these rules suffer a bit from indeterminacy and incompleteness. The former results mainly from the condition that debt can be part of the own home debt if taken for maintaining or improving the house, and to some extent from the complexity of the regime. The incompleteness is particularly a consequence of some possibilities to circumvent rules.

6.1.2. Determinacy and completeness of the Irish rules on fiscal treatment of debt

Ireland has reformed its regime for mortgage interest relief (MIR) – this term is used in Ireland instead of mortgage interest deductibility – significantly since 2009. As of 1 May of that year, MIR was

[1696] This percentage might be even higher if loans are taken for maintaining and improving the house and the costs of the maintenance and improvement do not fully translate in a higher house value.

restricted to the first seven years of a mortgage.[1697] In 2010, it has been decided that mortgage loans taken out after 31 December 2011 (later changed in 31 December 2012) will not be eligible for MIR, and that the possibility to receive relief for mortgage interest will be entirely abolished, for every loan, after 31 December 2017.[1698] However, the rule that MIR was restricted to the first seven years of a mortgage was abandoned for mortgages taken out in and between 2004 and 2011 (later changed in 2012), in order to support people who bought their home during the housing bubble, and who would face financial difficulties if MIR would stop after seven years.[1699] In addition, the rates at which mortgage interest relief is granted have been altered in 2010.[1700]

Since October 2013, Ireland offers howeowners the possibility to claim 13.5% relief for costs for renovating their house, provided that these costs are higher than €4,405.[1701] The maximum relief is € 4,050.[1702] Homeowners can claim relief until 31 December 2018.[1703] The possibility to claim this relief is subject to various conditions, regarding the residences that qualify for relief, the contractors that are allowed to carry out the work, and the information that a taxpayer must provide to the Revenue Commissioners, the Irish governmental body responsible for taxation.[1704] Most importantly, from the perspective of this study, this relief is granted for the costs of renovation, not for interest payments or other borrowing costs. So, it does not directly stimulate debt financing.

1697 Section 3 of Finance Act 2009, available at http://www.irishstatutebook.ie/eli/2009/act/12/enacted/en/html (last visited 10 November 2015). Cf. the country survey of Ireland in the database of the IBFD: http://online.ibfd.org/kbase and O'Brien (2009), p. 68.

1698 Section 7 of Finance Act 2010. Cf. section 9 of Finance Act 2012. These acts are available at respectively http://www.irishstatutebook.ie/eli/2010/act/5/enacted/en/html and http://www.irishstatutebook.ie/eli/2012/act/9/enacted/en/html (both last visited 12 November 2015).

1699 See the second stage of the discussion in the Dáil Éireann, the Irish lower house and principal chamber of the parliament, accessible via: http://www.oireachtas.ie/viewdoc.asp?fn=/documents/bills28/bills/2010/0910/document1.htm (last visited 12 November 2015).

1700 Section 7 of Finance Act 2010.

1701 Section 477B(1)-(3) Taxes Consolidation Act 1997 (TCA 1997). Unfortunately, later amendments have not been integrated in the publically available official version of the Taxes Consolidation Act 1997, but an unofficial consolidated version is available at http://www.taxworld.ie/tca-1997/. Section 477B(1)-(3) TCA 1997 is inserted by section 5 Finance (No. 2) Act 2013, http://www.irishstatutebook.ie/eli/2013/act/41/enacted/en/html (both last visited 10 March 2017). The minimum costs of €4,405 are the costs excluding VAT; it is € 5,000 including VAT, but relief is not granted over VAT.

1702 Section 477B(3)(c) TCA 1997 (including amendments).

1703 Section 477B(2) TCA 1997 (including amendments), as amended by section 9 Finance Act 2015, available at http://www.irishstatutebook.ie/eli/2015/act/52/enacted/en/html, and section 8 Finance Act 2016, available at http://www.irishstatutebook.ie/eli/2016/act/18/enacted/en/html. These acts prolonged the date till 31 December 2018; in the first instance, it was 31 December 2015.

1704 Section 477B TCA 1997 (including amendments). This is further explained in the Tax and Duty Manual of the Revenue Commissioners, part 15-01-43, available at http://www.revenue.ie/en/about/foi/s16/income-tax-capital-gains-tax-corporation-tax/part-15/15-01-43.pdf (last visited 8 August 2016).

6.1.2.1. The main features of mortgage interest relief in Ireland

The Irish regime for mortgage interest relief is based upon sections 244 till 245 of the Taxes Consolidation Act 1997 (TCA 1997), and the acts amending these provisions, which are several of the yearly adopted Finance Acts.[1705] Under the present rules, there are three relevant periods for determining whether a loan can be eligible for MIR.[1706] Firstly, no interest relief is possible for loans taken out until 2003. The same is true for mortgage loans taken out since 2013.[1707] Loans taken out in the years 2004-2012 are eligible for mortgage interest relief till 2017, if certain conditions have been fulfilled. This includes top up loans, which increase the amount of existing mortgage loans, if these top up loans are taken out in this period.[1708]

The rate at which mortgage interest relief is granted, as well as the maximum relievable interest, differs for first time and non-first time buyers.[1709] The rate is 15% for the latter category.[1710] There is one exception to this rule: 30% interest relief is granted for loans taken out in or between 2004 and 2008, if the loan concerns a second or subsequent qualifying residence, but the first qualifying residence was purchased on or after 1 January 2004.[1711] For non-first time buyers, the maximum amount of interest in a year for which relief can be obtained, is € 6000 for a couple and € 3000 for an individual.[1712] This amount is called relievable interest. When the 15% rate applies, this results in a yearly maximum interest relief of € 900 and € 450, respectively.

For first time buyers, the rate is 25% in the first and second year of receiving the relief, 22.5% in the third, fourth and fifth year of receiving the relief, and 20% in the sixth and seventh year of receiving the relief.[1713] If someone moves within the first seven years, he is still treated as a first time buyer for

[1705] *Supra,* footnote 1701.
[1706] Section 244(1)(a) TCA 1997 (including amendments).
[1707] Note that the section 9 of the Finance Act 2013 adds some sub-sections to section 244 TCA 1997, namely section 244(7)-(10). This covers some specific situations where (part) of the relevant actions occurs after the cut-off date of 31 December 2012, but loans can nevertheless be eligible for MIR. Examples are loans agreed in 2012, but partly taken out in 2013 (section 244(8) TCA 1997) or loans taken out in 2012 for constructing a house in 2013 (section 244(7)(b) TCA 1997).
[1708] Cf. Revenue Commissioners (2009).
[1709] Note that section 244(3) TCA 1997 (including amendments) regulates the situation that a first-time buyer marries (or becomes the civil partner of) a non first-time buyer.
[1710] Section 244(2(a)(i)(I) TCA 1997 (including amendments).
[1711] Section 244(2(a)(ii) TCA 1997 (including amendments).
[1712] Supra, footnote 1706. If the partner of the borrower dies and he hence becomes an individual instead of a couple, he is still granted a tax credit up to the maximum amount of a couple, according to section 244(6) TCA 1997 (including amendments).
[1713] Section 244(2(a)(i)(II) TCA 1997 (including amendments).

seven years.[1714] After the seventh year, the rate for non-first time buyers (15%) applies. Top-up loans can profit from the first time buyer rate, as long as this rate still applies to the already existing qualifying loan; otherwise the rate for non-first time buyers applies.[1715] As an exception to these rules, for loans taken out in and between 2004 and 2008, 30% interest relief is granted, in every year till 2017.[1716] For first time buyers, the relievable interest is € 20,000 for a couple, and € 10,000 for an individual.[1717] So, a couple can receive a yearly relief up to € 6000 (if the 30% rate applies). For every buyer, first-time or not, the maximum amount of interest relief can never exceed the amount which reduces the income tax to zero.[1718]

Currently, the Irish government is considering extending the mortgage interest relief scheme for a few years after 2017, on a tapered basis, in order to support homeowners who would otherwise be faced with strongly rising financing costs after 31 December 2017. Three options are considered.[1719] Firstly, MIR can be granted to its current recipients at 75% of the current level in 2018, 50% in 2019, 25% in 2020, and zero from 2021. The second option is to reduce the maximum ceiling per individual/couple to €2,250/€4,500 in 2018, €1,500/€3,000 in 2019, €750/€1,500 in 2020, and zero thereafter. The third option is the same as the first option, but only for homeowners who were first-time buyers during the peak of the housing boom, namely between 2004 and 2008.

6.1.2.2. Eligibility conditions for mortgage interest relief in Ireland

In order to qualify for mortgage interest relief, loans must be taken out between 2004 and 2012, and need to meet several other eligibility conditions: interest relief can solely be granted for interest paid in respect of a qualifying loan, in relation to a qualifying residence.[1720]

A qualifying residence is a house in a state of the European Economic Area, which is used as the sole or main residence of the taxpayer, his former partner, or a dependent relative who uses the house rent-free and without any other consideration.[1721] A dependent relative is a widowed parent of the

[1714] Tax and Duty Manual, part 08.03.08, para. 11, available at http://www.revenue.ie/en/about/foi/s16/income-tax-capital-gains-tax-corporation-tax/part-08/08-03-08.pdf (last visited 8 August 2016).
[1715] Revenue Commissioners (2009).
[1716] Supra, footnote 1711.
[1717] Supra, footnote 1706. Cf. footnote 1712 for the situation that the partner of the borrower dies.
[1718] Section 244(2)(b)(ii) TCA 1997 (including amendments).
[1719] Tax Strategy Group (2016), para. 55-72. Cf. https://www.kildarestreet.com/wrans/?id=2017-02-28a.416&s=speaker%3A433 (last visited 10 March 2017).
[1720] Section 244(1)(a) TCA 1997 (including amendments).
[1721] *Ibidem.*

taxpayer or his partner, or another relative ‘who is incapacitated by old age or infirmity from maintaining himself or herself’.[1722] The taxpayer does not necessarily have to own the house; it matters whether it is his home for the greater part of the time.[1723] So, interest for a loan related to a secondary residence is not eligible for MIR. One exception exists to this general rule: if the taxpayer acquired a new sole or main residence, but has not yet disposed his previous sole or main residence, the latter shall still be treated as a qualifying residence for a period of a year after acquiring the new home.[1724] This exception is subject to conditions: the taxpayer must show – to the satisfaction of the inspector – that he intends to dispose of his previous sole or main residence, and has taken and is taking all reasonable steps necessary for doing this.[1725] So, temporarily, two houses can simultaneously be a qualifying residence.

Whether a loan is a qualifying loan is determined by its aim: it is a qualifying loan, if used ‘solely for the purpose of defraying money employed in the purchase, repair, development or improvement of a qualifying residence or in paying off another loan or loans used for such purpose.’[1726] Hence, the purpose of the loan, and not its secured or unsecured status determines the eligibility of the interest paid for it for MIR. If part of the loan is used for other purposes than purchasing, repairing, developing or improving the qualifying residence, the amount of interest which qualifies as relievable interest is reduced *pro rata.*[1727]

The TCA 1997 includes two exceptions to the general rule determining whether a loan is a qualifying loan. One restricts the “qualifying loan” concept, whereas the other extends it. Firstly, there are situations where a loan is not regarded as a qualifying loan, although it meets the aforementioned requirements. This is the case if the loan is meant for defraying money for buying a house from the taxpayer’s spouse, or buying a house which is previously sold by the taxpayer or his spouse.[1728] This rule prevents several types of abuse of the system of MIR with a view of obtaining more interest relief. Firstly, a couple cannot enjoy the benefits of a first-time buyer for the second time by swapping the house among them. Also, it is no option to raise the loan at the moment of the repurchase of the house

[1722] Section 466(2) TCA 1997 (including amendments).
[1723] Tax and Duty Manual, part 08.03.08, para. 13 (*supra*, footnote 1714).
[1724] Section 244(5) TCA 1997 (including amendments).
[1725] *Ibidem.*
[1726] Section 244(1)(a) TCA 1997 (including amendments).
[1727] See e.g. Office of the Chief Inspector of Taxes (1998), pp. 18-20.
[1728] Section 244(4)(a)(i)-(ii) TCA 1997 (including amendments). However, these rules do not apply if the taxpayer who buys the house is separated from his or her spouse (section 244(4)(b) TCA 1997 (including amendments)).

or the purchase from the spouse, and use the extra debt for other purposes, such as consumption.[1729] Moreover, a loan is not considered a qualifying loan if the house is purchased from a person connected to the buyer and it appears that the purchase price substantially exceeds the house value, or when the house is repaired, developed or improved by a person connected to the home owner and the costs of this work substantially exceeds its value.[1730] In this situation, it would have been possible to overpay the person concerned, in order to raise the amount of the loan for which interest relief can be given, and receive the overpaid money back from that person. This overpaid amount will however not be considered as a qualifying loan. So, these restrictions of the "qualifying loan" concept aim at preventing abuse.

The "qualifying loan" concept is extended by the second exception, which concerns a bridging loan and is related to the exception to the rule about the qualifying residence, as discussed above. If the taxpayer moves to a new sole or main residence, but has not yet disposed his previous sole or main residence, he can receive interest relief on a bridging loan. This is defined as a loan which is used to 'defray in whole or in part the cost of the acquisition or the disposal or both'.[1731] Interest relief is given for a maximum of one year, as if the taxpayer pays no other relievable interest.[1732] In other words, the maximum relievable interest for a bridging loan is € 6000 for a couple or € 3000 for an individual, on top of the maximum relievable interest for a "normal" qualifying loan. The taxpayer must proof the existence of the bridging loan and the associated interest payments, and is not allowed to use the loan for other purposes.[1733]

6.1.2.3. Evaluating the determinacy and completeness of mortgage interest relief in Ireland

The outphasing of mortgage interest relief by the Irish legislature completely removes these tax-induced borrowing incentives. The question is as how to evaluate the determinacy and completeness of the rules governing the mortgage interest relief which can be received until 31 December 2017, and probably afterwards for a few more years on a tapered basis. In particular, it is relevant whether the restrictive rules are determinate and complete.

[1729] Cf. Taxes Consolidation Act 1997 Notes for Guidance, Part 8, pp. 18-19. These notes are available at http://www.revenue.ie/en/practitioner/law/notes-for-guidance/tca/ (last visited 12 November 2015).
[1730] Section 244(4)(a)(iii) TCA 1997 (including amendments).
[1731] Section 245(1)(b) TCA 1997 (including amendments).
[1732] Section 245(1) TCA 1997 (including amendments).
[1733] Section 245(1)-(2) TCA 1997 (including amendments).

Firstly, the time restrictions – only loans taken out in the years 2004 till 2012 can be eligible for MIR – are clear and encompassing and thus determinate and complete.[1734] Secondly, the rules determining the rate at which relief can be granted and the maximum relievable interest are determinate as well, as each rate and each maximum relievable amount is assigned to a well-defined category of persons. Moreover, there are rules for some otherwise indistinct situations, such as the case that a first-time buyer marries a non-first-time buyer.[1735] The existence of rules for these situations thwarts circumvention. Hence, their completeness is safeguarded. In principle, the rules on the houses that are considered as qualifying residence are clear too. However, abuse of the exceptions for the dependent relative and the not yet disposed previous sole or main residence cannot be excluded. Yet, these risks are relatively contained, since it is possible to verify the existence of the dependent relative, and the exception for the unsold house applies only for one year.

Another risk for the determinacy and completeness of the system is the qualifying loan concept, because the purpose of the loan determines its eligibility for MIR. Rules relying on the purpose of a transaction are inherently vague. This vagueness is mainly an issue for loans which are meant for improving a house, because it is needs to be verified whether such a loan is fully used to that end. However, the Tax and Duty Manual of the Revenue Commissioners lists examples of the types of costs which can and cannot be financed by a qualifying loan.[1736] Furthermore, verification is possible by means of invoices, so also these risks are contained.[1737] Several other forms of circumvention are counteracted by the rules which restrict the qualifying loan concept. As mentioned before, they are helpful to avoid certain types of circumvention, such as overpayment for house improvement, or overborrowing and using the money for other purposes.

6.2. The possibility of proportionate and dissuasive enforcement of the rules on tax treatment of debt

Enforceability is an irrelevant precondition for effectiveness of norms which are purely incentivising instead of prohibiting.[1738] The tax incentives provided by MID illustrate this: people will not be

[1734] There are only few exceptions to this rule (*supra,* footnote 1707). These exceptions only deal with the transition from 2012 to 2013. They are clear and do not hamper the determinacy and completeness of the time restrictions.
[1735] *Supra,* footnote 1709.
[1736] Tax and Duty Manual, part 08.03.08, para. 12 (*supra*, footnote 1714).
[1737] Still, it cannot be excluded that a consumer has enough savings to pay for the improvement, but uses a loan in order to profit from MIR.
[1738] Cf. sub-section 1.4.3.

punished for not using all the possibilities to deduct interest. However, regimes for MID contain restrictions as well. It makes sense to analyse to what extent they can be enforced proportionately and dissuasively.

Contrary to the instruments analysed in the previous chapters, generally the borrowers and not the lenders are the addressees of the rules governing MID. Hence, enforcement mainly is directed towards the borrowers. This means that some of the operationalisations to assess whether proportionate and dissuasive measures can be imposed, as discussed in the analytical framework, are not useful, since they concern the situation that lenders are the recipients. Yet, several insights remain valid: proportionate enforcement is possible if a range of enforcement measures is available, from light to severe sanctions, and sanctions are dissuasive if the expected costs of violating the rules outweigh the expected benefits, which requires the possibility to impose large fines.

6.2.1. Enforcing the Dutch rules on tax treatment of debt

Borrowers are incentivised to comply with the Dutch rules governing mortgage interest deductibility, since they will lose deduction possibilities if certain conditions are not fulfilled. Then, the loan will move to Box 3. Most importantly, this concerns the conditions on the relation of the debt to the own home and the amortisation requirements.[1739] Also sanctions can be imposed, if rules have been violated. In the Netherlands, powers to impose fines for violations of tax laws are affected by various areas of law. The general framework for administrative sanctions is provided by Chapter 5 of the Awb, the general administrative law act.[1740] Moreover, specific tax law applies, since the *Algemene wet inzake rijksbelastingen* (AWR) (General act on state taxes) includes provisions on enforcement.[1741] Both acts, as well as relevant case law, refer to and are influenced by principles, rules and concepts of criminal law.[1742]

When the Tax Administration discovers violations of fiscal rules, for instance regarding MID, it can choose to impose administrative sanctions, or to expedite the matter by means of criminal law.[1743] It cannot do both, according to the *una via* principle, as codified in art. 5:44 Awb. The Tax Administration uses the Protocol AAFD to choose between these two options. It is in force since 1 July 2015 and

[1739] Art. 3.119a, 3.119c and 3.119e Wet IB 2001.
[1740] *Supra,* footnote 727.
[1741] The AWR is available at http://wetten.overheid.nl/BWBR0002320.
[1742] Cf. e.g. De Kleer (2005), Maigret (2010) and Feteris (2015).
[1743] Cf. Knoester & Vermeij (2012).

replaces previous guidelines on the same matter.[1744] Although this protocol contains “only” policy rules and no law, it has legal consequences, because art. 4:84 Awb instructs administrative authorities to act in accordance with its policy rules, unless this has disproportionate consequences for one or more interested parties, due to special circumstances.[1745] According to the Protocol AAFD, the Tax Administration will opt for criminal prosecution in case of violations resulting in disadvantages of more than € 100,000 and a suspicion of intent.[1746] So, normally, violations of rules regarding MID are threatened with administrative sanctions instead of criminal prosecution.

6.2.1.1. Administrative fines

The AWR distinguishes two types of administrative fines: the default surcharge (*verzuimboete*) and the punitive penalty (*vergrijpboete*). The first category is not relevant for this study, since it concerns late or non-payment of taxes and the like.[1747] The second category enables sanctioning of violations of rules regarding MID.[1748] Art. 67d AWR allows imposing a punitive penalty of maximum 100% over the tax levied, if the tax assessment was incorrect or incomplete due to the intent of the taxpayer. Art. 67e AWR enables inflicting an administrative fine, if too little tax is levied due to the intent or gross negligence of the taxpayer. Then, the maximum fine is 100% of the additional levied tax. In both cases, the maximum fine is 300%, if the violations concern Box 3 income.

The policy rules of the Tax Administration on imposing administrative fines, *the Besluit Bestuurlijke Boeten Belastingdienst* (BBBB) set the standard percentages for fines, which are lower than the aforementioned maximum percentages.[1749] If tax is underpaid due to gross negligence of the taxpayer,

---

[1744] The Protocol AAFD, with as full name *Protocol aanmelding en afdoening van fiscale delicten en delicten op het gebied van douane en toeslagen*, is available at https://www.rijksoverheid.nl/documenten/besluiten/2015/06/24/blkb2015-572-fr-protocol-aafd (last visited 2 October 2015).

[1745] Cf. De Kleer (2005). For motivating a decision, an administrative authority can simply refer to policy rules (art. 4:82 Awb). Interested parties can invoke a policy rule before a court. Normally, a court reviews the policy rules itself, their application to the concrete case and finally the use of discretion by the administrative body, in this case the Tax Administration (Van Emmerik & Saris, 2014, p. 128).

[1746] Paragraph 2.1 Protocol AAFD. Nevertheless, several criteria may induce the Tax Administration to opt for criminal prosecution in case of lower amounts. This includes the situation that the suspected person has an exemplary function, for instance when he is a tax consultant, and also situations where the suspected person cooperated with a tax consultant or is a reoffender (see paragraphs 2.2(b), 2.2(c) and 2.2(f) of Protocol AAFD).

[1747] Art. 67a-67cb AWR.

[1748] Art. 67d-67e AWR are the provisions which enable the Tax Administration to impose punitive penalties for violating rules regarding MID.

[1749] The BBBB are available at https://zoek.officielebekendmakingen.nl/stcrt-2016-34921.pdf (last visited 6 August 2016).

the standard fine is 25% of the amount of underpaid tax.[1750] This percentage is 50% in case of intent.[1751] The fine can be decreased, if it is disproportionate in relation to the severity of the violation, or for sake of the financial situation of the offender.[1752] The severity of the violation or the fact that the violation was committed together with other offences can justify an increase of the fine above the standard percentage.[1753] In case of recividism, the standard percentage of the fine can be doubled.[1754]

If a fine is imposed for underpaid taxes, this is normally accompanied with tax interest, which has to be paid to the Tax Administration. Currently, the interest rate is the minimum rate of 4%. It is calculated over a period starting half a year after the end of the period to which the tax is related.[1755] The tax interest in itself is often already perceived as a punishment, since it is much higher than current market interest rates.

Intent or gross negligence as a necessary condition for imposing a fine

The previous paragrahs have shown that the presence of intent or gross negligence is a necessary condition for enabling the imposition of an administrative fine. Intent means committing the violation knowingly and wilfully (*willens en wetens).*[1756] The Supreme Court has lowered the bar for proving intent by introducing the concept "conditional intent" (*voorwaardelijk opzet, dolus eventualis*), which means knowingly and wilfully accepting the significant chance that certain consequences will take place, for instance, that the tax assessment is incorrect.[1757] With regard to the aforementioned provisions of the AWR, this means that the person concerned is aware of and accepts the significant

[1750] Para. 25(2), 25(9) and 26(4) BBBB. But see 26(3) BBBB, which suggest that the amount of the fine in case of a art. 67d AWR is a percentage of the whole amount of tax which has to be paid.
[1751] Para. 25(3) BBBB
[1752] Para. 7 BBBB.
[1753] Para. 8 BBBB.
[1754] Para 8(2)-(4) BBBB. For more circumstances which may induce decreasing or increasing the standard percentages, see para. 6-8, 25(5) and 26(11) BBBB
[1755] Art. 30fc(1)-(2) and 30hb(1) AWR.
[1756] De Hullu (2012), pp. 210-225; Maigret (2010). The policy rules of the Tax Administration on imposing administrative fines, the *Besluit Bestuurlijke Boeten Belastingdienst* (BBBB) have also incorporated a definition of intent: 'Opzet is het willens en wetens handelen of nalaten, leidend tot het niet of niet binnen de daarvoor gestelde termijn heffen of betalen van belasting.' (para. 25(3)).
[1757] In Dutch, the first definition of *voorwaardelijk opzet* was '*zich willens en wetens blootstelt aan de geenszins als denkbeeldig te verwaarlozen kans dat (…)'* (Hoge Raad 9 November 1954, *NJ* 1955, 55). Later, the defintion changed to *"bewust/willens en wetens de aanmerkelijke kans aanvaarden dat..."* (cf. De Hullu (2012), p. 228), Bruijsten (2012a). An important case in this regard is: Hoge Raad 25 March 2003, NJ 2003, 552, para. 3.6. Examples of cases in tax law where *voorwaardelijk opzet* played a role, are Hoge Raad 13 February 2004, *BNB* 2004/160 (para. 3.1) and Hoge Raad 3 December 2010, *BNB* 2011/59 (para. 3.6.1-3.6.2). In para. 25(3) BBBB conditional intent is defined as: '*Onder voorwaardelijk opzet wordt verstaan het willens en wetens aanvaarden van de aanmerkelijke kans dat een handelen of nalaten tot gevolg heeft dat te weinig belasting geheven is of kan worden dan wel niet of niet binnen de termijn betaald is.'*

chance of an incorrect or too low assessment due to his behaviour. Intent has to be present at the moment of committing the offence.[1758] Gross negligence (*grove schuld*) means negligence which is so reprehensible that it comes close to intent.[1759] Because the burden for proving that certain actions constitute a punishable offence is on the Tax Administration, it needs to prove intent, conditional intent or gross negligence.[1760]

No fine will be imposed if someone violated tax rules, for instance, regarding MID, but could nevertheless reasonably believe he acted in accordance with these rules. Then, the person concerned has a defendable standpoint (*pleitbaar standpunt*), and intent or gross negligence is absent.[1761] Whether a standpoint is defendable is determined objectively. This means that it is evaluated whether sufficient arguments for the standpoint exist, while it is not relevant whether the person concerned brings these arguments.[1762] However, the background of the person concerned is taken into account for determining this; high requirements exist for professionals.[1763] Bruijsten (2012b) discusses twelve rules of thumb for recognising whether a standpoint is defendable.

Intent or gross negligence if a tax consultant is involved

The rules governing the imposition of an administrative fine are partly different when a tax consultant is involved. In a nutshell, a consultant can receive a fine as well, if he (1) intentionally cooperates with the taxpayer in committing the offence, (2) causes the taxpayer to commit the offence, (3) persuades the taxpayer to commit the offence, or (4) supports the taxpayer in commiting the offence.[1764]

[1758] Hoge Raad 3 December 2010, *BNB* 2011/59, para. 3.6.2.

[1759] Hoge Raad 23 June 1976, NL:HR:1976:AX3678, *BNB* 1976/199; Hoge Raad 19 December 1990, NL:HR:1990:ZC4481, BNB 1992/217, para. 4.5. Para. 25(2) BBBB defines gross negligence as: '*Grove schuld is een in laakbaarheid aan opzet grenzende mate van verwijtbaarheid en omvat mede grove onachtzaamheid. Daarbij kan gedacht worden aan laakbare slordigheid of ernstige nalatigheid. Bij grove schuld had belanghebbende redelijkerwijs moeten of kunnen begrijpen dat zijn gedrag tot gevolg kon hebben dat te weinig belasting zou worden geheven of betaald.'*

[1760] See e.g. Hoge Raad 15 April 2011, NL:HR:2011:BN6350, *V-N* 2011/20.4, para. 4.11.3.

[1761] See e.g. Hoge Raad 11 July 1984, NL:HR:1984:BH6683, *BNB* 1984/268, para. 4; Hoge Raad 7 September 1988, L:HR:1988:ZC3892, *BNB* 1988/319, para. 4.4. Cf. Bruijsten (2012b). The concept of *pleitbaar standpunt* is also defined in para. 4 of the BBBB*: 'Van een pleitbaar standpunt is sprake als een door belanghebbende ingenomen standpunt, gelet op de stand van de jurisprudentie en de heersende leer, in die mate juridisch pleitbaar of verdedigbaar is dat belanghebbende redelijkerwijs kan menen juist te handelen.'*

[1762] Bruijsten (2012b).

[1763] So, for professionals it is more difficult to plea that they acted wrongly, but reasonably believed to act in accordance with the rules (Sitsen, 2014).

[1764] Art. 5:1(2) Awb in combination with art. 67o(1) AWR. Note that the tax payer himself cannot be punished in the second situation. Sanctioning the consultant is possible, because the Awb and AWR incorporated several concepts for punishing people who cooperate with or support the offender: see e.g. Hendriks (2007), Van de Kerkhof (2009), Valkenburg (2010), pp. 91-102; Maigret (2010); Knoester & Vermeij (2012); Huygen van Dyck-Jagersma & Rijksen (2015).

Moreover, the question is whether the taxpayer is punishable in situations where the tax consultant filled the tax return. On the one hand, it is difficult to prove the required intent or gross negligence of the taxpayer in this situation. On the other hand, it is undesirable that the taxpayer can hide behind his tax consultant to escape a fine. The Dutch Supreme Court ruled that proven (conditional) intent or gross negligence of the tax consultant is not automatically attributable to the taxpayer.[1765] So, the Tax Administration has to prove the (conditional) intent or gross negligence of the taxpayer. However, in certain situations this proof is presumably delivered, with a so-called *bewijsvermoeden*.[1766] This means that it depends on a taxpayer's exercise of due care and cooperation with the tax consultant whether (conditional) intent or gross negligence is assumed to be present.[1767] Conditional intent of the taxpayer can only be presumed, if at least three conditions have been fulfilled.[1768] Firstly, the taxpayer did not sufficiently control the progress of the work of the tax consultant. Secondly, this lack of control invoked the significant chance that the consultant would not do his job correctly, with underpaid taxes as result. Thirdly, the taxpayer has consciously accepted this chance.[1769] Hence, proving intent or gross negligence of the taxpayer can be difficult for the Tax Administration when a tax consultant is involved.

Sanctioning in case of creative compliance

Everything discussed until now in this sub-section concerns relatively obvious violations of tax rules. However, it is also possible that rules are creatively complied with; meaning that a gap is used to act against the spirit of the rules, although they are not violated to the letter. The Tax Administration is not empty-handed to act against this kind of circumvention. The Supreme Court namely developed the dogma of *fraus legis*: abuse of tax law.[1770] A fiscal construction only can qualify as *fraus legis,* if the decisive reason behind it is paying less tax while the construction is against the purpose and tendency of the law.[1771] Crucial for determining whether the decisive reason behind a tax construction is paying less tax, is whether it has other advantages than circumventing taxes.[1772] Resorting to *fraus legis* for

[1765] Hoge Raad 1 December 2006, NL:HR:2006:AU7741, BNB 2007/151, para. 3.3-3.4. Cf. Van der Wal (2007).
[1766] Hoge Raad 1 December 2006, NL:HR:2006:AU7741, BNB 2007/151, para. 3.5-3.6.
[1767] *Ibidem*.
[1768] See section 8.1 in Bruijsten (2012a).
[1769] Hoge Raad HR 29 februari 2008, NL:HR:2008:BC5346, *BNB* 2008/156, para. 3.7.2.
[1770] Hoge Raad 26 May 1926, *NJ* 1926, 723.
[1771] Wolf (2014), p. 313; Bruijsten (2015). Cf. Hoge Raad 27 December 1967, ECLI:NL:HR:1967:AX6049, *BNB* 1968/80; Hoge Raad 21 November 1984, ECLI:NL:HR:1984:AC8603, *BNB* 1985/32; Hoge Raad 16 September 1992, ECLI:NL:HR:1992:ZC5102, *BNB* 1994/2; Hoge Raad 13 July 2001 ECLI:NL:HR:2001:AB2642, *BNB* 2001/398 and *NTFR* 2001/1034; Hoge Raad 10 August 2001, ECLI:NL:HR:2001:AB3138, *BNB* 2001/399 and *NTFR* 2001/1211.
[1772] Bruijsten (2015). Hoge Raad 22 July 1982, ECLI:NL:HR:1982:AW9473, *BNB* 1982/243; Hoge Raad 7 December 1983, ECLI:NL:HR:1983:AW8750, *BNB* 1984/21.

prohibiting a fiscal construction is considered an *ultimum remedium.*[1773] For various reasons, generally, no punitive penalty is imposed in a situation of *fraus legis*.[1774] Therefore, inventing a tax construction to abuse loopholes to underpay taxes is a game without downside risk: in the worst case you have to abide by the rules that you are trying to circumvent, but you will never have to pay a fine.[1775] Nevertheless, there is at least one risk: the obligation to pay interest over the amount of underpaid tax. As discussed at the beginning of this sub-section, the tax interest itself is often already perceived as a punishment.

6.2.1.2. Criminal prosecution

Criminal prosecution is unlikely when rules regarding MID have been violated, considering the criteria of the Protocol AAFD, but nevertheless possible.[1776] The AWR enables the imposition of criminal sanctions in certain situations where tax is underpaid due to intentional actions of the taxpayer. More specifically, art. 69(2) AWR penalises a taxpayer who intentionally lodges an incorrect or incomplete tax assessment, with underpaid tax as a result. This offence can be punished with imprisonment up to six years or a fine of maximum € 82,000.[1777] If the amount of underpaid tax is more than this maximum fine, the fine can be raised to 100% of the underpaid tax.[1778] Intent or conditional intent has to be proven, but only with respect to lodging an incorrect or incomplete tax assessment, not with regard to underpaying taxes.[1779] This is different from the conditions for imposing administrative fines, as included in art. 67d and 67e AWR, which also require proof of the fact that the taxpayer intentionally underpaid tax. Like in an administrative case, a taxpayer can invoke the dogma of a defendable standpoint (*pleitbaar standpunt*) in order to avoid punishment.[1780]

[1773] Bruijsten (2015). Hoge Raad 25 October 2000, ECLI:NL:HR:2000:AA7846, *BNB* 2001/123.
[1774] Snijders (2014), Baron & Bekker (2014, 2015).
[1775] Snijders (2014).
[1776] See the beginning of section 6.2.1.
[1777] Art. 69(2) AWR in combination with art. 23(4) and 23(9) *Wetboek van Strafrecht* (Criminal Code) (available at http://wetten.overheid.nl/BWBR0001854) and art. I of *Besluit van 10 november 2015 tot wijziging van de bedragen van de categorieën, bedoeld in artikel 23, vierde lid, van het Wetboek van Strafrecht* (available at https://zoek.officielebekendmakingen.nl/stb-2015-420.html).
[1778] Art. 69(2) AWR.
[1779] Art. 69(2) AWR. This is a deliberate choice of the legislator (see pages 20-24 of the Explanatory Memorandum to the AWR: MvT, Kamerstukken II 1993/94, 23 470, nr. 3, available at http://resolver3.kb.nl/resolve?urn=sgd%3Ampeg21%3A19931994%3A0005928 (last visited 6 August 2016)).
[1780] Cf. Hoge Raad 6 March, 2012, NL:HR:2012:BQ8596, para. 7.3-7.4; Hoge Raad 8 February 2005, NL:HR:2005:AR3719, para. 3.6.4.

6.2.1.3. Evaluating the possibility of proportionate and dissuasive enforcement of the Dutch rules on tax treatment of debt

This discussion reveals that proportionate enforcement of violations of the rules regarding mortgage interest deductibility is possible. The magnitude of the fine can be varied, depending on various aspects. Actually, the Tax Administration is obliged to respect the principle of proportionality when imposing sanctions. The consequences of non-compliance with a condition for qualifying as own home debt are severe, namely losing the option to deduct interest for the part of the debt not meeting the conditions. This is not necessary always proportional, but certainly dissuasive. Also, a disuassive application of punitive penalties is possible: with fines up to 100% of underpaid taxes, the most severe sanctions are dissuasive enough to deter.[1781] However, it is debatable whether the standard fines – 25% on underpaid taxes in case of gross negligence, and 50% in case of (conditional) intent – are high enough to be dissuasive. This depends largely on the chance of getting caught, and the likelihood of receiving sanctions if caught.

The chance of getting caught is mainly an empirical question, which *inter alia* depends on the type of violation and the capacity of the Tax Administration to investigate tax assessments. It is known that the Tax Administration lacks manpower to check tax assessments.[1782] However, this is not really a problem for ensuring compliance with the rules on MID, since the Tax Administration receives most information about these loans from banks, which already verify whether interest is deductible.[1783] This information can be checked automatically, using software. If a person borrows from a lender without information duty, the borrower needs to fulfil some information requirements towards the Tax Administration.[1784] Only in these situations, the Tax Administration cannot lean upon verification by banks, and has to do the work itself, also verifying invoices for improvement of the house.

Furthermore, the likelihood of receiving sanctions, if caught, is affected by several legal issues. Firstly, the possibility to impose sanctions is hindered – albeit legitimately – by the requirement to prove intent, conditional intent or gross negligence. Even in case of conditional intent – which is easier to

[1781] Criminal law even allows imprisonment for violations of tax law, but it is not realistic to expect this in case of a violation of a rule regarding MID.

[1782] See e.g. the broadcast of Zembla of 25 September 2014: http://www.npo.nl/zembla/25-09-2014/VARA_101369809. Zembla broadcasts the results of investigative journalism. For the reaction of the Secretary of State of Finance, who is politically responsible for the Tax Administration, to this broadcast, see this letter to the parliament https://www.rijksoverheid.nl/documenten/kamerstukken/2014/09/29/brief-over-uitzending-zembla (both last visited 6 August 2016). Cf. Vakstudie Nieuws (2014).

[1783] Cf. sub-sections 6.1.1.2 and 6.1.1.3.

[1784] Cf. sub-section 6.1.1.2.

prove than intent – the Tax Administration needs to show that a taxpayer was aware of the fact that his behaviour invoked the significant chance that he will underpay taxes, and that he consciously accepted that chance. Proving this can be difficult for the Tax Administration, especially when a tax consultant is involved. Moreover, a taxpayer can try to avoid sanctions by invoking the dogma of defendable standpoint. Especially in case of complex rules, a judge will more easily honour a taxpayer's argument that he reasonably believed he acted in accordance with the rules. Since rules on mortgage interest deductibility are sometimes quite complex,[1785] it is easy to imagine that a taxpayer who violated some of these rules, can make the case that his standpoint is defendable. Then, no sanction is imposed. Lastly, if someone circumvented rules on MID and the dogma of *fraus legis* is applied, normally no punitive sanction is imposed. So, if a taxpayer abuses a loophole in the regime of MID, it might be possible in certain cases to prohibit the construction, but without punishment.

All in all, this discussion shows that imposing sanctions is not always easy for the Tax Administration. A dissuasive sanctioning regime cannot be completely guaranteed. Nevertheless, not all the obstacles to dissuasive sanctioning can be removed, since some of them are indispensable from a legal point of view. This concerns the need to prove (conditional) intent or gross negligence and to abstain from imposing sanction in case of a defendable standpoint or *fraus legis.* However, since banks already verify the eligibility for MID for most loans, the risk of violations of the rules is relatively small. Therefore, the need to penalise persons is small as well.

6.2.2. Enforcing the Irish rules on fiscal treatment of debt

For understanding the enforcement possibilities of the rules regarding MIR, it is essential to know how the relief is granted to households. Since 2002, most of the mortgage interest relief is granted at source, meaning that it is provided via lenders, who reduce a borrower's mortgage repayment by the amount of tax relief to which he is entitled.[1786] In turn, the lenders can reclaim the money from the Revenue Commissioners.[1787] Tax relief is only granted at source for qualified loans which are secured by mortgages on qualifying residences situated in Ireland.[1788] For other qualifying loans – which are,

[1785] As evidenced by the discussion in sub-section 6.1.1.
[1786] Section 244A TCA 1997 (including amendments), inserted by means of section 23 Finance Act 2001, available at http://www.irishstatutebook.ie/eli/2001/act/7/enacted/en/html.
[1787] The Revenue Commissions have been established by means of S.I. 2/1923, Revenue Commissioners Order, 1923, available at http://www.irishstatutebook.ie/eli/1923/sro/702/made/en/print (last visited 6 August 2016). Cf. Donnelly & Walsh (2002), p. 7.
[1788] Section 244A(1)(a) TCA 1997 (including amendments).

most importantly, unsecured loans for repairing, improving or developing an own home – interest relief is claimed through a tax return.[1789]

In the tax relief at source system, home owners who want to receive MIR, need to apply for it by means of an online form at the website of the Revenue Commissioners, and to provide the required information.[1790] From then on, they are required to report changes in their personal status or the status of the property, if affecting the amount of relievable interest.[1791] The Revenue Commissioners provide the lenders who participate in the tax relief at source system – being most lenders relevant for this study[1792] – monthly with a report containing the necessary information for operating the system.[1793] The lenders have to settle the relief with the actual interest payments.[1794] Moreover, they have to provide the Revenue Commissioners with all kind of information.[1795] This enables the Revenue Commissioners to assess whether the claimed interest relief is correct. Collins and Walsh (2010) rightly conclude that the "tax relief at source" system reduces the risk of fraud, since borrowers and lenders must cooperate in order to engage in fraud.[1796] Hence, this system creates an extra layer of control and facilitates the enforcement of the provisions on MIR.

In Ireland, the penalties for breaching the rules regarding MIR are included in Part 47 of the Taxes Consolidation Act 1997. It allows the Revenue Commissioners to impose civil penalties or to opt for criminal prosecution. The level of required proof differs between civil and criminal proceedings. In the first case, the Revenue Commissioners must proof the case 'on the balance of probabilities', while facts must be 'beyond on all reasonable doubt' in crimimal cases.[1797]

[1789] Interest relief is also granted via a tax return when the tax payer borrows from a lender who is not qualified for operating in the regime for tax relief at source (section 244A(2)(a) TCA 1997 (including amendments). Most lenders - including all banks licensed in EU member states – are qualified lenders (see section 244A(3) TCA 1997 (including amendments).

[1790] See http://www.revenue.ie/en/online/mortgage-interest-relief.html (last visited 13 November 2015). The obligation to apply is included in regulation 7 S.I. 558/2001, named *Mortgage Interest (Relief at Source) Regulations 2001* and available at http://www.irishstatutebook.ie/eli/2001/si/558/made/en/print.

[1791] Regulation 7(3) S.I. 558/2001.

[1792] *Supra*, footnote 1789.

[1793] Regulation 6 S.I. 558/2001.

[1794] Cf. http://www.revenue.ie/en/online/mortgage-interest-relief.html (last visited 14 November 2015).

[1795] See section 244(5) TCA 1997 (including amendments) and regulations 5 and 8 S.I. 558/2001 and Regulation 2 S.I. 424/2011, *Mortgage Interest (Relief at Source) Regulations 2011* and available at http://www.irishstatutebook.ie/eli/2011/si/424/made/en/print. A lender can receive a fine of € 3,000 for not supplying this information, which will be increased to € 4000 if the failure still exists after the end of the year (section 1052(1) TCA 1997 (including amendments), which refers to Schedule 29, column 1, which lists section 244A TCA 1997)).

[1796] Collins & Walsh (2010), p. 9.

[1797] Donnelly & Walsh (2002), p. 196.

6.2.2.1. Civil penalties

Two provisions enable penalising a person who violates rules regarding mortgage interest relief with the aim of claiming too much relief/underpaying tax. Firstly, section 1056(1)-(2) TCA 1997 penalises making *knowingly* a false statement in reference to the income tax which results in differences in the amount of income taxe which is and has to be paid, in order to obtain any allowance, reduction, rebate or repayment of tax. This can be receiving more MIR than entitled to. The magnitude of the fine depends on the difference between the tax which is paid due to the false statement, and the tax which has to be paid. This is referred to as 'the specified difference'. The magnitude also depends on the manner in which the offender is convicted.[1798] In case of a summary conviction and a specified difference of less than € 1520, the maximum sanction is a fine of 25% of this difference, imprisonment for a year, or both.[1799] In case of a summary conviction and a specified difference equal or larger than € 1520, the maximum sanction is a fine of € 1520, imprisonment for a year, or both.[1800] In case of conviction on indictment, the maximum sanction is a fine of 25% and/or 2 years imprisonment.[1801]

Secondly, section 1077E TCA 1997 enables imposing sanctions when a person *deliberately* makes a false, overstated or otherwise incorrect claim in connection to mortgage interest relief.[1802] Alternatively, a fine can be inflicted if a person submits an incorrect return, statement or claim regarding MIR, without taking reasonable care.[1803] The TCA 1997 does not define what 'deliberately' and 'failure to take reasonable care' mean. The Revenue Commissioners have published how they understand these terms.[1804] Deliberate behaviour is understood in accordance with its normal meaning.[1805] According to Code of Practice for Revenue Audit and other Compliance Interventions, this entails that 'indicators [are] consistent with intent to default or alternatively, (…) a breach that cannot

[1798] For the difference between a summary conviction and a conviction on indictment, see sub-section 5.2.3.1.
[1799] Section 1056(3)(a)(i) TCA 1997.
[1800] Section 1056(3)(a)(ii) TCA 1997.
[1801] Section 1056(3)(b) TCA 1997. In general, larger sanctions are possible, but since the maximum specified difference is € 6000 in case of fraud with MIR, the sanction can never be larger than that mentioned in section 1056(3)(b)(i) TCA 1997.
[1802] Section 1077E(2),(5) TCA 1997. Note that these two sub-sections, 2 and 5, both distinguish three situations in which a person is liable to a penalty. Claiming too much MIR by means is punishable under each of these three situations (note that section 244A TCA 1997 is listed in column 1 of Schedule 29, too which sub (a) of these two sub-sections refers).
[1803] Section 1077E(1),(5) TCA 1997.
[1804] Revenue Commissioners (2015), para. 5.6.
[1805] This statement in the Code of Practice is in accordance with Irish case law, where it is confirmed that acts ought to be understood, in the first instance, using literal interpretation. Taxation statutes in particular need to be understood in accordance with the common and ordinary use of the words (see *Gaffney v. The Revenue Commissioners* [2013] IEHC 651).

be explained solely by carelessness'.[1806] One of these indicators is 'providing incomplete, false or misleading documents or information'.[1807] Consequently, the existence of deliberate behaviour is not difficult to prove, since a subjective factor like intent is assumed to exist in the presence of certain objective factors, namely incomplete or false information. The test of reasonable care is defined as 'whether a taxpayer of ordinary skill and knowledge, properly advised, would have foreseen as a reasonable probability or likelihood the prospect that an act (or omission) would cause a tax underpayment, having regard to all the circumstances'.[1808] Arguably, it is not difficult for the Revenue Commissioners to show that this test is fulfilled if certain acts or omissions of the taxpayer are the reason for an overstated amount of MIR.

The magnitude of the fine imposed based upon section 1077E TCA 1997 depends on various circumstances. It is 100% of the incorrectly obtained relief if *deliberate* actions have caused this difference between the improperly obtained and correct MIR.[1809] However, section 1077E(4) TCA 1997 introduces various grounds for reducing this percentage. The penalty is reduced to 10%, if the offender voluntarily notifies the Revenue Commissioners before an investigation is started and discloses all relevant information.[1810] The penalty is reduced to 50%, if the offender submits all relevant information to the Revenue Commissioners after having been notified that an investigation will start, but before it actually starts.[1811] Finally, the penalty is reduced to 75%, if the offender cooperates fully with the Revenue Commissioners during the investigation.[1812] If *careless* actions led to incorrectly obtained interest relief, the rules distinguish even more different maximum penalty percentages, varying between 3% and 40%, depending on the magnitude of the difference between the correct and incorrect amount of MIR (more or less than 15%), and the (moment of) cooperation with the Revenue Commissioners (with a comparable system as for deliberate actions).[1813]

[1806] Revenue Commissioners (2015), para. 5.6(a).
[1807] *Ibidem.*
[1808] *Ibidem,* para. 5.6(b).
[1809] Section 1077E(4),(11)-(12) TCA 1997.
[1810] Section 1077E(4) TCA 1997.
[1811] *Ibidem.* These rules gave rise to case law about the effects of starting an investigation on the possibilities to disclose information. See e.g. *Gaffney v. The Revenue Commissioners* [2013] IEHC 651; *Murphy v. The Revenue Commissioners* [2015] IEHC 670.
[1812] *Ibidem.*
[1813] If the difference is more than 15%, the penalty is 40% of this difference; otherwise it is 20% (section 1077E(7)(a) TCA 1997). However, if the offender voluntarily notifies the Revenue Commissioners before an investigation is started and discloses all relevant information, the penalty is reduced to 5% or 3%, in case of a difference between correct and incorrect MIR of respectively more than or maximum 15% (section 1077E(7)(b) TCA 1997). If the offender submits all relevant information to the Revenue Commissioners after having been notified that an investigation will start, but before it actually starts, the penalty is reduced to 20% or 10% respectively, in case of a difference between correct and incorrect MIR of respectively more than or maximum 15%. Finally, if the offender cooperates fully with the Revenue Commissioners during the investigation, the

Yet, not only the offender, but also persons assisting him are liable to a penalty. Under section 1056(2)(b) TCA 1997, a person who assists or induces someone to make a false statement or submit an incorrect return is subject to the same penalty as the offender. In addition, section 1055 TCA 1997 enables the punishment of '[a]ny person who deliberately assists in or induces the making or delivery for any purposes of income tax (…) of any incorrect return, account, statement or declaration' with a penalty of €4,000.

If the Revenue Commissioners collect underpaid tax which resulted from an incomplete or incorrect claim in connection to mortgage interest relief, not only a fine can be imposed, but also interest will be levied. The interest will be calculated 'on the date when the tax becomes due and payable until payment'.[1814] The current interest rate is 0.0219% per day, which means 8% per year.[1815] The Revenue Commissioners can publish a list of persons who have received a fine.[1816]

6.2.2.2. Criminal prosecution

Section 1078 TCA 1997 includes both general and specific provisions criminalising certain offences. According to the general provision, the Revenue Commissioners may institute criminal proceedings if someone knowingly claims, obtains or attempts to claim or obtain relief to which he is not entitled, and for this purpose deceives, omits or uses other dishonest means, such as providing false, incomplete or misleading information.[1817] This list of criminalised specific offences includes knowingly or wilfully providing incorrect information in relation to any tax, and claiming or obtaining relief to which the person, to his own knowledge, is not entitled.[1818] Hence, someone who knowingly or wilfully obtains MIR to which he is not eligible can face criminal sanctions.

The maximum sanction for these violations depends on the manner in which the offender is convicted. In case of a summary conviction, the maximum sanction is a fine of € 5,000 or imprisonment for a year

penalty is reduced to 30% or 15%, in case of a difference between correct and incorrect MIR of respectively more than or maximum 15%.

[1814] Section 1080(2)(a) (ii) TCA 1997 (including amendments).

[1815] Section 1080(2)(c) TCA 1997 (including amendments).

[1816] Section 1086 TCA 1997 (including amendments). Cf. Donnelly & Walsh (2012), pp. 142-145.

[1817] Section 1078(1A)(a) TCA 1997 (including amendments). Also punishable is someone who knowingly or recklessy assists, incutes or induces a person with obtaining MIR to which he is not eligible (section 1078(1A)(b)-(c) TCA 1997 (including amendments)).

[1818] Section 1078(2)(a),(c) TCA 1997 (including amendments).

or both.[1819] The fine may be mitigated by the Revenue Commissioners to a fourth of the original fine.[1820] In case of a conviction on indictment, the maximum sanction is a fine of € 126,790 or imprisonment for 5 years or both.[1821]

6.2.2.3. Evaluating the possibility of proportionate and dissuasive enforcement of the Irish rules on fiscal treatment of debt

Under Irish rules, proportionate enforcement of falsely obtained MIR is possible, as the magnitude of the sanctions can be varied. When using section 1077E TCA 1997 as legal basis for punishment, a proportionate sanctioning system is actually automatically applied.

Fines up to 100% can be inflicted, which is a deterrent magnitude. Furthermore, the tax at source system increases the likelihood that someone who obtains too much MIR receives a sanction, because it provides the Revenue Commissioners with information and makes fraud more difficult. In addition, several legal issues are relevant for the chance of receiving sanctions if caught. It matters how easily the required proof can be provided. When section 1056 TCA 1997 is used as the legal basis for imposing penalties, it must be proven that the taxpayer knowingly made a false statement to obtain more MIR than entitled to, while section 1077E TCA 1997 requires proof of either deliberate or careless actions. As explained above, proving deliberate and especially careless actions is not difficult. However, the maximum fine for careless actions which led to underpaid tax is only 40%. All in all, it seems not difficult to impose deterrent sanctions. Hence, their dissuasiveness is guaranteed. Moreover, the high interest rate levied on overdue tax, 8% per year, adds to the dissuasiveness of the sanctions.

6.3. Independent amendment, application and enforcement of the rules on tax treatment of debt

Since tax rules on the treatment of debt are not aimed at the financial sector, but at citizens, the risk that these rules are insufficiently applied and enforced due to capture is small. Therefore, independence of the actors who apply and enforce these rules is not the main issue at stake. Yet, there is still the underlying risk that unpopular decisions which benefit the longer-term general interests are

[1819] Section 1078(3)(a) TCA 1997 (including amendments). Summary convictions are given in a court with a judge without a jury, whereas indictable convictions are given by a court with a judge and a jury (cf. Donnelly & Walsh (2002), pp. 13-14, 17).
[1820] Section 1078(3)(a) TCA 1997 (including amendments).
[1821] Section 1078(3)(a) TCA 1997 (including amendments).

not taken. In this context, the main concern is to what extent a parliament is willing to take decisions which restrict MID/MIR. Therefore, instead of following the operationalisation as set forth in sub-section 1.4.4, this section focusses on the independence of member states to decide on these issues, and on the procedures which the EU has created for influencing member states' economic and fiscal policies. Subsequently, it will be discussed to what extent national authorities are pushed towards enforcing the tax rules, since a lack of enforcement may stimulate non-compliance. Yet, since this is less of a concern than for the instruments discussed in the previous chapters, the latter discussion will be kept short.

6.3.1. EU influences on the amendment of the rules on tax treatment of debt

The EU has no competences in the field of income taxation. Still, EU law can affect income taxation through negative integration, when conflicts with the internal market arise. Moreover, the Union can influence member states' policies on mortgage interest deductibility by giving recommendations within the framework of economic governance in the EU. This framework – to be discussed below – governs the coordination of member states' economic policies, in particular fiscal policies. Using the framework of economic governance to issue recommendations about MID is not only a theoretical possibility. In 2012 the Netherlands received the recommendation to gradually reform the housing market, among other things, by phasing out mortgage interest deductibility.[1822] Between 2013 and 2015, the Netherlands was recommended to accelerate the planned reduction of the maximum deductible percentage of mortgage interest.[1823]

Basically, there are two reasons why it is possible that a tax measure like MID receives attention in the framework of economic governance in the EU. Firstly, allowing the deduction of mortgage interest has fiscal consequences, which can be considerable. Secondly, MID has a profound influence on the level

[1822] Recommendation 5 of the Council Recommendation of 10 July 2012 on the National Reform Programme 2012 of the Netherlands and delivering a Council opinion on the Stability Programme of the Netherlands, 2012-15, OJ 2012, C 219/88.

[1823] Recommendation 2 of the Council Recommendation of 9 July 2013 on the National Reform Programme 2013 of the Netherlands and delivering a Council opinion on the Stability Programme of the Netherlands, 2012-2017, OJ 2013, C 217/89; Recommendation 2 of the Council Recommendation of 8 July 2014 on the National Reform Programme 2014 of the Netherlands and delivering a Council opinion on the Stability Programme of the Netherlands, 2014, OJ 2014, C 247/88; Recommendation 2 of the Council Recommendation of 14 July 2015 on the 2015 National Reform Programme of the Netherlands and delivering a Council opinion on the 2015 Stability Programme of the Netherlands, OJ 2015, C 272/83. Aside, the recommendations acknowledged the economic situation: in 2013 it stated that an accelerated reform should take into account the impact of the economic environment, whereas the strengthened recovery was cited in 2015 as a reason for accelerating the reduction of the maximum deductible interest.

of household debt, which, as of 2011, is one of the indicators considered in the macroeconomic imbalance procedure (MIP), one of the procedures within the framework of economic governance in the EU.[1824]

The question is how imperative these recommendations are. In other words, it is relevant to what extent the system of economic governance in the EU restricts the independence of member states in amending the rules on the tax treatment of debt. Therefore, a brief discussion of this framework is necessary for understanding the content and force of these recommendations.

The framework of economic governance in the European Union governs the coordination of member states' economic policies.[1825] Predominantly, it is a rule-based system, although there is room for discretionary choices and coordination.[1826] Art. 121 and 126 TFEU constitute the basic framework for achieving this coordination: the former sets out the multilateral surveillance procedure (MSP), which essentially deals with the coordination of economic policies, while the latter creates the excessive deficit procedure (EDP), with as goal the restriction of government debt and deficits. Both procedures have further been elaborated by two regulations – together called the Stability and Growth Pact (SGP) – which were adopted in 1997 and have been amended several times by other regulations since.[1827] The MSP and EDP are called the preventive and corrective arm of the SGP, respectively. In 2011, a third

[1824] Cf. European Commission (2015a), pp. 29-31.
[1825] Art. 5 TFEU instructs member states to coordinate their economic policies and provides the Council with the competence to 'adopt measures, in particular broad guidelines for these policies'. Art. 120-126 TFEU further details the procedures and conditions for this process.
[1826] Armstrong (2013), pp. 608-613. Cf. Verdun (2013), pp. 26-28, 33. For a discussion of the history of this framework, see e.g. Verdun (2004, 2013), De Streel (2013), Lastra & Louis (2013). For a discussion of the rationale behind the framework of economic governance and the arguably ordoliberal principles behind it, see respectively Louis (2010), pp. 979-981; Nedergaard & Snaith (2015), pp. 1096-1104. Moreover, for the rationale of the framework of economic governance, see also para. 58-59 of Case C-370/12 *Pringle* (EU:C:2012:756) and para. 100 of Case C-62/14 *Gauweiler and Others* (EU:C:2015:400).
[1827] The SGP was established in 1997 with Council Regulation 1466/97 of 7 July 1997, OJ 1997, L 209/1 and Council Regulation 1467/97 of 7 July 1997, OJ 1997, L 209/6. It was reformed in 2005 with Council Regulation 1055/2005 of 27 June 2005, OJ 2005, L 174/1 and Council Regulation 1056/2005 of 27 June 2005, OJ 2005, L 174/5. The SGP was reformed again in 2011, when the Six-Pack was adopted, consisting of five regulations and a directive: Regulation 1173/2011 of the European Parliament and of the Council of 16 November 2011, OJ 2011, L306/1; Regulation 1175/2011 of the European Parliament and of the Council of 16 November 2011, OJ 2011, L306/12; Council Regulation 1177/2011 of 8 November 2011, OJ 2011, L306/33. For a discussion of the reforms in 2005 and 2011, see respectively Amtenbrink & De Haan (2003, 2006), Louis (2004, 2006), Smits (2004), Hodson & Maher (2004), Schelkle (2007) and Amtenbrink (2011, 2012), Ruffert (2011), Adamski (2012).

procedure was created, the MIP, a *species* of the MSP.[1828] The EDP is not particularly relevant for this study, but the MSP and MIP require some further explanation.[1829]

In 2013, the framework of economic governance in the EU was reformed through the adoption of the Two-Pack, two regulations applying to the member states that have adopted the euro.[1830] One of these regulations allows for enhanced surveillance for member states experiencing or 'threatened with serious difficulties with respect to their financial stability (…), leading to potential adverse spill-over effects on other Member States in the euro area'.[1831] Since high household debt levels might have consequences for financial stability, the possibility of putting member states under enhanced surveillance requires attention.

6.3.1.1. The impact of the multilateral surveillance procedure on the fiscal independence of member states

According to the procedure envisaged in Article 121 TFEU and the regulations based upon this provision, the economic policies of the member states must be in conformity with the broad guidelines of the economic policies (BGEP).[1832] These guidelines are issued in the course of a yearly policy cycle, which was reformed in 2011 with the creation of European Semester, a clearer cycle of policy surveillance and coordination, aiming at improving economic coordination and policy coherence.[1833] The cycle starts in November with several reports of the Commission, including the Annual Growth Survey, which identifies the economic priorities for the EU, and a recommendation for the BGEP. Thereafter, the Council formulates the BGEP and reports to the European Council, which concludes

[1828] MIP: Regulation 1176/2011 of the European Parliament and of the Council of 16 November 2011, OJ 2011, L306/25. Enforcement of MIP: Regulation 1174/2011 of the European Parliament and of the Council of 16 November 2011, OJ 2011, L306/8.
[1829] The EDP creates the procedure to enforce abidance by the maximum thresholds of 60% government debt and 3% government deficit. This is not of prime relevance for this study.
[1830] Art. 1(3) Regulation 472/2013 of the European Parliament and of the Council of 21 May 2013, OJ 2013, L140/1 and art. 1(3) Regulation 473/2013 of the European Parliament and of the Council of 21 May 2013, OJ 2013, L140/11. In 2012, 25 member states have also adopted the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (the so-called Fiscal Compact), which mainly has created additional obligations for member states to achieve a balanced budget and reduce government debt (art. 3-4).
[1831] Art. 1(1)(a) Regulation 472/2013.
[1832] Articles 120 and 121(1)-(3) TFEU. For the regulations, see footnote 1827.
[1833] See art. 2-a Regulation 1466/1997 (after amendment with Regulation 1175/2011). For the integration of the MIP in the European Semester, see.art. 1(2) and 6(4) Regulation 1176/2011. See also art. 4 Regulation 473/2013. For more information about the European Semester, see also European Commission (2015c), Annex 2, European Commission (2015d); http://ec.europa.eu/europe2020/making-it-happen/index_en.htm; http://www.consilium.europa.eu/en/policies/european-semester/how-european-semester-works/ (both last visited 18 April 2016).

about the BGEP. Subsequently, member states adopt Stability or Convergence Programmes, containing medium term budgetary plans and strategies for achieving sustainable growth, which must be consistent with the BGEP.[1834] During the summer, the Council adopts, with a qualified majority, country-specific recommendations for the member states, which are endorsed by the European Council. These country-specific recommendations seek to ensure that the economic policies of member states are in accordance with the BGEP, and do not jeopardise the proper functioning of the EMU.[1835] The Commission can as well issue a warning to a member state, in 'the event of a significant observed deviation from the adjustment path towards the medium-term budgetary objective'.[1836] This can result in a Council recommendation containing policy measures to return to the adjustment path towards the medium-term budgetary objective.[1837] Finally, the Council can, after having established that a member state has not taken effective action in reaction to its recommendation, require euro area member states to lodge an interest-bearing deposit of 0.2% of its GDP with the Commission.[1838] No such sanction is available for not respecting the BGEP.

Hence, a country-specific recommendation in the MSP is not subject to any other coercion than peer pressure, unless it is concerned with deviations from the medium-term budgetary objective of a member state. Consequently, although a country-specific recommendation requesting a reform of the regime for MID pushes a member state in a certain direction, it does do not really restrict the member state's decionsion-making powers. Disregarding the recommendation has little consequences. This conclusion is supported by the literature, which highlights weaknesses in the MSP.[1839] The European Semester integrated the national and European cycles of policy-making. This increases the chance that member states adhere to recommendations issued in the context of the MSP. It might also intensify the pressure on member states to comply with these recommendations, whereas the process of adopting BGEP may increase the acceptance of the recommendations by member states.[1840]

[1834] Art. 3(1) and 7(1) Regulation 1466/1997. Member states which have adopted the euro, must submit Stability Programmes, whereas the other EU member states need to submit Convergence Programmes (cf. art. 2 Regulation 1466/1997).
[1835] Article 121(4) TFEU.
[1836] Art. 6(2) and 10(2) Regulation 1466/1997.
[1837] *Ibidem.*
[1838] Art. 4(1) Regulation 1173/2011. The Council decides on this sanction, on recommendation of the Commission, which shall come within 20 days after the Council decided that the member state concerned took no effective action. The Commission recommendation is adopted, unless a qualified majority in the Council rejects it within 10 days (art. 4(2) Regulation 1173/2011). Note that according to art. 121(4) TFEU decisions of the Council in the MSP are taken with qualified majority voting. Hence, the legality of introducing reverse qualified majority voting by secondary EU law can be contested (for a discussion, see Palmstorfer (2014)).
[1839] See e.g. Adamski (2012), pp. 1340-1342. On these kind of weaknesses before the reforms of 2011, see e.g. Amtenbrink and De Haan (2003), pp. 1076-1085; Amtenbrink and De Haan (2006), p. 404.
[1840] Amtenbrink & Repasi (2017), section 3.1.1.1.

Nevertheless, if member states are unwilling to comply, they face few consequences. So, although the MSP may influence member states's policies, it does not significantly restrict their powers to design the rules governing mortgage interest deductibility. The aforementioned recommendations regarding MID received by the Netherlands serve as an example of the uncertainty about the actual influence of the MSP. When the Netherlands was recommended for the first time to phase out MID, in 2012, Dutch political parties had already agreed on limiting deductibility of mortgage interest to mortgages, for which borrowers redeem at least as much as under an annuity scheme.[1841] So, this reform does not stem from EU pressure. Instead, it might be that the decision to gradually reduce the maximum rate at which mortgage interest payments can be deducted (with 0.5 percentage point per year), taking effect since 2014, is influenced by the country-specific recommendation issued in 2013.[1842] Certainly, the Netherlands did not comply with the country-specific recommendations of 2014 and 2015 to accelerate the reform of the system of MID. This example suggest that compliance with EU recommendations depends on national political willingness. However, in-depth research is necessary to find out the actual influence on the MSP on political decisions.

6.3.1.2. The impact of the macroeconomic imbalance procedure on the fiscal independence of member states

The MIP copies some features from the MSP, but also differs from it in significant aspects. This procedure is part of the EU response to the economic crisis, as it was considered important to monitor, within the context of economic policy coordination in the EU, economic developments in addition to public debt.[1843] The MIP is concerned with macroeconomic imbalances, which are defined as 'any trend giving rise to macroeconomic developments which are adversely affecting, or have the potential adversely to affect, the proper functioning of the economy of a Member State or of the [EMU], or of the Union as a whole'.[1844] Basically, this can be any trend with adverse macroeconomic effects, regardless of its origin. In order to support the identification and monitoring of (potential) imbalances, the MIP is equipped with a scoreboard, consisting of a variety of indicators with indicative thresholds

[1841] Political parties agreed this in April 2012, in the same agreement where they decided to reduce the LTV ratio (*supra,* footnote 1141). The recommendation was issued in July 2012.

[1842] See sub-section 6.1.1 about this measure. It would require an in-depth case study to find out what political forces where exactly at play when deciding about this reform.

[1843] Cf. recital 7 of the preamble Regulation (EU) No 1176/2011.

[1844] Article 2(1) Regulation (EU) No 1176/2011 of the European Parliament and of the Council of 16 November 2011.

serving as alert levels.[1845] The indicators include private sector debt, which is the debt of households and firms.[1846] The Commission has the power to change the indicators and their thresholds.[1847]

The MIP consists of a preventive and a corrective arm. The first step in the procedure, in its preventive arm, entails that the Commission writes an annual report, assessing the movement of the indicators in order to identify and monitor imbalances.[1848] This so-called alert mechanism consists of the interpretations of the scoreboard and a report thereof, the Alert Mechanism Report, written by the Commission and published at the start of a yearly cycle of the European Semester. This report is discussed in the Council, as a part of the multilateral surveillance, and in the Eurogroup.[1849] Taking these discussions into account or in case of unexpected, urgent economic developments which require analysis, the Commission can undertake an in-depth review of a member state, analysing the circumstances in the respective country in detail, as well as the origins of any detected imbalances.[1850] For instance, in its in-depth reviews of the Netherlands, the Commission considers the regime of MID as an important origin of the high household debt levels.[1851] If the Commission concludes from its review that imbalances exists, the Council *may,* based on a recommendation of the Commission, give country-specific recommendations to the member state concerned in accordance with the procedure of the MSP.[1852] So, for example, if the Commission concludes that the levels of household debt adversely affect the proper functioning of the Dutch economy or the EMU, it can recommend the Council to give a recommendation to the Netherlands for addressing this imbalance, even if the imbalance is not (yet) considered excessive. Actually, the country-specific recommendations to the Netherlands about mortgage interest deductibility originate from this procedure. In the previous sub-section, it was already concluded that a country-specific recommendation issued under the MSP may influence the policies of a member state, but does not decisively restrict its regime for the tax treatment of debt.

[1845] Article 4 Regulation 1176/2011.
[1846] For the exact definition of private debt, see e.g. http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&plugin=1&language=en&pcode=tipspd10 (last visited 15 October 2015)
[1847] Article 4(5)-(7) Regulation 1176/2011.
[1848] Article 3(1) Regulation 1176/2011.
[1849] Art. 3(5) Regulation 1176/2011.
[1850] Art. 5 Regulation 1176/2011.
[1851] See e.g. the reports of the in-depth reviews of the Netherlands in 2014 and 2015: European Commission (2014h), p. 35; European Commission (2015b), p.24.
[1852] Art. 6 Regulation 1176/2011.

The corrective arm starts, if the Commission considers that an *excessive* imbalance exists. Then, the Council *may*, again based on a Commission recommendation, establish the existence of such an excessive imbalance and provide policy recommendations, as well as a deadline before which the member state concerned must submit a corrective action plan, containing policy actions and their social and economic impact.[1853] The Council evaluates the corrective action plan, based on a Commission report, and could approve it or request a new one.[1854] In case of approval, the plan is endorsed by means of a recommendation, which lists the policy actions required.[1855] The Commission monitors the implementation of the policy actions.[1856] If the Commission considers that the member state concerned did not take the policy actions, it recommends the Council to establish non-compliance, which is done unless a qualified majority in the Council decides otherwise within 10 days.[1857] This voting modality is called reverse qualified majority voting (RQMV).[1858]

Another secondary Union law act has created the possibility to apply sanctions to a member state neglecting Council recommendations in the corrective arm of the MIP.[1859] This only applies to euro area countries.[1860] If a member state does not implement the corrective action plan within the deadlines, an interest-bearing deposit of 0.1% of GDP of the member state concerned must be imposed by the Council, based on a recommendation of the Commission.[1861] This deposit turns into an annual fine of the same magnitude if the Council establishes non-compliance for the second successive time.[1862] Such a fine can also be imposed, if the Council requests a new corrective action plan of the member states concerned for two successive times.[1863] RQMV applies to voting about these sanctions.[1864] Figure 6.1 below shows the working of the macroeconomic imbalance procedure for euro area countries. Moreover, if the Council adopted two successive recommendations in the same procedure, because a member states has not submitted a sufficient corrective action plan, or because it has not taken the recommended corrective action, the Commission must propose the Council to

[1853] Art. 7 and 8 Regulation 1176/2011.
[1854] Art. 8 Regulation 1176/2011.
[1855] Art. 8(2) Regulation 1176/2011.
[1856] Art. 9 Regulation 1176/2011.
[1857] Art. 10 Regulation 1176/2011.
[1858] Cf. footnote 1838.
[1859] Regulation 1174/2011 of the European Parliament and of the Council of 16 November 2011, OJ 2011, L306/8.
[1860] Art. 1(2) Regulation 1174/2011.
[1861] Art. 3(1) Regulation 1174/2011.
[1862] Art. 3(2) Regulation 1174/2011.
[1863] Art. 3(2)(a) Regulation 1174/2011.
[1864] Art. 3(3) Regulation 1174/2011.

suspend part or all of the commitments or payments for programmes of the member state financed by the European Structural and Investment Funds.[1865]

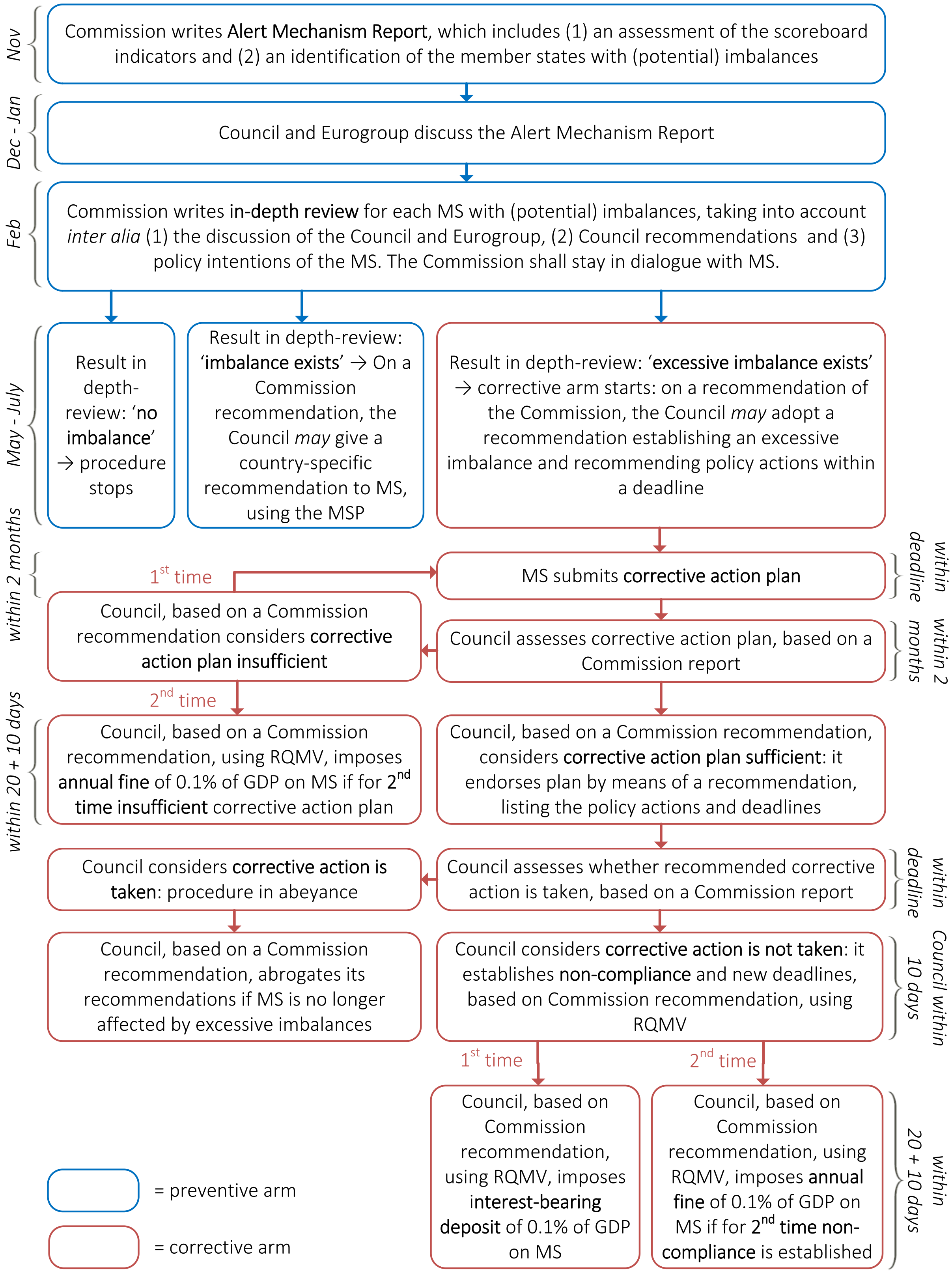
The MIP differs from the MSP regarding procedural issues and enforceability and has the potential to constrain member states' decisions on the tax treatment of debt if – but only if – they experience high household debt levels. Namely, if household debt levels are labelled as an excessive imbalance, the corrective arm of the MIP starts, and member states can face recommendations that are enforceable with sanctions. Nevertheless, even then the member state is in charge of deciding on the policies to pursue, because the corrective action plan, as submitted by the member state, is at the heart of the corrective arm. The Council must approve this corrective action plan. It may reject the plan if the member state neglects a key policy area, which the tax treatment of debt is in certain member states. Hence, the review process by the Commission and the Council, and the threat of rejection restricts the freedom of the member state concerned to decide on the design of the regime for MID. However, this restriction is still abstract. At least, until now no sanctions have been imposed in the MIP.

Two other aspects reduce the likelihood that the MIP will actually restrict member states in deciding how to design the rules governing the fiscal treatment of debt, namely the political character of the decision-making process in the MIP, and the incredibility of imposing financial sanctions. Firstly, the political character of the decisions in the MIP is less present than in the MSP, because the former procedure is "semi-automatic", due to the use of RQMV in the later stages of the procedure. This makes it more difficult for the Council to block Commission recommendations as a result of political bargaining. Nevertheless, the Council can in the end take decisions, so peer pressure characterises the MIP.[1866] This diminishes the credibility of imposing far-reaching measures that reduce a member state's room of manoeuvre.

[1865] Art. 23(9) Regulation 1303/2013 of the European Parliament and of the Council of 17 December 2013, OJ 2013, L 347/320.

[1866] Cf. Adamski (2012), pp. 1353, 1364. For earlier, similar, conclusions on the MSP before its reform in 2011, see e.g. Amtenbrink and De Haan (2003), p. 1076; Louis (2004), pp. 577-586; Amtenbrink and De Haan (2006), p. 404.

Figure 6.1: The working of the macroeconomic imbalance procedure



Moreover, decisions taken by the Commission and the Council remain dependent on the political will to take them. This willingness seems to be limited, as many scholars have acknowledged.[1867] It is telling in this regard that the corrective arm of the MIP has never been applied until now, even though imbalances in a range member states have been labelled as “excessive” from 2014-2017.[1868] The Commission created additional categories of imbalances and currently distinguishes between “no imbalances”, “imbalances”, “excessive imbalances” and “excessive imbalances with corrective action”. Member states are subjected to specific monitoring, if whatever type of imbalances are present, but the corrective arm is only started in case of the imbalances of the last category.[1869] Seemingly, these additional categories – which are not formally recognised by Regulation 1176/2011 – have been created to avoid initiating the corrective arm. Secondly, several scholars point at the incredibility of imposing financial sanctions on a member state suffering from economic problems, since this will worsen the situation even more.[1870] This reduces the threat for member states of facing sanctions. Hence, the actual likelihood that the MIP restricts a member state’s policy choices is low.

All in all, it can be concluded that the MIP may influence member states’ policies by drawing attention to certain problems, and by creating pressure to reform. Nevertheless, it does not significantly restrict the independence of member states in deciding how to design the rules governing the tax treatment of debt.[1871] Recommendations in the preventive arm are not enforceable.[1872] If the corrective arm starts, the member state has the initiative in choosing policies to pursue for remedying imbalances. Whether the Council, based on recommendations of the Commission, takes decisions against the member state depends on political will. Moreover, if such recommendations are given, the possibility to enforce them with financial sanctions is not entirely credible, although the threat of cutting back money coming from the European Structural and Investment Funds might be more credible. For these

[1867] Hodson (2013) observes that the Commission is reluctant to be too critical towards member states experiencing macroeconomic imbalances (p. 193). For comparable remarks, see Common Market Law Review (2012), p. 1559; Kastrop et al. (2014), p. 611 Adamski (2016), p. 191. Cf. Moschella (2014), pp. 1273-1274, 1282-1283; Seyad (2015), pp. 257-258. Wolf (2015) qualifies the Commission as a political body, captured by member states (p. 72).

[1868]https://ec.europa.eu/info/node/4320/ (last visited 12 August 2017). However, Smits (2015) provides an alternative explanation for flexibility in enforcement decisions regarding the SGP, which *mutatis mutandis* also applies to the MSP: the fact that structural reforms are becoming more important means that the effects of such reforms are only visible with a delay (pp. 1161-1162). Then, fast enforcement might not be appropriate.

[1869] European Commission (2016b), pp. 6-7.

[1870] Ruffert (2011), p. 1803; Adamski (2012), pp. 1341-1342, 1347; De Streel (2014), p. 98. Cf. Catania (2011), p. 6; Adamski (2016), p. 190.

[1871] Cf. Hodson (2015), who concludes that the Six-Pack, which includes the MIP, is softer than it looks (p. 155).

[1872] Cf. art. 288 TFEU, which states that ‘[r]ecommendations and opinions shall have no binding force.’

reasons, the likelihood of decisive restrictions on member states' possibilities to decide on the tax treatment of debt is low.[1873]

6.3.1.3. The impact of enhanced surveillance on tax policies of member states

When a member state experiences or is threatened with serious difficulties regarding its financial stability, which likely spill over to other euro area member states, the Commission – not the Council – can decide to subject the country to enhanced surveillance.[1874] For assessing whether this is the case, the Commission shall *inter alia* base itself on the scoreboard of the MIP and the in-depth reviews of the member states.[1875] So, enhanced surveillance will only be an option if household debt levels have far-reaching consequences for financial stability. Member states are not confronted with it in normal circumstances.

When a member state is subject to enhanced surveillance, it must adopt measures with the aim of addressing the sources or potential sources of the difficulties, in cooperation with the Commission, which acts in liaison with the ECB, the European Supervisory Authorities and the ESRB.[1876] The member state must take into account any recommendations issued under the MSP, MIP and EDP. So, if it turns out that the regime for MID in a certain member state contributes to high household debt levels, which in turn create financial instability, the member state must address this regime. However, it is difficult to imagine that such a close and causal link between MID and financial instability can be proven. Otherwise, the enhanced surveillance mainly entails that the member states are obliged to provide certain information, must consult, and cooperate with, the Commission – acting in liaison with the ECB, the European Supervisory Authorities, the ESRB and, where appropriate, the IMF – in adopting measures aimed at addressing the (potential) sources of difficulties, and will receive review missions of the Commission, ECB and relevant European Supervisory Authorities.[1877] If the Commission, based upon the review missions, concludes that additional measures are necessary, the Council, 'on a proposal from the Commission, may recommend to the Member State concerned to adopt

[1873] These findings have been confirmed by the European Commission (2014i), which concluded, in its economic governance review, that the MIP 'contributed to a shared understanding among Member States of their specific and common policy challenges and the policy response. However, *there is a need to* improve the implementation of the relevant policy recommendations, and *find the tools that improve the incentives for Member States to adopt and implement the necessary policies*.' (p. 8) (italics added).
[1874] Art. 2(1) Regulation 472/2013.
[1875] Art. 2(2) Regulation 472/2013.
[1876] Art. 3(1) Regulation 472/2013.
[1877] Art. 3(3) and 3(5) Regulation 472/2013.

precautionary corrective measures or to prepare a draft macroeconomic adjustment programme.'[1878] The Council can opt for making its recommendation public. These decisions are adopted by qualified majority.[1879] Regulation 472/2013 does not specify sanctions. Therefore, Hodson (2014) rightly concludes that its bark looks worse than its bite.[1880] Indeed, for influencing a member state's decisions on designing the regime for MID, Regulation 472/2013 does not add stronger pressure mechanisms than the MIP. However, if a member state were subjected to enhanced surveillance due to high household debt levels causing financial instability, the Commission and the EU financial supervisors become more involved in the actual decision-making process, and thus have more opportunities to influence decisions. Still, it remains the question whether domestic decision-makers will really be influenced by these EU actors.

6.3.2. Independent amendment and enforcement of the Dutch rules on tax treatment of debt

Whether under EU pressure or not, decisions on amending rules regarding MID are made at a national level. In the Netherlands, most rules regarding MID are part of primary law, namely the Wet IB 2001. The parliament adopts primary law. Decisions on more detailed aspects of the rules regarding MID are taken by the Tax Administration, which is part of the Ministry of Finance. These details can be relevant, especially for the determinacy and completeness of the rules. Nevertheless, all of the examined rules are part of the Wet IB 2001, except for the condition that interest has to burthen on the borrower, which results from a decree, and except for a few issues solved by case law.[1881] So, the parliament decides on almost all main issues. It has not created rules which explicitly leave room for discretionary choices by the Tax Administration, so their application requires no separate discussion.

The enforcement of the rules on MID belongs to the tasks of the Tax Administration. Its discretion is not steered towards acting. A concern in that respect is that the workload at the Tax Administration might be a reason to abstain from enforcement.[1882] When acting, its discretion is guided towards imposing proportionate sanctions. Due to the principle of proportionality, the magnitude of the fine has to be tuned to the seriousness of the offence and other relevant circumstances.[1883] The Tax Administration further restricted its own discretion by adopting the BBBB, which include policy

[1878] Art. 3(7) Regulation 472/2013.
[1879] *Ibidem.*
[1880] Hodson (2014), p. 198.
[1881] Cf. sub-section 6.1.1.
[1882] Cf. sub-section 6.2.1.3 and footnote 1782.
[1883] Art. 5:46(2) Awb. This provision specifically concerns sanctions. See also art. 3:4(2) Awb, which codifies the proportionality principle, as applying to all decisions of administrative organs.

guidelines on the magnitude of the fines.[1884] These guidelines are not hard: deviating from them is possible, if substantiated. Hence, this is a situation of guided discretion. Since the Tax Administration is part of the Ministry of Finance, it is accountable to parliament.

6.3.3. Independent amendment, application and enforcement of the Irish rules on tax treatment of debt

In Ireland, almost all rules regarding MIR have been enshrined in the TCA 1997 and are thus part of primary law, adopted by the Houses of the Oireachtas. Yet, some aspects of the rules have been determined or clarified by the Revenue Commissioners.[1885] In some of these cases, they exercise *de jure discretion;* in other cases *de facto* discretion, even if the law does not grant it.[1886] Although the Revenue Commissioners are subject to control of the Minister for Finance, they are independent insofar as performing their functions under tax acts or statutory instruments.[1887]

The Revenue Commissioners only possess limited discretion regarding enforcement decisions. Firstly, they have to decide whether to settle, to opt for civil penalties, or initiate a criminal procedure. It is unlikely, in light of their own code of practice, that the Revenue Commissioners will start a criminal procedure.[1888] There are two legal bases for imposing civil penalties, sections 1056 and 1077E TCA 1997, each with a different procedures and, consequently, with different implications for the degree of discretion when deciding about the penalties. If the Revenue Commissioners use section 1056 TCA

[1884] Cf. sub-section 6.2.1.1. These guidelines limit all three types of discretion.

[1885] An example of a clarification by the Revenue Commissioners is the Tax Briefing on the eligibility of top-up loans for MIR (Revenue Commissioners (2009); cf. the discussion in sub-section 6.1.2.1). An example of a rule set by them is the *pro rata* approach regarding the purpose of a qualifying loan: if part of a loan is used for other purposes than purchasing, repairing, developing or improving the qualifying residence, only a *pro rata* part of the interest is considered as ineligible for MIR (cf. sub-section 6.1.2.2).

[1886] The *pro rata* approach, mentioned in the previous footnote, is opposite to the literal text of section 244(1)(a) TCA 1997, as indeed acknowledged in the relevant Tax Briefing (Office of the Chief Inspector of Taxes (1998), p. 18.) Their policy is against the literal meaning of the section, notwithstanding the fact that Irish acts, in the first instance, ought to be interpreted in accordance with their literal meaning (*Gaffney v. The Revenue Commissioners* [2013] IEHC 651)). An example of the exercise of *de jure* (subsuming) discretion is that a home owner is temporarily allowed to receive relief for his previous own residence, but only if he shows, to the satisfaction of the inspector, that he took all reasonable steps necessary for disposing it (cf. sub-section 6.1.2.2). There is no guidance for using this discretion.

[1887] Regulation 9 S.I. 2/1923 (*supra,* footnote 1787; section 101 Ministers and Secretaries (Amendment) Act 2011, No. 10/2011, available at http://www.irishstatutebook.ie/eli/2011/act/10/section/101/enacted/en/index.html

[1888] In their Code of Practice, the Revenue Commissioners (2015) includes non-exhaustive and non-binding lists with offences that probably will be prosecuted, as well as criteria for consideration to guide their decisions (para. 7.2-7.4). Moreover, it states that criminal prosecution is only started against the most serious tax offenders and offences: so, it will probably never be used against claiming too much interest relief (para. 7.1).

1997 as a basis for penalising offenses, a court imposes the fine. This section only provides maximum sanctions, but no further guidance. If section 1077E TCA 1997 serves as a basis for imposing fines, procedural issues are different. The section prescribes a sophisticated regime for determining the magnitude of the sanction, and prescribes the procedure to follow.[1889] Hence, the choice for the amount of the fine is guided, and the degree of discretion left for the Revenue Commissioners is limited.

Nevertheless, another provision increases the discretion of the Revenue Commissioners considerably. They namely have the power to mitigate any fine or sanction imposed with maximum 50%, even penalties arising from a judgement.[1890] Apart from this maximum percentage for mitigating penalties, the TCA 1997 provides no further rules to guide choices regarding mitigation. Hence, this discretion of the Revenue Commissioners is quite large, especially considering the possibility to overrule court decisions.

6.4. Concluding and comparative remarks

In the past decade, possibilities to deduct mortgage interest have been reduced in many European countries, including the Netherlands and Ireland.[1891] During this period, in Germany the option to deduct mortgage interest rates from income tax did not even exist. Moreover, the previous regime for subsidising homeownership, the *Eigenheimzulage* was not dependent of the manner of financing the residence and did not directly stimulate debt-financing of an own home. The Dutch and Irish regimes for mortgage interest deductibility or relief differ considerably, also in their complexity. The Dutch rules are more complex, mainly with the aim to restrict deduction possibilities and to prevent that homeowners deduct interest which is not used for financing their own home. Some of these rules are

---

[1889] The envisaged procedure entails that the Revenue Commissioners first try to impose the sanction in a settlement procedure (Section 1077B(1)(a) TCA 1997 and p. 22 of the Explanatory Memorandum of the Finance (No. 2) Bill 2008, available at http://www.oireachtas.ie/viewdoc.asp?DocID=10390 (last visited 5 January 2016)). When they are unable to agree on the terms of the settlement with the tax payer, a Revenue Officer shall notify the tax payer, by means of an opinion, that he is liable to a penalty. This opinion shall include the provision on which the penalty is based, the relevant circumstances and the amount of the penalty. This opinion may be amended at any time. If the recipient of the opinion does not agree with the opinion, within 30 days in writing, and does not pays the fine, the Revenue Officer may apply to a court. Then, the court will determine whether the tax payer is liable to a fine (section 1077B(1)-(3) TCA 1997). Hence, this procedures provides the Revenue Commissioners with more options, but still strictly guides their discretion, which has to be acclaimed for ensuring the effectiveness by battling unchecked capture or pressure.

[1890] Section 1065 TCA 1997.

[1891] Because the analytical framework has been applied somewhat differently in this chapter, no summary table will be included in the conclusion.

necessary due to the fact that the Dutch system is more generous than the Irish system in granting compensation for paid mortgage interest. For instance, because the Netherlands offers MID for thirty years, it has a rule preventing homeowners from deducting interest for more than thirty years.[1892] While the Netherlands has created a rule to prevent that homeowners deduct more interest after moving by increasing the mortgage loan, instead of using the proceeds from selling their previous home, Ireland just set a maximum percentage and amount for second and subsequent buyers, which removes many incentives to increase debt-financing after moving. [1893] Part of the complexity of the Dutch rules is also a result of the introduction of incentives to redeem debt, by only allowing MID for annuity loans, contrary to the Irish rules. However, when the Irish system of MIR is phased out, the incentives to redeem debt will return.[1894]

The comparison of the Dutch and Irish regimes reveals that both countries can learn from design choices in the other country. For instance, the Dutch system includes rules that preclude deducting artificially increased interest rates, while receiving a reduction via the backdoor.[1895] Instead, the Irish rules prevent that homeowners can claim too much relief by purchasing or repairing a house for an artificially high price.[1896]

Both member states have involved lenders for executing the rules on MID/MIR and providing information about borrowers. This helps to reduce and detect violations. While both member states provide for proportionate and dissuasive sanctions to punish violations of tax laws, the ease with which they can impose them is different. The Revenue Commissioners can easier prove a deliberate or careless action of an Irish homeowner than the *Belastingdienst* can prove (conditional) intent or gross negligence of a Dutch homeowner.[1897] Therefore, enforcement will be easier in Ireland.

The independence of national actors to decide on the tax treatment of debt is limited by the powers which EU actors – mainly the Commission and the Council – have received in the system of economic governance in the EU. These European actors can exert influence on member states, but are unable to decisively limit the freedom of national governments, because of the weakness of the EU governance

[1892] This is the rule on the redemption position. Cf. sub-section 6.1.1.2.
[1893] The Dutch rules on the own home reserve have been discussed in sub-section 6.1.1.2, and the Irish ceiling for second and subsequent buyers in sub-section 6.1.2.1.
[1894] Sub-section 7.1.2.3 offers some suggestions to reduce the incentives to borrow in the Dutch system of MID.
[1895] Cf. sub-section 6.1.1.2.
[1896] Cf. sub-section 6.1.2.2.
[1897] Cf. sub-sections 6.2.1.1, 6.2.1.3, 6.2.2.1, 6.2.2.3.

in place.[1898] Nevertheless, country-specific recommendations have become more specific in the post-crisis years.[1899] After the reform of the system of economic governance, they often point to specific policy areas. Consequently, pressure on member states with respect to their tax policies has increased. Nationally, the parliaments have given the bodies responsible for taxation a different degree of discretion and guidance when applying and enforcing tax law.

[1898] Sub-section 7.3.2 offers some suggestions for improvement.
[1899] Cf. Dawson (2015), p. 985.

7. Rethinking household debt regulation in the EU and its member states from a systemic perspective

At the start of this decennium almost none of the legislation to restrict household debt levels analysed in the previous chapters existed. There were no macroprudential measures in European capital requirements legislation, no regulatory LTI and LTV caps in the analysed member states, much more generous regimes for mortgage interest deduction or relief and no mandatory creditworthiness assessment before providing a mortgage loan, as now required by the MCD. The institutional landscape looked very different too, without the ESRB, the SSM, the macroprudential authorities with powers to intervene in financial markets, and the MIP to push member states to adopt reforms for the sake of macro-financial stability. All these instruments, as well as the actors which are empowered to use them, have been analysed in this study with a view of discovering whether the preconditions for effectiveness are present for these instruments. It has been discussed to what extent these instruments are determinate and complete, whether they can be enforced proportionately and dissuasively, and whether they can be applied independently. This final chapter aims at advancing the analysis one additional step. Building upon the findings of the previous chapters and upon an analysis of the interaction between the various instruments and actors, it draws conclusions about the rules in the EU, the Netherlands, Ireland and Germany, and proposes changes to better fulfil preconditions for effectiveness. To be sure, macroprudential policy in Europe is, much like our understanding of it, still in its infancy.[1900] Therefore, a certain degree of humility is called for when drawing conclusions and proposing changes.

This chapter proceeds with highlighting findings and trends about the ever-increasing number of instruments to restrict household debt levels. In addition, it examines the interaction between the instruments in light of the household debt determinants. Finally, it offers suggestions to exploit the complementarities between the instruments and allocate them in a way that supports their potential effectiveness. The second section draws conclusions about the mechanisms to enforce the instruments, and mentions possibilities for improvement. Section 7.3 starts with the finding that the players involved received a range of new tasks in the past years. It points to some trends and examines the interaction between the actors. Last, but certainly not least, this section underlines the areas where improvement is necessary to ensure that instruments can be used effectively.

[1900] Aikman et al. (2015), p. 1102.

7.1. An increasing number of instruments

The four previous chapters examined several types of instruments: regulatory capital- and funding-based instruments, direct LTV, DSTI, LTI and DTI limits, lending restrictions in consumer law and the tax treatment of household debt. Some interesting findings stand out when transcending the analysis of each compartment of law and taking an overarching perspective.

7.1.1. EU and national action: findings and trends

Both the EU and its member states have been active to create new instruments. The EU has adopted the CRR and CRD IV, which included new macroprudential instruments, as well as the CCD and MCD. Member states have reformed their regimes for mortgage interest deduction or relief and have adopted or are adopting LTV, DSTI, LTI and DTI limits. Arguably, the EU played a role as well in the creation of these caps, because the ESRB facilitated discussion and mutual learning, and issued a recommendation on these instruments.[1901]

7.1.1.1. Available macroprudential instruments and the design of LTV, DSTI, LTI and/or DTI limits

EU legislation created the macroprudential capital-based instruments which target policies related to lending to households. They are uniform in the whole Union, in terms of design, but not in terms of use, as competent and designated authorities can exercise national options and discretions to increase capital requirements. Until now, none of the examined authorities has used these powers in relation to consumer and mortgage loans, apart from a minor tightening of one criterion by the Central Bank of Ireland.[1902] Most of the examined macroprudential supervisors – namely DNB, BaFin and the ECB – currently only have the instruments at their disposal for counteracting undesirable credit developments and high household debt levels that have been created by the CRR and CRD IV. Consequently, they lack instruments that go beyond banking regulation and supervision. Admittedly, in the Netherlands, there is a system of regulatory maximum LTV, DSTI and LTI ratios in place since 2013, but the Minister of Finance – and not DNB – is in charge of setting and adjusting these ratios. In Germany, the possibility to set LTV, DSTI and DTI limits is under construction and expected to be finalised in 2017. Instead, in Ireland, the CBI has set LTI and LTV caps in 2015 and has the power to adjust them.

[1901] See e.g. European Systemic Risk Board Recommendation 2013/1 of 4 April 2013, OJ 2013, C 170/01.
[1902] Cf. sub-section 3.1.1.2 and https://www.esrb.europa.eu/national_policy/other/html/index.en.html (last visited 16 June 2016).

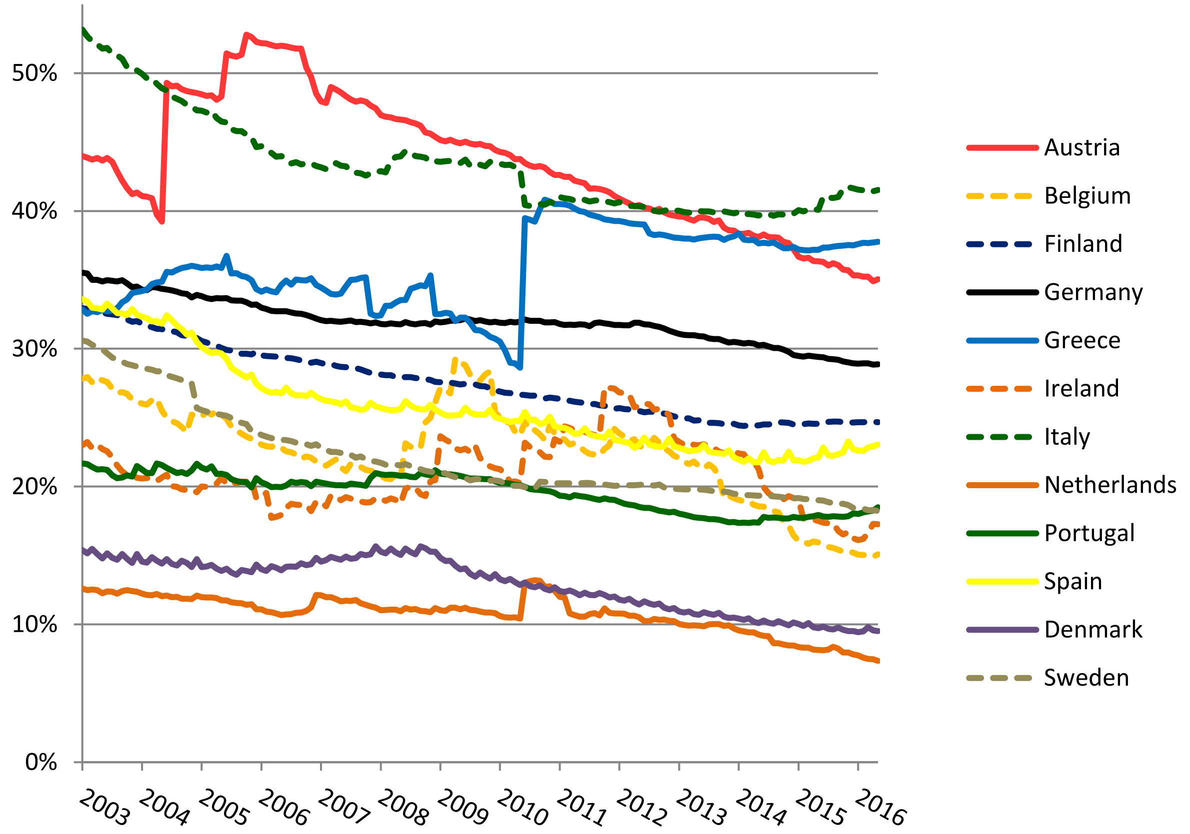
In all three examined member states, LTV, DSTI, LTI and/or DTI limits are or can be in place, beyond banking regulation. The creation of such instruments is a trend in the EU.[1903] In all three member states, the scope of these caps is or will be set as wide as possible, in order to reduce circumvention possibilities. The Netherlands and Ireland have opted for different approaches to achieve that aim, because the Irish – as well as the proposed German – caps are explicitly macroprudential rules, whereas the Dutch caps have been built upon conduct of business rules, which have consumer protection as primary goal.[1904] The rules of the Irish and proposed German caps are more broad-brushed than their Dutch counterparts, due to their explicit macroprudential character. This enables a macroprudential use of the rules, but decreases the protection for an individual household, because they are not binding in relation to a single consumer.[1905]

7.1.1.2. Dangerous differences between rules for mortgage credit and for other consumer credit

A general trend – visible in several areas – is that mortgage credit is more regulated and subject to stricter rules than general consumer credit. For instance, in the Netherlands, self-regulatory DSTI limits exist for consumer credit, compared to the regulatory DSTI caps for mortgage credit. In Ireland, there are only LTI limits for secured loans. Furthermore, the rules on assessing creditworthiness in the CCD lack detail and bite compared to their counterparts in the MCD. Admittedly, there are good reasons to prioritise rules for mortgage credit, since housing and housing loans can be subject to boom-busts dynamics; this risk is smaller for consumer credit. Furthermore, mortgage lending involves large sums of money. Nevertheless, having protective rules for consumer credit is essential too, because it can function as a substitute for mortgage credit. Current legislation does not always prevent this. Furthermore, in many member states a significant share of the total amount of lending to households consists of consumer loans, as illustrated in graph 7.1.[1906] Finally, consumer credit is often more expensive and riskier than mortgage credit, and especially used by vulnerable groups.[1907]

[1903] Cf. table 2.2 and https://www.esrb.europa.eu/national_policy/other/html/index.en.html (last visited 16 June 2016).
[1904] See sub-sections 4.1.1, 4.2.1 and 4.4.
[1905] See section 4.4 for a more extensive discussion of this issue.
[1906] Graph 7.1 is based upon data from the Statistical Data Warehouse of the ECB: http://sdw.ecb.europa.eu/browse.do?node=9689405 (retrieved 5 July 2016). The share of outstanding consumer loans in the total amount of outstanding loans to households is calculated by adding the 'MFI loans for house purchase to domestic households' and 'MFI loans for consumption and other purposes to domestic households' and calculating the share of the latter category. About MFIs, see https://www.ecb.europa.eu/stats/money/mfi/general/html/index.en.html (last visited 5 July 2016). Consumer loans can be provided too by other lenders than MFIs, so the actual share of consumer loans might be higher, but these percentages give a first indication of the importance of consumer loans.
[1907] Cf. section 5.4.

Graph 7.1: Share of consumer loans in total lending to households in %



Steps are necessary to address these issues, both at the level of the EU and its member states. Ireland and Germany can improve protection for consumers who take out consumer loans by adding specificity to the provisions for assessing creditworthiness, which would decrease their current indeterminacy.[1908] This is possible, as shown by practice in the Netherlands, where codes of conducts further detail this obligation.[1909] There is also room for improvement in Netherlands, as the norms in the codes of conduct are not entirely coherent with the regulatory norms.[1910] Ireland can also enhance consumer protection and repair the current gaps in the LTV and LTI limits, by requiring lenders to take unsecured credit into account when calculating loan-to-income ratios. Although this will be much easier after the credit registry becomes operational, it is already possible now.[1911]

The main priority for the EU needs to be the aligning of the CCD and MCD, and the addressing of existing shortcomings. The MCD already attempts to be coherent with the CCD by often using a

[1908] Cf. sub-sections 5.1.3.1 and 5.1.4.
[1909] Cf. sub-section 4.1.1.1.
[1910] Cf. sub-section 4.1.1.2 and table 4.2.
[1911] Cf. sub-section 4.2.1.3.

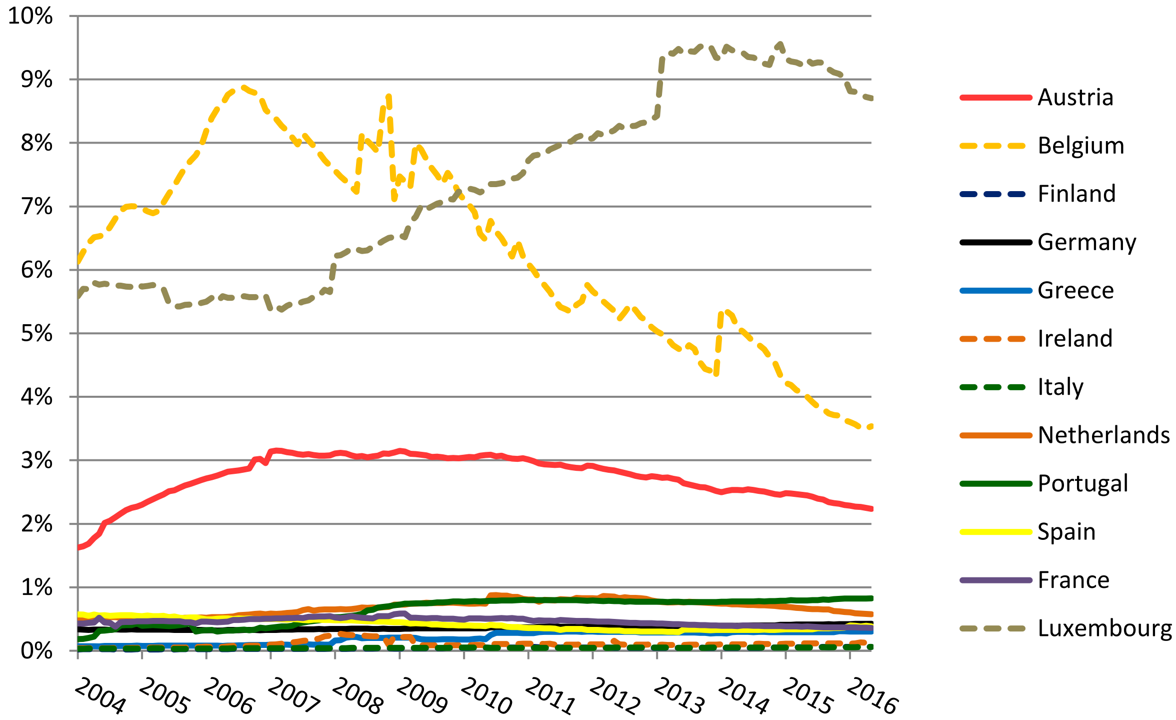
comparable approach and by regularily referring to the CCD, especially concerning definitions.[1912] Still, there are significant differences between both directives in their approach to consumer protection.[1913] More coherence would be achieved by integrating the two legal acts into one directive and bringing their approaches in line.[1914] This integration must be accompanied with an amendment of the provision on creditworthiness assessment for general consumer credit – currently art. 8 CCD – which falls significantly short of offering meaningful consumer protection, especially due to its vagueness and gaps.[1915] What makes matters worse, art. 8 CCD is subject to maximum harmonisation, barring one specific exception. So, member states lack possibilities to solve this problem. Consumer protection has actually decreased in several member states – for instance in Ireland – after the adoption of the CCD.[1916] Hence, it is up to the EU to ensure high standards of consumer protection. Eventually, art. 8 CCD could simultaneously be changed into a minimum harmonisation provision. If the EU is not able to achieve higher standards, a solution is to change art. 8 CCD into a minimum harmonisation provision, without any further substantial amendment of the rules. It is presently submitted that this is not the best option to ensure high lending standards, since member states might be reluctant to increase their requirements due to regulatory competition. It might also undermine the unity of the internal market. However, minimum harmonisation is not unprecedented, as the provisions on creditworthiness assessment in the MCD are also subject to minimum harmonisation. Furthermore, derogations from uniform internal market provisions are repeatedly allowed in other areas as well for reasons of consumer protection.[1917] More importantly, for the EU, the internal market is not an end in itself, but a means to improve ‘the well-being of its people’.[1918] Offering ‘a high level of protection’ is another means.[1919] If over-indebtedness and its negative consequences cannot be prevented due to the pursuit of uniform, but low standards, it might be wise to rebalance the intermediate goals of achieving an internal market and offering a high level of protection, in order to increase the well-being of European people and the stability of the internal market.

On the contrary, the case for creating maximum harmonisation rules regarding the creditworthiness assessment in the area of mortgage credit is weak, as the amount of cross-border transactions is low;

[1912] See e.g. art. 4 Directive 2014/17.
[1913] See sub-section 5.1.1. Cf. Brown (2015), pp. 564-566.
[1914] Schäfer (2014) also advocates the integration of the CCD and MCD into one directive (p. 216).
[1915] See sub-sections 5.1.1.1 and 5.4.
[1916] On decreased consumer protection in Ireland, see Donnelly & White (2013), pp. 9-10. Cf. Brown (2015), p. 569.
[1917] See e.g. Case 220/83 Commission v France [1986] ECR 3663, para. 20; Case C-288/89 *Gouda* [1991] ECR I-4007; Case C-265/12 *Citroën Belux* [2013], ECLI:EU:C:2013:498, para. 37-38.
[1918] Cf. Buijze (2014), p. 73.
[1919] Cf. art. 3 TEU.

only 1%, according to earlier research.[1920] Indeed, graph 7.2 shows that lenders in most member states supply (much) less than 1% of their mortgage loans across borders, with the exception of lenders in Austria, Belgium and Luxembourg.[1921] It is highly questionable whether harmonisation will increase

Graph 7.2: Cross-border mortgage lending in %



cross-border transactions, given that issues like language play a crucial role in decisions of consumers where to buy goods or to use services.[1922] Most likely, there will be a strong home bias in case of mortgage borrowing, because borrowers will intuitively trust local lenders more than foreign lenders.[1923] While the amount of cross-border transactions is rather low, maximum harmonisation might actually lead to a lower level of consumer protection. Furthermore, it deprives member states of possibilities to fine-tune consumer protection to the relevant domestic circumstances. Therefore, the subsidiarity principle would not fulfilled, if the EU would adopt maximum harmonisation measures on creditworthiness assessment for mortgage loans.[1924] Instead, minimum harmonisation measures

---

[1920] *Supra,* footnote 1367.

[1921] Graph 7.2 is based upon data from the Statistical Data Warehouse of the ECB (*supra*, footnote 1906). The share of cross-border mortgage lending is based upon the difference between 'MFI loans for house purchase to euro area households ' and 'MFI loans for house purchase to domestic households'.

[1922] Thommes et al. (2015), pp. 48, 56-57, 66-67, 69.

[1923] A Dutch study to consumer behaviour in the mortgage markets shows that Dutch consumers have a strong preference for Dutch lenders (EIM, 2011, pp. 15-16).

[1924] The EU could do this in the exercise of its competences related to consumer protection and the internal market, which are both shared competences (art. 4(2)(a) and 4(2)(f) TFEU). The MCD and CCD are based upon (what is currently) art. 114 TFEU. This legal basis, related to the EU's internal market competence, is often used to adopt measures that seek to ensure a high level of consumer protection (cf. art. 169(2)(a) TFEU).

on creditworthiness assessment can be justified, since they allow for the establishment of minimum lending standards across the Union, whilst enabling member states to enact stricter and more fine-tined rules. Minimum harmonisation is necessary from the perspective of consumer protection and financial stability in order to avoid a regulatory race to the bottom and regulatory arbitrage, as well as to ensure an equivalent and high level of protection. A high level of consumer protection contributes to the stability of the financial system, which in turn is in the interest of the whole E(M)U.[1925] Building upon this study, further, detailed, research is required to clarify how the CCD and MCD can be integrated best, while offering a high level of consumer protection, possibilities to fine-tune rules to national circumstances, and a fairly uniform regime across the EU.

7.1.1.3. Compliance or over-compliance? Balanced and protective rules to withstand risks

Interestingly, in both the Netherlands and Ireland, in recent years lenders seemed to prefer to abide by the standard rules and are cautious to use existing exception possibilities.[1926] A first question is what drives this attitude. In the Netherlands, a report of Ernst & Young (2015) – based upon interviews with respondants working in the financial industry and, to a lesser extent, supervisors and interest groups – provided several potential explanations for this behaviour.[1927] One is that the high regulatory burden, resulting from the increasing amount of new rules, led to standardisation, with as consequence that exceptions are rarely used. In addition, lenders seem to treat soft guidance of the supervisor as binding regulation.[1928] Another factor mentioned in the report is that the indicators on the AFM dashboard have been constructed in a manner which leads to a lower ranking when exceptions are used.[1929] Nevertheless, the AFM does not consider the use of exception clauses to the LTI and LTV limits as problematic, if justified by good reasons.[1930] Other or additional explanations than those provided for in the report of Ernst & Young are conceivable too. Firstly, the degree of risk-aversion might have grown in the aftermath of the crisis. Secondly, the current low-profit environment for commercial banks might stimulate standardisation, because the use of exceptions might be time-consuming and thus costly. On the contrary, it can also be argued that this low-profit environment stimulates risk-seeking, in a quest for profit.

[1925] Cf. Schoenmaker & Wierts (2016), p. R54.
[1926] Ernst & Young (2015), p. 56; McBride (2016).
[1927] Ernst & Young (2015), pp. 7, 51, 56, 76.
[1928] This phenomenon is observed more frequently with respect to guidance of the supervisor in the context of principle-based regulation (Black, 2008, p. 449; De Vries, 2013, p. 345).
[1929] Ernst & Young (2015), p. 56.
[1930] As indicated by an official of the AFM in an interview.

A second question is how to evaluate and respond to this behaviour. The report of Ernst & Young qualifies the observed behaviour as over-compliance, which leads to a larger, indirect, regulatory burden.[1931] The report does not draw the conclusion that some rules need to be abolished or relaxed in order to decrease this regulatory burden – instead, it proposes to be clearer about the interpretation of soft guidance.[1932] Yet, especially in Ireland, some people are arguing that the macroprudential rules should be relaxed, because of their negative consequences.[1933] Without further research, it is difficult to assess whether the behaviour of lenders can be qualified as over-compliance, or whether there are currently good reasons to be careful with lending. In any case, it can help if a supervisor communicates that using exceptions in a good way is allowed. However, policymakers, regulators and supervisors need to be reticent with relaxing rules, as long as the exceptions provide sufficient room to accommodate lending to situations where exceeding LTV, DSTI, LTI and/or DTI limits does not involve many risks. If that is case, the rules are not the problem. It might very well be the case that the degree of risk-aversion is currently high, as a consequence of the recent crisis. However, rules must be able to contain lending during a boom, when over-optimism soars and risk-aversion might swiftly turn into risk-seeking.[1934] Although over-regulation and unnecessary restrictions must be avoided, rules – including the conditions for using exceptions – must be able to withstand the pressure which is being built during a boom.

7.1.1.4. Information is invaluable

Another noteworthy finding, not limited to one particular instrument, is the importance of available information via a credit registry. Accessible and reliable information is necessary for lenders to be able to calculate a DSTI or LTI ratio and assessing a consumer's creditworthiness. This is no surprise. It is less well known that a well-functioning credit registry is also vital for macroprudential supervisors. They need information to understand potential risks. Moreover, the interview with an official of the Central Bank of Ireland revealed the importance of access to a fully-fledged credit registry with loan-level data to adequately calibrate DSTI and DTI limits. Ensuring the availability of reliable data will not be easy; it will encounter resistance. This is evidenced by the fact that the original proposal of the CCD contained a provision that obliged member states to set up credit registries, which was later

[1931] *Ibidem,* p. 78.
[1932] Ernst & Young (2015), p. 103.
[1933] See the brief summary of the public debate in Ireland in sub-section 4.2.1.3. In the Netherlands and Germany similar arguments were raised in response to the recommendation to reduce the LTV limit and the proposal to create the legal basis for borrower-based caps, respectively.
[1934] Cf. sub-section 2.1.1.1.

removed.[1935] Nevertheless, it is important to strive for the availability of reliable data, albeit while simultaneously respecting data protection requirements and privacy.[1936]

7.1.1.5. Valuation rules may not be catchy, but are still crucial

The restrictive effects of loan-to-value ratios – be it as borrower-based caps or as used in capital requirements legislation or the MCD – crucially depends on the prudence of the valuation of the house. However, valuation requirements differ substantially between member states and between fields of law. The CRR prescribes the use of either the market value or the mortgage lending value. The latter is the prudent value of the house, taking into account long-term sustainable aspects of the property, while disregarding speculative elements.[1937] In Germany, using the market value is prescribed for calculating the macroprudential LTV cap, whereas using the mortgage lending value is mandatory for issuing *Pfandbriefe*.[1938] Both valuation methods can be used for other purposes.[1939] In Ireland, the macroprudential LTV ratio must be calculated with the lowest of either the market value of the property, or the price agreed in the contract.[1940] Instead, the Netherlands interpreted art. 19 MCD as precluding the use of the price paid for the house as its value.[1941] For calculating the LTV limit, it allows four valuation methods: (1) the building costs of the house, (2) the market value of the house, (3) model-based valuation (but only if the LTV ratio is lower than 90%), and (4) the most recent official appraisal value based upon to the Wet WOZ (but only if the LTV ratio is lower than 90%, or for people who already live in house).[1942]

The definitions of the market value differ in EU, Irish and German law, while Dutch law does not contain a definition at all.[1943] The core of these definitions is the price at which a house would exchange at the date of the valuation between a willing buyer and a willing seller in an arm's-length transaction, after

---

[1935] Ferretti (2013), pp. 803-804.
[1936] Among others, Ferretti (2009, 2010, 2013), Jentzsch (2007) and Pyykkö (2013) discuss issues related to privacy and data protection in the context of credit registries. To increase the availability of reliable, loan-level data, the ECB has started the project AnaCredit: https://www.ecb.europa.eu/stats/money_credit_banking/anacredit/html/index.en.html (last visited 12 August 2017).
[1937] Cf. sub-section 3.1.1.1.
[1938] Cf. sub-sections 4.3.1.2 and 3.1.3.1.
[1939] If German banks use the mortgage lending value, as allowed in the CRR, requirements of the § 16(2) PfandBG and the BelWertV must be met (§ 10(1)(8) KWG in combination with § 22 *Solvabilitätsverordnung (supra,* footnote 642).
[1940] Cf. sub-section 4.2.1.1.
[1941] *Supra,* footnote 1082.
[1942] Cf. sub-section 4.1.1.2.
[1943] Cf. art. 4(76) CRR, art. 115(6) Bgfo, regulation 2(1) S.I. 47/2015, § 194 *Baugesetzbuch.*

proper marketing and assuming that parties act knowledgeably and prudently, without pressure. The market value may include short-term and speculative elements. Therefore, this and the other allowed valuation methods, except for the mortgage lending value, do not prevent overvaluation of a house due to boom dynamics.

7.1.2. Interacting instruments

An array of instruments affects the level of debt which households can take on. These instruments can complement, substitute or conflict with each other, which is relevant for their final effectiveness.[1944] Complementary instruments reinforce each other, if they affect different aspects of the borrowing and lending process or if they target different household debt determinants. An advantage of the presence of substitutive measures is that regulators or supervisors are able to choose between instruments and select the most suitable tool for a particular situation. However, a potential drawback is that overlapping instruments might increase the regulatory burden for borrowers and lenders. Then, cutting red tape could be desirable. Finally, instruments are undermined if they conflict with each other, for instance, when the resulting incentives for regulatees are contradictory.

Hereafter, various various interactions between the examined instruments are discussed, starting with the relationships among the instruments that are part of the domain of prudential regulation. Subsequently, the view will be broadened in several steps, by reviewing respectively the interaction between prudential regulation and consumer law, regulatory instruments and tax policy, and the instruments analysed in this study and other available measures.

7.1.2.1. The interaction between capital-, funding- and credit-based instruments

The level of EU involvement is different for capital-, funding- and credit-based instruments. All the capital-based measures are governed by EU legislation, while funding-based instruments are often partly subject to EU legislation and partly to national rules. In turn, credit-based tools are almost entirely a national matter.

Chapter 3 illustrates that the completeness of the rules governing (sectoral) capital requirements varies per type of instrument. Furthermore, effects of a measure can leak away, because a bank that is subjected to higher capital requirements can meet this demand in various ways. Increasing capital requirements will not necessarily restrict lending, even though this might be a secondary aim, besides

[1944] Cf. sub-section 1.4.1.

increasing resilience, (for some of the instruments). Moreover, regardless how well designed the rules within the CRR and CRD IV may be, they only apply to credit institutions and investment firms.[1945] Although this does not mean that an increase in capital requirements will have no effect on lending decisions, these instruments are far from perfect, if used for that purpose. This is also true for funding requirements, where similar concerns can be raised. Instead, credit-based instruments – i.e. borrower-based LTV, DSTI, LTI and/or DTI ratios – can be expected to be much more effective in restricting lending – if set at the right level – because circumvention is difficult, at least if the possibility of substituting general consumer credit for mortgage credit is cut off.

Nevertheless, capital- and funding-based instruments are more than imperfect substitutes for credit-based instruments. Capital requirements are mainly complementary to direct LTV, DSTI, LTI and/or DTI limits, because they work differently. Assuming that capital is costly, capital requirements affect the price of lending and, hence, always exert incentives, no matter the magnitude of the loan.[1946] Instead, direct LTV, DSTI, LTI and/or DTI limits are hard quantity restrictions, which only work at the margin. Arguably, price incentives are less paternalistic than quantity restrictions, because there is no hard constraint. They offer, however, also less protection, not only because they can be more easily avoided, but also because contradictory price incentives can be stronger, especially during a boom.[1947]

In terms of function, the various capital-, funding- and credit-based instruments are complementary too. DSTI, LTI and DTI caps are most appropriate for preventing repayment problems and over-indebtedness, because they are directly concerned with affordability. In fact, they reduce the probability of default (PD). Furthermore, they are more protective than a LTV ratio, because income is less subject to boom dynamics than house prices. A borrower-based LTV limit is complementary to DSTI, LTI and DTI limits, because it decreases the loss given default (LGD) – from the perspective of the bank – and the risk of residual debt – from the perspective of the borrower. This is certainly relevant, because research has shown that over-indebtedness is often the result of unexpected events, like unemployment, divorce or illness.[1948] Repayment problems after such a shock cannot completely be prevented by DSTI, LTI and DTI limits.

[1945] If, for instance, insurers have mortgage loans on their balance sheet, the Solvency II Directive (*supra,* footnote 614) requires them to hold capital for these exposures, but these capital requirements do not contain rules related to the LTV ratio, nor possibilities to increase capital requirements for macroprudential reasons.
[1946] See sub-section 2.3.1.2 for a discussion on the costs of capital.
[1947] Cf. De Nicolò et al. (2012), p. 5.
[1948] See sub-section 2.1.2.4.

Capital requirements are complementary to borrower-based limits, because they increase the resilience of lenders, by creating a buffer to absorb losses. Borrower-based caps do not have that effect. Because the risk of losses is larger for loans with a higher LTV ratio, a differentiation of the amount of required capital depending on the actual LTV ratio is justified. The various capital-based instruments are partly substitutive and partly complementary to one another. They are substitutive, since several instruments can be used to raise risk-weights for household loans, but only partly, due to relevant differences. Consequently, the assortment of measures enables selecting the most appropriate tool for a particular situation. Increasing risk-weights for sectoral capital requirements is useful if specific developments in the housing sector demand higher capital requirements or when differentiation based upon the actual risk level of a loan is necessary. Instead, the countercyclical capital buffer (CCB) or the leverage ratio can be increased when action is necessary due to overall credit conditions or general developments. Due to these differences, supervisors can use the instruments complementary.

LTV requirements in funding-based instruments are complementary to those in capital- and credit-based instruments in another manner. Firstly, they prevent that the lender does not care about the repayment capacity of the borrower, because he can pass on all the risks. Secondly, they inhibit that the consequences of a default of a borrower spread through the financial system. A LTV ratio of 80% for covered bonds namely means that the part of the loan above 80% of the house value cannot serve as collateral for covered bond. So, the holder of the covered bond is only affected by a default of the borrower if the LGD is higher than 20% of the house value; this is unlikely, if the house that serves as collateral can be sold. Thirdly, LTV ratios related to funding combat the circumvention of LTV ratios in capital requirements. Banks can namely circumvent higher capital requirements for mortgage loans by removing them (partly) from their balance sheet, for instance through securitisation. Currently, these three functions of LTV requirements in funding-based instruments cannot be accomplished well, because there are no LTV ratios in place for all relevant types of funding. Therefore, it is recommended to incorporate LTV requirements in, most notably, the rules on securitisation. Specifically, these rules should require the originator to keep the part of the loan above a certain LTV limit – for instance 90% – on their own balance sheet. Then, the originator should be obliged to hold sufficient capital for this part of the loan, by means of the normal rules on sectoral capital requirements for residential real estate. This simultaneously prevents circumvention of capital requirements and completely passing on the risks related to the loan to another party.

LTV, DSTI, LTI and DTI requirements in capital-, funding- and credit-based instruments are thus mainly complementary and to a lesser extent substitutive, albeit imperfectly. Therefore, it is recommended to use them accordingly, and to avoid using capital-based instruments as a full substitute for credit-based instruments. While increasing risk-weighted capital requirements can be useful, it creates the risk of pushing lending activities to less regulated sectors.

7.1.2.2. The interaction between prudential regulation and consumer protection

Microprudential regulation and consumer protection

Both microprudential and macroprudential regulation share some aims and methods with consumer law. One of the most important purposes of microprudential regulation is reducing credit risk, which is 'the risk of a loss because of the failure of a counter-party to perform according to a contractual arrangements, for instance due to a default by a borrower'.[1949] This strongly resembles the rationale behind the creditworthiness assessment, as prescribed by EU consumer legislation, namely avoiding repayment problems. The methods to achieve these goals are partially similar too. Art. 79(a) CRD IV prescribes competent authorities to ensure that 'credit-granting is based on sound and well-defined criteria'. These sound criteria might very well include some sort of creditworthiness assessment. Furthermore, the same credit-scoring model might be used to assess a consumer's creditworthiness, as required by the CCD and MCD, as well as to calculate risk-weights in the context of the IRB approach.[1950]

Nevertheless, the mandatory creditworthiness assessments complements and surpass the rules in microprudential regulation. Firstly, the perspective is different, namely not preventing problems for the lender, but for the borrower. This often coincides, but not always. Without consumer protection rules, there are several situations in which a lender might provide a loan to a consumer, even though this might cause problems for this person. This may happen if a lender is insured against credit risk, due to a mortgage guarantee or sufficient collateral. Alternatively, the lender may be able to pass on the risk, or he may have other risk preferences than the borrower. In all these examples, it might be in the interest of the lender to supply the loan, even if it creates significant risks for the borrower. Consumer protection rules force a lender to consider the interests of the borrower. Secondly, the rules on mandatory creditworthiness, especially those in the MCD, are much more specific than the aforementioned phrase in art. 79(a) CRD IV. Thirdly, the rules of the CCD and MCD apply to all lenders, not only to credit institutions and investment firms. All in all, the rules on creditworthiness assessment add more detail and another perspective for banks, while they create new obligations for other lenders.

[1949] De Haan et al. (2009), p. 305.
[1950] Cf. sub-section 3.1.1.1.

Macroprudential regulation and consumer protection

Likewise, macroprudential regulation and consumer protection exhibit shared aims, in particular the prevention of debt accumulation for households. One might wonder whether macroprudential DSTI, LTI, DTI and LTV requirements are redundant, because of the mandatory creditworthiness assessment, which already ought to prevent that households take on too much debt.

Here too, the perspective of macroprudential regulation and consumer protection differs. The latter is concerned with preventing over-indebtedness for the sake of the protection of an *individual* consumer, whereas macroprudential regulation seeks to prevent debt accumulation in order to reduce *systemic* risks and their negative consequences. Indeed, the MCD does not explicitly require lenders to take macroeconomic or systemic conditions into account in the creditworthiness assessment. It is true that art. 18(1) MCD requires to 'take appropriate account of factors relevant to verifying the prospect of the consumer to meet his obligations under the credit agreement'. Also, recital 55 of the preamble of the MCD and the EBA guidelines on creditworthiness assessment further specify that a lender should make prudent allowances for potential negative scenarios in the future.[1951] However, these requirements are not clear and binding enough to guarantee that lenders will sufficiently do this. Moreover, lenders – especially smaller ones – do not have the same capabilities as macroprudential supervisors to signal systemic risks. Hence, even if a lender complies with the rules on creditworthiness assessment and sees no reason related to the individual consumer to confine a loan, further macroprudential restrictions may still be necessary, due to systemic developments, for instance an emerging bubble. Therefore, although macroprudential regulation and consumer protection can indeed be partly substitutive – in protecting households for over-indebtedness – they are especially intended to be complementary.

In reality, member states have made different choices in combining macroprudential regulation and consumer protection, each with its own merits and demerits. In Ireland, it is required to assess a consumer's creditworthiness – because of the implementation CCD and MCD – or the suitability and affordability of credit – due to the Consumer Protection Code. Simultaneously, static macroprudential maximum LTI and LTV ratios apply, subject to proportionate limits. Not every housing loan needs to be below this limit, but a lender must on average comply with them on a yearly basis. If the German LTV ratio will be activated, its design is comparable to the Irish borrower-based caps, due to the *excess quota* (although the German rules include more exceptions, such as the *de minimus* threshold). In these two member states, the macroprudential rules are complementary to consumer protection. Yet,

[1951] *Supra,* footnote 1402.

some might argue that these double layers create red tape. In the Netherlands, LTV, DSTI and LTI caps are fully integrated into the rules to protect consumers and thus binding for each and every individual, unless exceptions are used. Therefore, there is only one layer of rules. This leads to less red tape, but also entails that macroprudential supervisors cannot use borrower-based caps as a non-static instrument complementary to consumer law.

In order to fully grasp the interaction between LTV, DSTI, LTI and/or DTI caps on the one hand and the mandatory creditworthiness assessment on the other hand, the nature of these rules requires attention too. Section 1.4.2.3 discussed three archetypes of norms, namely (1) a straightforward and encompassing rule, (2) a complex and detailed rule and (3) a principle. None of the examined macroprudential and consumer protection rules perfectly fits in one of these archetypes, but many of them approximate one archetype more than another. Although they are not pure principles, the rules on mandatory creditworthiness assessment display many principle-like features, due to the use of relatively vague terms, which point more towards a certain goal than that they really restrict. This is especially true for the requirements of the CCD, and to a lesser extent for those in the MCD, which include several more specific rules. The Irish LTV and LTI limits – as well as the proposed German caps – resemble features of the first archetype of a rule, by being relatively straightforward and encompassing, without a lot of details. Instead, the Dutch LTV, DSTI and LTI limits are rather detailed and more like the second archetype of a rule. These differences affect the potential effectiveness of these rules, as well as their interaction.

The Dutch legal design demonstrates one option to combine principles with strict rules. Provisions in the Wft and Bgfo oblige lenders to prevent an overextension of credit and to create their own criteria to achieve that. This is a form of principle-based regulation. The regulatory LTV, DSTI and LTI caps are based upon these provisions, thereby transforming the principle-based system into a relatively detailed and complex rule-based system. It is rather determinate and complete, although it is allowed to exceed the caps, if certain conditions are met. The exceptions for specific situations are mostly rule-based.[1952] However, the general exception for exceeding the LTI limit is a combination of procedural rules and substantial principles.[1953] According to the literature, gaps and creative compliance are the main potential weaknesses of a detailed rule, because regulatees may resort to 'box-ticking and formal compliance with the rules, but act against their purpose, circumventing the restrictions set by these

[1952] See e.g. art. 4(2)-(3) and 5(3)-(4) Trhk.
[1953] Art. 4(1) Trhk. See also art. 5(5)(d) Trhk for a principle-like exception.

rules as much as possible.'[1954] Instead, principles are credited for their ability to accommodate to new developments and to prevent creative compliance, as well as for increasing ownership of the norms.[1955] The Dutch system combines advantages of both archetypes: the detailed rules provide strictness and hard maximum ratios, whereas the overarching principle is still able to minimise risks related to new developments, and can function as a safety net.[1956] Nevertheless, the practice in the Netherlands shows that it is deemed unacceptable, in light of legal certainty, to consider behaviour that respects the detailed rule as a violation of the overarching principle.[1957]

In Ireland and Germany, the rules on mandatory creditworthiness assessment display many principle-like features, because they kept the implementation of the CCD and MCD close to the text of the EU directives. This form of principle-based regulation involves significant risks, despite the aforementioned advantages. The vagueness of the provisions creates room for bending the rules, among other things, by choosing a favourable interpretation. Lenders may 'get away with the minimum level of conduct possible; and thus (…) inadequate protection to consumers'.[1958] The extent to which this risk realises, will partly depend on the supervisor. Definitely, these are not purely theoretical risks: principle-based regulation is considered to have been a contributing factor to the financial crisis in Ireland and the UK.[1959] The chief executive of the British financial supervisor famously said that principle-based regulation does not work with people "who have no principles".[1960] Indeed, Luyendijk (2015), a Dutch anthropologist who conducted more than 200 interviews with people who work(ed) in the City, predominantly in investment banking, describes the culture in the City as amoral, also after the crisis.[1961] This may not be true for the culture in every member state and every field of finance, but these anecdotes provide sufficient reasons to be careful with solely relying on principles. Furthermore, principles decrease legal certainty. Paradoxically, the resulting quest for certainty might lead to an increasing number of supervisory guidelines, which are treated as if they were rules.[1962] A report of Ernst & Young (2015) shows that this actually happens in the Netherlands.[1963] Then, the result is a detailed set of norms, almost like the rule of the second archetype, but more opaque.

[1954] Van 't Hof (2016). Cf. Black (2008), p. 426; Brown & Scott, p. 475.
[1955] Cf. sub-section 1.4.2.3.
[1956] In Dutch law, also the duty of care can serve as a safety net to reduce lending behavior which is harmful for consumers. On this duty of care as a safety net, see Broekhuizen (2016), pp. 153, 156.
[1957] See the discussion of the motives for creating regulatory DSTI, LTI and LTV limits, as described at the start of sub-section 4.1.1.2.
[1958] Black (2008), p. 426.
[1959] See e.g. O'Sullivan & Kennedy (2010), p. 232.
[1960] Cited in: O'Sullivan & Kennedy (2010), p. 232; Black (2012), p. 1042; O'Sullivan & Kinsella (2013), p. 7.
[1961] Luyendijk (2015), in particular chapter 6.
[1962] Black (2008), p. 449.
[1963] Ernst & Young (2015), pp. 51, 76.

The relatively straightforward Irish and German LTV and LTI caps can serve as a backstop for the softer consumer protection rules. These hard macroprudential rules provide an upper limit to lending, in case credit is provided too easily due to euphoria, competitive pressure, or other reasons. This combination allows exploiting advantages of both archetypes of rules. Still, Ireland and Germany combine relatively vague consumer protection rules with broad-brushed macroprudential rules. The resulting freedom for lenders may stimulate own responsibility and thus identification with the aim of avoiding over-indebtedness. However, this system offers less protection for an individual household than the relatively detailed Dutch rules on LTV, DSTI and LTI limits. Therefore, in Ireland and Germany, creating more detailed macroprudential rules may become necessary in the future, especially if competition leads to pressure to circumvent the rules.

These interactions, as well as the analysis in the chapters 3-5 itself, reveal that legal details are of utmost importance for determining the impact of regulatory instruments. In that sense, it is surprising that legal research into macroprudential instruments is so scarce. Therefore, it is highly recommended to analyse macroprudential instruments in other member states than the Netherlands, Ireland and Germany in a similar fashion, and in other areas than household debt regulation. This could further our understanding of the necessary legal conditions for guaranteeing effective macroprudential policy.

7.1.2.3. The interaction between regulatory instruments and tax policy

The effects of regulation depend on the interaction with tax policy. Mortgage interest deduction or relief subsidises debt-financing of the own home, by reducing debt-financing costs. Basically, it provides opposite incentives than the regulatory instruments that aim to restrict borrowing. Hence, these instruments are in clear conflict with each other when it comes to the main direction in which they work. The situation is more nuanced – but not fundamentally different – when considering the interaction in more detail. The possibility to deduct interest or to receive relief affects the actual DSTI ratio by creating a difference between gross and net debt-financing costs. It allows a higher gross DSTI ratio, while the effect on the net DSTI ratio is unclear: it is lowered due to the subsidy, but that enables the household to take on more debt, which in turn leads to a higher DSTI ratio. The Dutch rules governing the DSTI limits take MID into account and allow a much lower DSTI ratio when no MID is possible.[1964] The Irish LTI limit does not differentiate between households which can and cannot receive interest relief. The possibility of mortgage interest deduction elevates the actual LTV ratio, because a household can take on more debt. Hence, household leveraging is stimulated, with all the

[1964] Cf. sub-section 4.1.1.2.

attendant risks.[1965] It is incoherent to provide a price incentive to leverage on the one hand, and to restrict leverage by a quantitative limit on the other hand. In the Netherlands, there is another reason why the system of MID is not at par with the regulatory LTV limit. In tax law, substance prevails over form, which is not true for financial law. As a result, even when the regulatory LTV ratio is 100% (in 2018), it is possible to deduct interest for own home debt up to 101.5%.[1966]

Nevertheless, some rules related to MID in the Netherlands stimulate the redemption of debt, and thus reduce the distorted incentives that are provided by MID. An example is the rule that the taxation of imputed rent is waived, insofar it is higher than the outstanding amount of mortgage debt.[1967] Another example is the mandatory redemption of the entire mortgage loan in maximum 30 years as eligibility condition for MID.[1968] This reduces the actual LTV ratio over time.

Stimulating home ownership by means of a relief that is independent of the manner of financing the residence, mitigates conflicts between instruments that aim to prevent over-indebtedness and leveraging on the one hand, and tax policies that try to stimulate home ownership on the other hand. The German *Eigenheimzulage,* phased out by now, was an example of such a policy.[1969] While the subsidy provides households with additional means to use for debt-financing, this only supports borrowing indirectly (and mildly, compared to MID). While the Irish system of MIR is being phased out, the Dutch system of MID needs to be reformed, which could be done along these lines. Then, relief can be granted at a much lower rate than the rates at which interest can be currently deducted. Conceptually, such a reform is not at odds with the rationale behind the present regime, which treats mortgage interest as costs for a supposedly income-generating house. The use of savings for financing a house namely implies forgoing other investment possibilities – thus, there are opportunity costs. Some of the features of the current system can be retained; for example, the mandatory amortisation requirement as eligibility condition for households which finance their home with debt. If policymakers consider this a drastic reform, they can at least accelerate the pace of reducing the maximum rate for deducting mortgage interest.[1970] Moreover, they can solve the conflict between the LTV limit and the maximum amount of debt for which interest can be deducted by prohibiting the deduction of interest for debt that exceeds the LTV limit.

[1965] Cf. sections 1.1 and 2.1; Admati & Hellwig (2013), chapter 2; Mian & Sifu (2015), chapters 2-4.
[1966] Cf. sub-section 6.1.1.3.
[1967] Cf. sub-section 6.1.1.1.
[1968] Cf. sub-section 6.1.1.2.
[1969] Cf. the first pages of chapter 6.
[1970] Cf. sub-section 6.1.1.1.

7.1.2.4. The interaction with other instruments

Lenders may have various reasons to provide loans, even if the risk of repayment problems is substantial. Many of the resulting problems are addressed or mitigated by the instruments that have been examined in this study. For instance, while lenders do not internalise all the effects of their policies on others, the mandatory creditworthiness assessment stimulates them to take the borrower's perspective into account.[1971] Borrowers and lenders will probably not internalise the effects of their actions on financial stability either – such as boom-bust dynamics generated by widespread leverage among households – but LTI and LTV caps can prevent these problems.[1972] Furthermore, LTV limits related to funding can reduce incentives to neglect and the possibilities to pass on risks. Minimum lending standards, created by LTV, DSTI and LTI caps and consumer law, can shield against a race to the bottom as a result of competitive pressure (taking into account that hard rules will perform better than principles under pressure). Finally, these instruments also protect borrowers against their own behavioural biases or their tendency to borrow in order to keep up with their peers.[1973]

Although the mandatory creditworthiness assessment and the LTV, DSTI, LTI and DTI caps mitigate these problems, they will be more effective when complemented with other policies. Well-designed policies to increase financial literacy may reduce borrower's behavioural biases.[1974] Misaligned incentives due to sales targets, fees and bonuses can be mitigated by making fees and bonuses dependent on the long-term performance of a portfolio instead of only on a sales target, and by reducing the fee if certain risks are neglected.[1975] Mian and Sufi (2015) propose a type of mortgage which induces lenders to take the risks of a potential boom and of leverage into account, namely the shared-responsibility mortgage.[1976] This entails that the risk of a decreasing house price is partly or fully born by the lender, if and when it materialises.[1977] This proposal exhibits some similarities with a

[1971] Cf. sub-section 7.1.2.2.
[1972] On the effects on financial stability, see sub-sections 1.1 and 2.1.1 and Mian & Sufi (2015), chapters 2-4.
[1973] Cf. sub-sections 2.1.2.2-2.1.2.3.
[1974] Cf. sub-section 2.3.3.1.
[1975] The EBA already published guidelines on sound remuneration policies under Articles 74(3) and 75(2) Directive 2013/36. These can be found at https://www.eba.europa.eu/regulation-and-policy/remuneration/guidelines-on-sound -remuneration-policies# (last visited 6 July 2016). In particular sections 8, 14 and 15.7 are relevant for aligning incentives.
[1976] Mian & Sufi (2015), chapter 12.
[1977] Accordingly, the lender is incentivised to care about the movement of the cycle (Mian & Sufi, 2014, pp. 179-180). In addition, the authors argue that this construction reduces the risk of painful deleveraging, since borrowers receive downside protection. In order to avoid moral hazard, Mian and Sufi (2015) propose to measure a house price decline by means of an index of the average house price in a certain area and not by the actual price of the house in question. In addition, the authors argue that this construction reduces the risk of painful deleveraging, since borrowers receive downside protection. In order to avoid moral hazard, Mian and Sufi (2015) propose to measure a house price decline by means of an index of the average house price in a

mortgage guarantee scheme. If implemented correctly, without removing responsibility for the borrower, this could contribute to internalising risks.

7.1.3. Exploiting complementarities and allocating instruments

7.1.3.1. Combining the mandatory creditworthiness assessment with an adjustable LTV limit

The separation of consumer protection and macroprudential rules – as is the case in Ireland and Germany – creates another avenue to exploit complementarities between these rules, namely the possibility to empower the macroprudential authority to adjust the LTV limit, and to use it countercyclically or differentiate it between regions, if necessary. The Central Bank of Ireland faces no legal obstacle to adjust the LTV ratio, and to use it countercyclically. BaFin will also be able to adjust the LTV limit.[1978] In contrast, DNB cannot directly control the LTV limit.

Among academics and supervisors, there is no consensus on whether a variable or regionally differentiated LTV limit would be desirable and feasible. Yet, there are macroprudential authorities which have countercyclically adjusted LTV limits over time,[1979] or differentiated them regionally.[1980] Furthermore, several studies find that countercyclical LTV limits are more effective than constant LTV limits in leaning against the cycle and restricting volatility in house prices and credit supply.[1981] The restrictive effects of a static LTV cap on the borrowing capacity of a household will decrease during a boom, due to the sharply rising house prices.[1982] This fits in with observations made by Goodhart (2015), who supports a countercyclical use of macroprudential measures in order to mute speculative euphoria, but simultaneously warns that, even then, 'in practice the confidence that a boom brings with itself leads to macro-prudential measures being far less than necessary'.[1983]

certain area and not by the actual price of the house in question (p. 172). Otherwise, the homeowner might be tempted to reduce maintenance.

[1978] It depends on the legal details whether this is the case.

[1979] This includes the Monetary Authority of Singapore (see e.g. Wong et al., 2013, pp. 28-29) and the Korean financial supervisory authority (see e.g. Chang (2010), pp. 9-20).

[1980] For instance, the Korean financial supervisory authority imposed stricter LTV limits for designated areas in Seoul, the central bank of New Zealand started with setting LTV limits for loans secured on houses in Auckland, before it later broadened the scope of the restrictions on the rest of New Zealand. Also, the Norwegian supervisor imposed stricter rules on exceptions to the LTV limits for loans secured on houses in Oslo. However, it is important to understand the causes behind regional differences for selecting the optimal response. Hekwolter of Hekhuis et al. (2017) found that strongly rising house prices in Dutch cities are not accompanied by an increase in credit, but are driven by supply shortage. This implies that supply side measures are more suitable to address regional differences in house prices than differentiated LTV limits.

[1981] See e.g. Mendicino & Punzi (2014), pp. 338, 349-354; Lambertini et al. (2013), pp. 1503, 1520; Bruneau et al. (2016), p. 42.

[1982] Cf. Benes et al. (2016), pp. 17-18.

[1983] Goodhart (2015), p. 608.

Whether a countercyclical LTV limit is indeed desirable in order to reduce procyclicality in house prices and credit supply depends on the design and calibration of the LTV limit. Firstly, if loan-to-value ratios are calculated with the mortgage lending value of the house, short-term and speculative elements are not included in the valuation, which reduces procyclicality. However, in the Netherlands, Ireland and Germany, LTV limits are calculated with market values or other valuation methods which tolerate including these elements.[1984] Secondly, if a LTV limit is well below 100%, it will already function countercyclically, because people have to save more to buy a house, if house prices rise.

The procyclical effect of the housing cycle on the borrowing capacity of households can also be contained by DSTI, LTI and DTI limits, but only to the extent that these are not procyclical. Income is less procyclical than house prices.[1985] Still, some aspects of income are probably procyclical, for instance fees and other variable income components, as well as wage growth. Also, the number of people receiving unemployment benefits instead of a salary will grow during a recession.[1986] All in all, the empirical literature reports mixed results with respect to the cyclicality of real wages.[1987] However, not only the degree of cyclicality of income, but also that of the DSTI, LTI and DTI limits matters. These may work procyclical, *inter alia* because banks are probably more lenient with using exceptions during an upswing. The Dutch Financial Stability Committee has also warned against procyclical elements in the calculation of the Dutch DSTI and LTI limits.[1988] Recently, Nibud has changed some of elements in this calculation to make the norms less procyclical.[1989] To the extent that income or DSTI, LTI and DTI limits are procyclical, their protection against the procyclical effect of the housing cycle on the borrowing capacity of households diminishes.

In the absence of factors which contain the procyclicality of house prices, it might be desirable to allow a macroprudential authority to lower the LTV limit within a certain margin, if deemed necessary in light of an impending boom (even if this is socially challenging). An adjustable LTV cap must be subjected to a form of guided discretion, like the countercyclical capital buffer (CCB).[1990] This can be

[1984] Cf. sub-section 7.1.1.5. To use the mortgage lending value, this concept needs to be further developed in law and standards. In practice, a LTV ratio based on the mortgage lending value will be lower than a LTV ratio based on the market value.
[1985] Cf. sub-section 2.3.1.2.
[1986] According to the De Nederlandsche Bank (2015), the Dutch system of calculating LTI limits is characterised by some procyclical elements (p. 13).
[1987] See e.g. Messina et al. (2009).
[1988] See the accounts of the meeting of 12 November 2013 (*supra,* footnote 1166).
[1989] Nibud (2016), pp. 18, 46-47.
[1990] The existence of the CCB does not make a countercyclical use of the LTV cap redundant, because the latter can be expected to be more restrictive, since it is much more difficult to circumvent. The same is true when comparing a countercyclical LTV limit with a countercyclical leverage ratio, as proposed by, among others,

built on early-warning indicators combining house price growth, price-to-income and price-to-rent ratios, and mortgage credit growth. The first three indicators can be used to estimate to what extent house prices are overvalued. Overvaluation stimulates households to take on more debt.[1991] Indicators based on credit growth are considered as good predictors of financial crises.[1992] Admittedly, it will be difficult to construct good indicators to detect a boom well in advance, and distinguish it from a moderate increase in house prices. The exact design and calibration of the indicators must be figured out by economic research, to ensure a reliable early-warning system, which is crucial considering the importance of timing for countercyclical macroprudential instruments.[1993] It might be necessary to differentiate the early-warning indicators and the (countercyclical) LTV limit for certain segments of regions of the housing market.[1994]

7.1.3.2. Allocating LTV and LTI limits in the EU

There is an ongoing discussion about the level at which macroprudential regulation and supervision should be exercised. The Vice-President of the ECB, Constâncio (2015a,b), has argued in favour of creating a European framework for LTV and LTI limits, with a crucial role for the ECB in applying them; several others support this plea.[1995] Whether borrower-based caps can be employed best at national or European level depends on the origins of household debt determinants and credit bubbles, as well as on the possibilities to guarantee the effectiveness of these instruments.

The origins of credit bubbles and the allocation of LTV and LTI limits

LTV and LTI limits, insofar used in a macroprudential fashion, aim to prevent credit bubbles. Most of the identified drivers of booms and busts have their origin in both national and international developments, and are influenced by national as well as European rules and policies. These identified drivers are deregulation, low interest rates, abundant liquidity, buoyant economic growth, tax policies,

Schoenmaker & Wierts (2015, 2016). Moreover, capital-based and credit-related instruments are complementary (cf. sub-section 7.1.2.1).

[1991] Cf. sub-sections 2.1.1.1 and 2.1.1.2.

[1992] Cf. sub-section 2.1.1.1, in particular footnote 250.

[1993] The literature as discussed in sub-section 2.1.1.1 shows that indicators are, generally, either based upon credit (or house price) growth, or upon the deviation of credit (or house prices) from a certain trend (e.g. the credit-to-GDP gap).

[1994] For instance, in both the Netherlands and Ireland house price growth is currently strongest in the capital. Art. 124(2) CRR explicitly allows differentiating sectoral risk-weights between property segments. This would be possible for other instruments as well, but only if segments or regions can be clearly delineated. There is the risk that the border between segments or regions is considered arbitrary or unfair (e.g. if a house in one municipality is subject to another LTV limit than a house 100 meters away in another municipality).

[1995] See e.g. Merler (2015), pp. 35-41.

overoptimistic expectations and perverse incentives.[1996] Also, several researchers have investigated the synchronisation or comovement of credit cycles among countries in order to understand at which level these cycles are determined.[1997] Most studies detect considerable comovement, but also substantial differences between the credit and house price cycle in various OECD and E(M)U countries.[1998] Some researchers have found that the heterogeneity between cycles in EMU member states is more pronounced for mortgage credit cycles[1999], and others that it increased after the introduction of the euro.[2000] These differences in house price and credit cycles are confirmed by the fact that some EU member states experienced pronounced booms and busts, in contrast to others.[2001] Dissimilarities in regulation and market structures can partly explain cyclical differences between countries.[2002] Consequently, even a common driver of the cycle or a common shock may have an asymmetric impact in EU member states. Schüler et al. (2015) conclude that their results

> 'support the notion that countercyclical macroprudential policies in the EU need to be tailored to country-specific phases [but that the] considerable co-movement of financial cycles across the countries analysed [also] suggests a strong need for coordination and reciprocity in the implementation of country-specific measures.'[2003]

[1996] See sections 1.1 and 2.1.
[1997] Still, comovement does not explain where the credit cycle is determined, because it can be the result of a common factor that drives the cycles in various countries – for instance monetary policy within the euro area – or it can be caused by the transmission of a shock in one country to another (cf. Igan et al. (2011), p. 224). It matters for the allocation of macroprudential policy which of these rivalling explanations is true, but it is hard to distinguish between them.
[1998] Igan et al. (2011) discovered comovement of house price and credit cycles between 18 advanced OECD countries. They found that cycles can move together simultaneously or with a lag *(*pp. 225-226). The presence of lags favours the explanation that shocks in one country are transmitted to another. Claessens et al. (2011) found that credit cycles of 21 advanced OECD countries are for 75% of the time in the same phase – upturn or downturn – while this number is 59% for house price cycles (Clasessens et al. (2011), table 3. Hirata et al. (2012) found similar percentages (table 6)). Schuler et al. (2015) found that financial cycles – measured by a composite indicator which includes credit and house price cycles – in 13 EU member states move together for two-thirds of the time and that their concordance varies between 53% and 78% (Schüler et al. (2015), p. 5).
[1999] Samarina et al. (2015) found substantial heterogeneity between cycles in 14 EMU member states, both in terms of direction and amplitude, especially for the household mortgage credit cycles (pp. 10-13, 26-27). They disentangle synchronisation of credit cycles into two aspects, namely direction and amplitude (p. 2). In addition, they differentiate between the total credit cycle, the credit cycle for non-financial business and the household mortgage credit cycle (p. 7).
[2000] Merler (2015), pp. 7, 11. A similar divergence is found by Lane (2016), p. 12.
[2001] Cf. section 1.1.
[2002] Perhaps, even cultural preferences might play a role, since some researchers found effects of culture on households' financial decisions (see e.g. Guiso et al. (2006), pp. 38-39; Breuer et al. (2014, 2015))
[2003] Schüler et al. (2015)*,* p. 35.

If coordination and mandatory reciprocity are indeed necessary, the EU must be involved, be it through (1) adopting a legal provision that mandates reciprocity, (2) a coordinating actor at EU level, or (3) a European supervisor who employs the LTV and LTI limits, differentiated for each member state. Among others, Schoenmaker and Wierts (2016) advocate for strong involvement of the ECB in guaranteeing financial stability, in order to ensure consistency.[2004] Schoenmaker (2011, 2013) argues that supranational financial integration, financial stability and national financial policies cannot be combined, coining this the financial trilemma. Others stress that national differences in tax policies, laws, market structures and circumstances may necessitate diverging (macroprudential) regulation in order to guarantee financial stability and consumer protection, even if this means that there is no entirely single rulebook.[2005] If *regulation* – and not only *supervision* – needs to be differentiated for each member state, it is difficult to establish the required uniform framework to enable a European supervisor to use of LTV and LTI limits.

The principles of subsidiarity and proportionality and the allocation of LTV and LTI limits

Whether coordination and mandatory reciprocity are indeed necessary and how this eventually could be combined with dissimilar national regulation, depends *inter alia* on the possibilities to guarantee the effectiveness of these instruments. The analysis of the LTV, DSTI and LTI limits in the Netherlands and Ireland reveals that these member states have set their scope as wide as possible in order to prevent circumvention.[2006] In terms of types of lenders covered by the LTV limit, Germany has done this as well.[2007] The design of these rules prevents regulatory arbitrage by means of lending from abroad or by means of lending through a branch of a credit institution established in another member state. Mandatory reciprocity is thus unnecessary to ensure completeness. Moreover, currently the completeness of borrower-based caps can only be guaranteed at national level. Harmonising the rules regarding LTV and LTI caps by including them in the CRR or CRD IV is harmful for their scope, because these legal acts only apply to credit institutions and investment firms. Harmonising borrower-based limits by means of another legal act and designating the ECB as supervisor does not guarantee completeness either, since the scope of the ECB's supervisory tasks is limited to credit institutions. Hence, the effectiveness of LTV, DSTI and LTI limits can be better ensured with national than with EU regulation and supervision. What follows from this is that currently the subsidiarity principle is evidently not fulfilled for any EU action that proposes the opposite.[2008] Guaranteeing an encompassing

[2004] Schoenmaker & Wierts (2016), p. R54.
[2005] See e.g. Babis (2015), p. 781; Andenas & Chiu (2013), pp. 335-336, 348-349.
[2006] Cf. sub-sections 4.1.1 and 4.2.1.
[2007] Cf. sub-section 4.3.1.2. Yet, the scope of the LTV limit is reduced by the numerous exceptions to the loans covered by it.
[2008] Cf. sub-section 1.2.2 on the subsidiarity principle.

scope at EU level would require a wide expansion of regulatory and supervisory powers at EU level, which is not proportionate if the same goal can also be achieved with coordinated national macroprudential action.

It may be necessary to coordinate macroprudential action in the presence of strong global or EU-wide drivers of a credit bubble. If these are present, and some, but not all, member states set LTV and LTI caps, credit possibly flows to the member states with the least restrictions; and create a bubble in those countries. Any resulting financial instability might spill over to other member states. Realising coordinated EU-wide macroprudential action is difficult for member states, so the subsidiarity principle is fulfilled for EU legislative action enabling this. The subsidiarity principle might especially be satisfied if some national macroprudential supervisors are well-equipped to take action, contrary to others, since the possibility of setting LTV and LTI caps is a *condition sine qua non* for EU-wide coordinated action.[2009] Instead, the proportionality principle is only fulfilled for such EU legislative action, if the ESRB – the EU-wide macroprudential authority – cannot sufficiently achieve the required coordination. Otherwise, any new proposal goes further than necessary. This potential role of the ESRB will be discussed in sub-section 7.3.3.4.

What this discussion reveals is the complex relationship between the internal market, financial stability, and the division of competences between the EU and its member states. It shows that the aims of financial stability and integration of financial markets do not always coincide, although diverging macroprudential regulation and supervision may serve the higher goal of the stability and integrity of the internal market. It also demonstrates that the application of the subsidiarity principle does not always lead to the conclusion that the EU is better able than the member states to achieve a certain objective, for instance, maintaining financial stability.

7.2. Enough enforcement possibilities? Findings and trends

7.2.1. The heritage of the past and the reforms of the present

Traditionally, the EU has granted its member states plenty of freedom for choosing how to enforce EU law, as long as the principles of effectiveness and equivalence are fulfilled.[2010] An important rationale

---

[2009] On the relationship between the subsidiarity principle and well and less advanced situations in various member states, see case C-508/13 *Estonia v Parliament and Council* [not yet published], para. 53-54 (cf. Panara, 2016, pp. 320-321).
[2010] See e.g. sub-section 5.2.1.

for this procedural autonomy is the substantial differences between member states' legal systems, not least in terms of enforcement. Indeed, possibilities to enforce the rules that restrict household debt levels often significantly depend on the underlying characteristics of the national legal system and past legal choices. For example, in Ireland, there are constitutional difficulties with imposing penalties on offenders outside courts.[2011] Nevertheless, in order to increase the efficiency of enforcement, the CBI acquired wide administrative powers over the past years, including possibilities to settle.[2012] In the Netherlands, the general framework for administrative law has been substantially reformed in the past decades – with the phased adoption of the Awb – among other things to create a coherent system that allows for administrative enforcement. Nowadays, wide administrative enforcement possibilities for supervisors exist in the Netherlands. Meanwhile, Rott (2007) finds that, in the area of consumer law, Germany has traditionally relied on private enforcement.[2013] Indeed, private law is most important for enforcing the rules regarding creditworthiness assessment, while administrative enforcement in this area is weak. Moreover, there are fewer administrative enforcement possibilities in Germany than in the Netherlands and Ireland in the area of capital requirements. These differences between member states reveal the heritage of past national traditions of enforcement systems.

At the same time, since 2013, there is a trend towards more uniform and more dissuasive enforcement law in the area of financial regulation and supervision, among other things, due to requirements in EU law that go beyond the principles of effectiveness and equivalence. The CRD IV prescribed some minimum requirements for sanctions, like the possibility to penalise managers, the possibility to impose high fines and the mandatory publication of administrative sanctions, if no appeal is possible anymore. This certainly contributed to the availability of dissuasive sanctions, in all member states. It reduces possibilities for regulatory arbitrage by preventing that banks establish themselves in member states where they cannot receive substantial sanctions.[2014] The adoption of the SSM regulation, which enabled the ECB to impose several sanctions, is another harmonising factor with respect to enforcement. Since the ECB supervises the most significant banks in the euro area, actual enforcement will probably become similar across the euro area.

The MCD has exerted harmonising influences regarding enforcement in the area of consumer protection in the field of financial services. It namely steers towards administrative enforcement. Administrative enforcement has certain attributes which likely make it more effective and thus more

[2011] See e.g. Law Reform Commission of Ireland (2016), pp. 19-27 and sub-section 3.2.2.2.
[2012] Before 2004, imposed regulatory sanctions required confirmation by the High Court (Breslin, 2013, p. 62).
[2013] Rott (2007), p. 305.
[2014] On differences in sanctioning regimes in various member states, see e.g. Schneider (2014), pp. 19, 21-22.

dissuasive than private enforcement.[2015] The MCD thus contributes to increasing the credibility of the sanctions for violations of the rules on creditworthiness assessment. Still, preventing capture is a prerequisite for effective administrative enforcement. The MCD does not guarantee that. Section 7.3 discusses in more detail how to deal with capture.

Another interesting trend is the increasing interaction between public and private enforcement regarding upholding lending standards. In the Netherlands, courts, as well as the arbitration tribunal for financial services, have – on occasions – granted damages to borrowers, when lenders violated regulatory DSTI caps.[2016] This case law is, however, not yet very coherent. In Ireland, the Central Bank and the Financial Services Ombudsman possess, under certain conditions, powers to grant consumers respectively redress and compensation, to be paid by the lender, if a lender violated rules related to the mandatory creditworthiness assessment.[2017] Consumers can also start a procedure for damages, if these rules have been violated.[2018] These interactions increase the dissuasiveness of the regime, because they create additional incentives for lenders to comply with the rules.

The possibility of proportionate and dissuasive enforcement is a precondition for effectiveness; a *condition sine qua non* for effective regulation of household debt levels. However, this study also revealed that the availability of proportionate and dissuasive sanctions is not enough to guarantee effectiveness. The discussed minimum requirements in EU law are in itself not enough. The pre-crisis situation in Ireland showed that, even with all the necessary sanctions available, supervisors were reluctant to use them, because they were captured. Hence, it is crucial that supervisors are able to withstand industry and political pressure. This will be further discussed in section 7.3.

7.2.2. Reinforcing enforcement

The availability of proportionate and dissuasive sanctions is a necessary, but not a sufficient condition for effective regulation of household debt levels. The discussed findings and trends reveal areas for possible improvements. Firstly, Germany needs to complete the enforcement pyramid for BaFin. In some instances, BaFin can issue an order to a bank, but cannot penalise the bank if it neglects this order.[2019] Hence, BaFin cannot use the enforcement pyramid in that situation: escalation is impossible.

[2015] Cf. section 5.2.
[2016] Cf. sub-section 4.1.2.2.
[2017] Cf. sub-section 5.2.3.1.
[2018] *Ibidem.*
[2019] Cf. sub-sections 3.2.2.3 and 5.2.4.2.

In addition, the menu of available enforcement measures is more limited in Germany than in the Netherlands and Ireland. For example, the Dutch supervisors can – unlike the CBI and BaFin – impose an order for incremental penalty payments.[2020] Instead, the Central Bank of Ireland can – in contrast to DNB, BaFin and the ECB – suspend the provision of any financial service up to 12 months.[2021] So, other supervisors have more enforcement measures at their disposal than BaFin, and hence more options to choose the most appropriate response to a violation.

Secondly, the Irish approach of integrating public and private enforcement offers modes for improving the potential effectiveness and efficiency of enforcement. Other member states can bestow the supervisor as well with the power to grant redress to a consumer who suffered losses due to the violation of a rule by a lender. Of course, this must be designed carefully, respecting procedural rights of a lender, and avoiding the removal of a borrower's responsibilities when taking out a loan, especially because it is difficult to determine the amount of suffered damage for which a borrower cannot be held responsible.[2022] There are strong arguments against this option as well, especially that courts are better fit for this task than supervisors. Furthermore, in Germany, BaFin does not even possess a mandate for consumer protection. Another promising avenue is allowing consumers to start proceedings for damages when they incurred losses due to a violation of regulatory requirements by a lender.[2023] Proving this may be easier than demonstrating that a lender violated his duty of care.[2024] If correctly designed, this adds incentives for lenders to comply with legislation, and also mitigates the risk of capture to some extent, by enabling private enforcement, even were public enforcement fails. Admittedly, there are complications, because supervisory involvement will often be needed to determine whether a regulatory requirement is violated or not. This might only be different in case of violations of a straightforward rule, or in case of gross violations. Both options to create a private enforcement mechanism besides existing public mechanisms are mainly relevant for conduct of business and consumer protection rules, because the likelihood that a consumer incurs losses due to non-compliance of a lender is the largest in these areas. Instead, it is difficult to prove causality between a lender's non-compliance with prudential regulation and losses born by a borrower.

[2020] Cf. sub-section 3.2.2.1.
[2021] Cf. sub-section 3.2.2.2. Note that the ECB can exercise this power versus Irish banks.
[2022] The less is left of a borrower's own responsibility, the more the image of the rational consumer is abandoned in favour of an image of a vulnerable consumer.
[2023] Cf. section 44 of Central Bank (Supervision and Enforcement) Act 2013.
[2024] Cf. sub-sections 4.1.2.2 and 5.2.3.1. Under this option, a court can still determine the importance of a borrower's own responsibility. This option helps to align public and private law, but might hinder an autonomous development of the concept of duty of care within private law.

7.3. Powerful players: findings and trends regarding the involved actors

7.3.1. Increasing and differing duties

Currently, we are witnessing a huge increase in the number of tasks bestowed upon financial regulators and supervisors. They are exercising microprudential, as well as macroprudential powers, and became responsible too – although some already were – for consumer protection in the area of financial services. Supervisory choices are of utmost importance in determining the actual impact of prudential regulation and consumer protection, not least because chapter 5 has shown that the interpretation of the rules on the mandatory creditworthiness assessment by the supervisors will be crucial for their ultimate impact. The pivotal role of these supervisory actors means that they can expect a lot of pressure, both from the industry and from politicians. Indeed, the experience of the past few years in the Netherlands, Ireland and Germany shows that the instruments examined in this study receive considerable attention in public and parliamentary debates; displeasure about new rules was publically voiced. Industry lobbying is as present as ever, as observed by multiple scholars.[2025] So, ensuring sufficient independence of regulators and supervisors is also more important than ever.

The development of existing institutional frameworks has not kept pace with the increasing amount of tasks bestowed upon supervisors and central banks. Because the instutional frameworks differ significantly between the examined member states, the type of remaining problems also varies. Since Ireland has opted for a unitary model, the CBI can align the various instruments that it possesses owing to its responsibility for financial stability, effective regulation of financial service providers and markets, and consumer protection in the area of financial services.[2026] Meanwhile, Colaert (2015) warns that integrating various mandates involves the risk of neglecting one or more objectives, because the supervisor might seek to raise its profile through action in the most visible areas, such as consumer protection.[2027] This may be true, but it is unclear whether this risk outweighs the benefits of integrating these complementary functions. In practice, the CBI can exercise its tasks relatively independently, despite the restrictions on its independence.[2028] Instead, the challenge is to accompany all these tasks with sufficient accountability mechanisms.[2029]

[2025] Mészáros (2013), pp. 171-172; Baker (2013), p. 427. Cf. Wolf (2015), p. 147.
[2026] These are all equally important objectives, besides its primary objective of maintaining price stability (section 6A Central Bank Act 1942).
[2027] Colaert (2015), p. 1586. Cf. Ferran (2015), pp. 115-116.
[2028] Cf. sub-sections 3.3.1 and 4.2.3. Cf. Masciandaro et al. (2008), who found that regulators inside a central bank are often more independent than regulators outside a central bank (p. 838).
[2029] See further sub-section 7.3.

Due to the twin-peaks model, regulatory responsibilities in the Netherlands are more scattered among several actors, necessating discussion among them. This makes aligning the various instruments more difficult[2030], and results in the situation that DNB cannot directly control the DSTI, LTI and LTV limits, which hinders their use as macroprudential instruments. DNB's powers have increased, but much less than those of the CBI. Moreover, DNB's independence is not fully guaranteed, because the Minister of Finance can override DNB's decisions about the macroprudential instruments.

In Germany the most important remaining problems are that BaFin lacks sufficient independence (and thus might be unable to withstand political pressure from the BMF)[2031], and that instruments and mandates do not always fully match. BaFin is empowered to use the available micro and macroprudential instruments, and is responsible for ensuring compliance with rules to protect consumers.[2032] However, the Bundesbank has the primary responsibility for financial stability, [2033] and BaFin lacks a mandate to to protect individual consumers. For several reasons, these issues can be problematic. A mismatch between instruments and mandate might undermine commitment to the goals of the instruments, at least in theory. Furthermore, the division of macroprudential tasks means that no actor bears full ownership for macroprudential policy.[2034] Also, the mutual dependencies in the macroprudential framework might hamper swift action.

At EU level, one of the challenges resulting from the involvement of various actors is avoiding duplicate work in some areas. The ESRB and the ECB share macroprudential tasks, which are partly overlapping. For instance, both the ECB and the ESRB evaluate proposed national flexibility measures.[2035] While the scope of the powers of the ESRB is broader (it may issue recommendations related to any systemic risk or macroprudential instrument), the topping-up powers of the ECB are hard instead of soft.

[2030] The FSC, in which DNB, the AFM en the Ministry of Finance take part, can provide a forum for discussion among them about aligning macroprudential instruments. Yet, the FSC lacks formal powers to coordinate the application of macroprudential instruments.
[2031] Cf. sub-section 3.3.1.
[2032] While BafIn is empowered to use these instruments, prudential tasks are shared between BaFin and the Bundesbank (§ 6(1) KWG. Cf. § 4 FinDAG (*supra,* footnote 858). For the tasks of the Deutsche Bundesbank, see §§ 6, 6b and 7 KWG, and § 1 FinStabG).
[2033] § 1 FinStabG (*supra,* footnote 212).
[2034] Besides the Bundesbank and BaFin, the Financial Stability Committee is a relevant actor. It discusses factors related to financial stability and may issue warnings and recommendations to draw attention to and to address risks (§§ 2-3 FinStabG). According to the established macroprudential policy framework, BaFin will generally only take action after a discussion of the issues within the Financial Stability Committee (as indicated in an interview with an official of BaFin).
[2035] The ESRB is asked to do so in the context of art. 458 CRR, and the ECB as a result of its topping-up powers.

So, generally, at national level, macroprudential powers cannot be exercised with a sufficient degree of independence, and guided discretion is not broadly used. Most macroprudential authorities examined in this study published a macroprudential strategy, explaining their decision-making process.[2036] While this provides a good indication of the process, it falls short of true guided discretion, because it is too general to bind decision-makers. The use of guided discretion beyond the CCB and some general rules for art. 124 and 164 CRR is limited. Even limited use of guided discretion helps to signal risks, to take decisions and to diminish the risk of inaction or inadequate action. However, even if authorities use a form of guided discretion, it is not publically known which indicators and thresholds are used.[2037] Then, the mechanism cannot function as an external yardstick to evaluate the performance of the macroprudential supervisor and to detect inaction or inadequate action. Consequently, the expanded macroprudential powers are mainly exercised discretionarily.

7.3.2. Interaction between actors: politics and supervision intertwined

The interaction between politicians, regulators and supervisors differs per instrument and member state. The Central Bank of Ireland is very powerful and can largely operate on its own – domestically. It even received some regulatory powers, such as those with which it created the LTI and LTV limits.[2038] Moreover, learning from its pre-crisis errors, Ireland bolstered the supervisory independence by appointing relative outsiders for key functions within the central bank. The previous and current Governor are academics instead of high-ranked officials from the Ministry for Finance, while some other important positions are occupied by foreigners, including the Deputy Governor responsible for financial regulation, consumer protection and enforcement.[2039] This creates behavioural distance between the central bank, the government and the industry and reduces the possibility to capture the CBI. In the Netherlands and Germany, there will be more interaction between political actors and supervisors, because the Ministry of Finance possesses meaningful powers in these member states and participates in the Financial Stability Committee. In the Netherlands, this could result in

[2036] Cf. sub-sections 3.3.2.1, 4.13, 4.2.3 and 4.3.3.2.
[2037] *Ibidem.* According to information obtained via interviews, the CBI uses guided discretion mechanisms internally, while DNB and BaFin do currenty not use guided mechanisms to decide about the use of other macroprudential instruments than the CCB. Note that the activation of the German LTV limit is steered by some general guidance, which will possibly be further specified. The ECB relies predominantly on model-based analyses to decide about taking macroprudential action (European Central Bank (2016), p. 10). It is not clear whether any predefined outcomes of these models, for instance, certain significance levels related to risks, will trigger action. So, it cannot function as an external yardstick to evaluate the ECB's performance and to detect inaction or inadequate action. This will be difficult anyhow, because the outcome of economic models can easily be sensitive to the precise set up and use of statistical techniques, or to the inclusion or exclusion of certain variables.
[2038] Section 48(1) Central Bank (Supervision and Enforcement) Act 2013.
[2039] Cf. sub-sections 4.2.3 and 3.3.3.

institutional disagreement about the use of instruments to restrict household debt levels, because both the Minister of Finance and DNB have instruments at their disposal. Moreover, the Minister is allowed to override the exercise of DNB's powers to use the capital-based macroprudential instruments, which may increase the risk of inadequate action. In Germany, the risk of inaction or inadequate action is magnified by the possibility that the Minister of Finance exerts influence on BaFin if unpopular decisions need to be taken, as well as by a potentially slower decision-making process, due to the division of macroprudential tasks between various actors. If BaFin intends to activate the macroprudential LTV limit, it must consult various ministries. Also, the Minister of Finance must explain the reasons for adopting or amending the LTV limit before the committee on financial supervision of the *Bundestag.* Hence, while accountability requirements are high, they might become a hurdle to activate the LTV limit, especially because the relatively low independence of BaFin makes it more difficult to resist pressure.[2040]

The interaction is affected too by the involvement of private actors. In the Netherlands, the self-regulatory role of the financial industry regarding the DSTI ratios for consumer credit is noteworthy.[2041] Self-regulation means more room for discretionary choices by lenders and arguably less consumer protection.[2042] Especially in Ireland and Germany, private actors have a role in enforcing the mandatory assessment of a consumer's creditworthiness / the suitability and affordability of a loan. Presumably, for detecting violations and interpreting certain behaviour as permitted or not, these private actors will be partly dependent on the know-how and actions of supervisors.

The involvement of EU actors as an additional force in the interactive process of regulating household debt diminishes the influence of politicians and the industry. The ECB's possibility to top up capital-based macroprudential measures reduces the risk of inaction or inadequate action. Besides the ECB, two EU agencies are involved in the process of regulating and supervising household debt. Firstly, the EBA can influence rules in the field of banking regulation and customer protection by means of its technical standards and guidelines.[2043] These technical standards and guidelines will be drafted in an iterative process with national supervisors. Secondly, the ESRB can issue warnings and recommendations, subject to a comply-or-explain mechanism. It needs to inform the Commission and the Council about these warnings and recommendations, and keep the Council updated about their follow-up.[2044] Consequently, it is conceivable that the ESRB will receive political pressure from the

[2040] Cf. sub-section 4.3.3.2.
[2041] Cf. sub-sections 4.1.1.1 and 4.1.3.1.
[2042] Cf. sub-section 7.1.2.2 on principle-based regulation.
[2043] Cf. sub-sections 3.1.1 and 5.1.1.2.
[2044] Art. 16-18 Regulation 1092/2010.

Council about a recommendation. In turn, the ESRB could try to use the Council to exert political pressure on a member state to comply with a recommendation.

Finally, a member state can be pushed to adopt certain policies in relation to household debt through the framework of economic governance, most importantly through the MIP. This process involves the Commission and the peers of the respective member state in the Council. The findings of sub-section 6.3.1 suggest that it is possible to exert influence on a member state, but that it is questionable whether this will be enough if a member state is unwilling to adopt the recommended policy. After all, it remains a highly political process. At least, the procedure helps to stay focussed on risks related to macro-financial stability. However, reforms of the MIP are necessary to live up to its aims of preventing and correcting developments that create financial instability. Member states are namely not always willing or able to adopt prudent policies, as the crisis revealed for, *inter alia,* Ireland and Spain, which did not act sufficiently to prevent housing bubbles. This may be explained by the pursuit of rivalling aims, conflicts of interest, or political difficulties in adopting policies with long-term benefits, but short-term costs.[2045] One avenue for reform, along the lines of art. 5 Regulation 473/2013, is to create stronger independent national bodies that stimulate governments to pursue prudent policies.[2046] These bodies could provide independent assessments of governmental policies, subject to a comply-or-publically-explain mechanism. These assessments may help governments to weigh interests and may provide them with additional arguments to explain their choices to the voters. Still, the hurdles which governments must overcome to adopt prudent policies will continue to exist.

Another avenue for reform would be to reduce the room for politically influenced decision-making by the Commission, for instance, by subjecting it stronger to the advice of independent bodies. In addition, the lobbying of the member states at the Commission may be counterbalanced by increasing the accountability of the Commission towards the European Parliamen, by strengthening the Economic Dialogue. This dialogue enables the relevant committee of the European Parliament to invite, among others, the President of the Council and the Commission to discuss, *inter alia*, the results of the multilateral surveillance carried out, Council recommendations addressed to member states in the

[2045] An example of pursuing rivalling aims is promoting home ownership and avoiding a housing bubble. Conflicts of interest can, among other things, occur because financial booms can fill the budget, due to increased revenues from construction taxes, consumption and the like (Kincaid & Watson (2015), p. 790; Borio (2014), p. 190).

[2046] These bodies would be similar to the independent bodies mentioned in art. 5 Regulation 473/2013, and to the competiveness authorities proposed in The Five Presidents' Report (European Commission (2015), pp. 7-8).

MSP, and recommendations issued under the corrective arm of the MIP.[2047] De la Parra (2017) concluded that the Economic Dialogue has created a forum for publicly debating European economic governance.[2048] However, the Commission has only to give account after decisions have been taken, not during the process. Also, it faces no consequences. To strengthen the Economc Dialogue, the European Parliament can be involved earlier in the process. Then, the input of the parliament can be taken into account. Without amending the treaties, it is difficult to accomplish more far-reaching changes than these types of reform. Further details of option for reform can be the topic of further research.

The involvement of political actors in determining the policy objectives of each instrument – which is a form of *ex ante* control of the supervisor – varies significantly between instruments. The EU legislator has added policy objectives for each of the capital-based instruments, but some are clearer than others. Especially the aims of art. 124 and 164 CRR and Pillar 2 measures are vague, meaning that discussion about their objectives is ongoing among supervisors and agencies.[2049] During the adoption of the German legal basis for setting a macroprudential LTV limit, a clear policy objective was included in the law by the legislator. On the contrary, the Irish legislator was not involved in determining the objectives of the LTI and LTV limits, because it granted the CBI a broad power to adopt regulations. Concrete objectives, especially if they are quantified, help to hold a supervisor to account, as can be learned from the discussions about accountability of central banks.[2050] Nevertheless, quantifying a financial stability objective is difficult.

In addition, the interaction between supervisors and other actors in the context of accountability arrangements differs significantly for the various instruments. For instance, justification towards EU institutions, the ESRB, and the EBA is required for using national flexibility measures – not for refraining from using them. Public justification is required for decisions about the CCB, but not for decisions about the tools of art. 124 and 164 CRR. Whereas a supervisor can impose macroprudential Pillar 2 measures while involving almost no other actors, setting a LTV limit in Germany requires consulting a range of actors and even discussion with the parliament.[2051] This also shows that accountability requirements

[2047] Art. 2-ab Regulation 1466/97 (after amendment by Regulation 1175/2011), art. 14 Regulation 1176/2011. Cf. art. 121(5) TFEU. See also art. 18 Regulation 472/2013.
[2048] De La Parra (2017), p. 116.
[2049] See e.g. the references in footnote 516.
[2050] Cf. De Haan et al. (1999), pp. 172-178.
[2051] Cf. sub-section 4.3.3.2.

are often one-sided (with the CCB as an exception): using an instrument requires explanation, but not using it does not.[2052]

All in all, this sub-section shows that (macroprudential) regulation and supervision is often substantially intertwined with politics, but this interaction is not always designed optimally. The adoption of regulation requires political involvement, without sacrificing the objective of ensuring financial stability, while the supervisors who implement regulation need to be both independent and accountable.[2053] The next sub-section discusses the tricky question of finding the right balance between independence and political involvement.

7.3.3. Institutional improvement: ensuring effectiveness, while avoiding autocrats

7.3.3.1. Independence and accountability

It is a delicate issue how much independence a macroprudential authority should have. The high political involvement in the regulation of household debt levels, especially in the Netherlands and Germany, is not without reasons. Compared to monetary policy, macroprudential decisions have a more direct impact on the natural and legal persons involved.[2054] Moreover, a macroprudential supervisor has a wider array of instruments at its disposal, which can be highly targeted in nature.[2055] Therefore, macroprudential choices have more direct distributional consequences than monetary policy choices. This provides a strong argument in favour of bestowing a macroprudential supervisor with a lower degree of independence and a higher degree of accountability than a central bank in its monetary policy capacity.[2056] In fact, the far-reaching nature of supervisory powers underlies the German choice for a financial supervisor, BaFin, which is not independent.[2057] It is also telling that the ESRB, and the Dutch and German Financial Stability Committees are all bodies without legally binding powers.[2058]

[2052] Similarly, the LTV and maturity restrictions which BaFin can enact need to be reviewed every six months, but the use of the exceptions requires no review.
[2053] Views on the role of politics in regulation differ. For instance, Brown & Scott (2011) state 'that European countries have been rather less successful in separating regulation from politics' (p. 475). Meanwhile, Tombs (2015) criticises the insulation of regulation from democratic politics (p. 68).
[2054] Alexander (2015a), pp. 170-171; Tridimas (2016), p. 90. Cf. Goodhart (2015), p. 609; Wolfers & Voland (2014), pp. 182-185.
[2055] Cf. sub-sections 2.3.
[2056] Garicano & Lastra (2010), pp. 616-617; Alexander (2015a), pp. 170-171; Ter Kuile et al. (2015), p. 165.
[2057] Wolfers & Voland (2014), p. 182.
[2058] These bodies can only issue recommendations subject to a comply-or-explain mechanism.

Meanwhile, macroprudential policy is a textbook example of a field where strong conflicts are present between short-term costs (tightening of rules) and long-term benefits (financial stability).[2059] In addition, the complex tasks – monitoring a convoluted and completely interrelated financial system and deciding about the necessity of taking action – requires involvement of experts. These are the core arguments for independence of regulators and supervisors.[2060] Indeed, this is reflected in the institutional choices in some jurisdictions. The Irish macroprudential regulator and supervisor, the central bank, can act relatively independently.[2061] DNB and the ECB, which are both designated to exercise the macroprudential powers included in the CRR and CRD IV, can act independently too.[2062]

In the coming years, it is necessary to provide the macroprudential supervisors in each member state with binding powers and sufficient independence. Guaranteeing their independence is no luxury, because, as Mészáros (2013) argues, 'macroprudential approaches will, if anything, be subject to much greater political pressure (be it from state or private interests) because it is intended to be more far reaching, systemically oriented and interventionist than its microprudential forebear.'[2063] Meanwhile, for the aforementioned reasons, independence must be accompanied with meaningful accountability.[2064] This poses the difficult dilemma of combining independence and accountability, as illustrated by Baker (2013):

> 'This leaves macroprudential regulators with a tricky political conundrum to solve: the question of how to arm themselves with sufficient institutional autonomy, policy capability, and discretion to neutralize procyclical political pressures. It is important, therefore, for macroprudential authorities to have some institutional insulation to enable them to implement countercyclical policies, but this immediately brings them into potential conflict with legislative bodies, who seek to call them to account.'[2065]

[2059] Cf. Advisory Scientific Committee of the European Systemic Risk Board (2014), p. 2.
[2060] Cf. sub-section 1.4.4; Alesina & Tabellini (2007, 2008).
[2061] Cf. sub-sections 3.3.1 and 4.2.3.
[2062] Cf. sub-section 3.3.1.
[2063] Mészáros (2013), p. 174. Cf. Baker (2013), p. 429.
[2064] A macroprudential authority should not have the same degree of independence as the ECB (in its monetary policy function) has, since the ECB cannot be held accountable in a meaningful fashion, due to absence of possibilities to attach consequences to its failures (see e.g. Amtenbrink (1999). Cf. Claeys et al. (2014), p. 6).
[2065] Baker (2013), p. 429.

Despite this tricky conundrum, renouncing a meaningful accountability mechanism and opting for unlimited independence is not the appropriate way forward.[2066] Not only the distributional consequences justify some form of political involvement, but the need to warrant effective macroprudential action demands a well-designed accountability mechanism too.[2067] This relates to a core issue in this study: if macroprudential policy is a black box and supervisors do not need to justify their (in)action, capture and political pressure can proliferate unnoticed and unchecked.[2068] Therefore, decision-making about using macroprudential instruments should be characterised by two main elements. Firstly, decisions need to be taken by independent supervisors, insofar as possible based upon a mechanism of guided discretion (purely rule-based macroprudential policy is not possible, due to the complex and possible unforeseeable contingencies under which decisions need to be taken).[2069] These decisions need to be transparent and guided by clear policy objectives. Secondly, the accountability of supervisors needs to fostered, among other things by a semi-override mechanism.[2070] A certain degree of EU involvement is helpful and necessary to create a balanced and potentially effective system. These issues will be discussed in the following sub-sections.

7.3.3.2. Improving policy objectives, transparency and the use of guided discretion

Sub-section 7.3.1 briefly summarised the current use of guided discretion by macroprudential authorities. When the positive aspects of their practices are combined and further developed, promising mechanisms for guided discretion can be created. This means that guided discretion mechanisms – with predefined thresholds or outcomes that trigger action or explanation – are used for as many macroprudential instruments as possible; not only for the CCB.[2071]

A successful use of discretion requires a clear objective for each instrument.[2072] To ensure democratic legitimacy of regulatory action, the legislator needs to be involved in setting this objective. This is a

[2066] A decade ago, Masciandaro et al. (2008) concluded that countries differ less in their vision on appropriate accountability mechanisms than on their vision on the appropriate level of independence (p. 838).
[2067] Note that designing good supervisory governance structures is not only 'nice to have', but critical for ensuring that supervisors stick to their mandate (Enriques & Hertig, 2011, pp. 362-365).
[2068] Cf. sub-section 1.4.4.1. Alesina & Tabellini (2008) argue (and model) that regulators are normally better protected against lobbying/capture than politicians (p. 440).
[2069] Cf. sub-section 1.4.4.1.; Wyplosz (2011), p. R23.
[2070] While both concepts have already been explained in sub-section 1.4.4, their application to macroprudential policy requires a more detailed discussion, especially because the findings of this study will be integrated into it.
[2071] Note that the ESRB recommended macroprudential authorities to use guided discretion for 'decisions on the application, deactivation or calibration of time-varying macro-prudential instruments' (recommendation C1(b) of European Systemic Risk Board Recommendation 2013/1).
[2072] Cf. Amtenbrink & Lastra (2008), pp. 118-121; Lastra (2013), p. 224.

form of *ex ante* control on the supervisor.[2073] This control can be improved by further specifying the objectives of the macroprudential instruments where these objectives are currently unclear. This concerns particularly art. 124 and 164 CRR and Pillar 2 measures. Eventually, to make the responsibilities of a supervisor clearer, the objective of an instrument can be linked to an intermediate objective of macroprudential policy, as recommended by the ESRB. One of them is preventing and mitigating excessive credit growth and leverage.[2074] If the legislator desires to increase its *ex ante* control, it can create restrictions, as the German *Bundestag* did. This restricts the room of manoeuvre of a macroprudential authority, more so than the room of manoeuvre which a central bank has for monetary policy where it genererally has freedom to calibrate its instruments. However, a clear risk is that politicians create restrictions which are an obstacle to effective macroprudential policy. Therefore, alternatively, the legislator can require the macroprudential authority to develop a guided discretion mechanism, and to consult the Ministry of Finance in this process. A guided discretion mechanism has also the advantage of further specifying the objective of an instrument, which supports holding the authority to account.[2075]

If the legislator worries that a macroprudential authority will use the instrument without caring about negative side effects, it can require taking these effects into account, for instance by setting contributing to economic growth as secondary aim. The monetary policy objective of the ECB and the objective of the UK's Financial Policy Committee are constructed in this manner.[2076] Although such a secondary objective is difficult to quantify, it stimulates authorities to take the effects of their decisions on economic growth into account. However, it must be absolutely clear that (medium and long-term) financial stability is the supervisor's primary objective.[2077] Otherwise the problems related to the inaction bias and time-inconsistency are not solved.

Guided discretion mechanism can be used for more instruments than currently is the case; it can, for instance, also be applied to art. 124 and 164 CRR and the borrower-based caps in the three member states. Ideally, a guided discretion mechanism is used both internally and externally, meaning that supervisors are transparent about the framework guiding the decisions, including the indicators and

[2073] Cf. sub-section 1.4.4, in particular footnote 181.
[2074] Recommendation A(2)(a) of European Systemic Risk Board Recommendation 2013/1.
[2075] Cf. De Haan et. (1999) on clear and quantified objectives of monetary policy (p. 177).
[2076] See art. 127(1) TFEU and sections 9C(1) and 9C(4) of the Financial Services Act 2012, available at http://www.legislation.gov.uk/ukpga/2012/21/pdfs/ukpga_20120021_en.pdf.
[2077] Cf. (sub-)sections 4.2.3 and 4.4.

their thresholds, and about the use of discretion.[2078] Decisions require justification in light of the relevant developments, the supervisory mandate, and the objective of the instrument. In this way, a guided discretion mechanism can function as early-warning mechanism – through the use of indicators and thresholds as signals – as well as a device to steer supervisors towards their mandate and to reduce the risk of unobservable capture. [2079] The latter is impossible without an external yardstick, for which transparency is a precondition. Currently, transparency requirements vary a lot among macroprudential instruments. They are high for, *exempli gratia*, the CCB, but low for, for instance, art. 124 and 164 CRR. A yardstick and transparency also facilitate accountability, by enabling evaluation of supervisory action, which is much harder for macroprudential than for monetary policy, because the objectives of the latter are better quantifiable.[2080] So, guided discretion mechanisms need to consist of three core elements: (1) early-warning indicators with thresholds, (2) an act-or-explain principle, and (3) transparency about (1) and (2).

The design of a guided discretion mechanism also determines which types of discretion are restricted.[2081] If indicators with thresholds solely function as an early-warning mechanism, only the supervisor's subsuming discretion is affected, because the thresholds determine whether a development is classified as risky or not. If there is an act-or-explain principle if a threshold is exceeded, the administrative discretion in strict sense is limited as well. The wording of the rules determines how much interpretative discretion is left for a supervisor, and how prescriptive a guided discretion mechanism really will be. So, when designing a guided discretion mechanism, all three types of discretion need to be considered.

To be sure, there are some caveats, of which two stand out. Firstly, macroprudential policy is still in its infancy, and apart from the fact that regulators and supervisors are still creating policy frameworks

[2078] Cf. McDonnell (2013), p. 134; Gandrud & Hallerberg (2015), pp. 782-783. Note that the ESRB recommended member states to 'ensure that macro-prudential policy decisions and their motivations are made public in a timely manner, unless there are risks to financial stability in doing so, and that the macro-prudential policy strategies are set out and published by the macro-prudential authority' (recommendation D1 of European Systemic Risk Board Recommendation 2011/3). In addition, it recommended macroprudential authorities to foster the transparency of their policy (recommendation C1(c) of European Systemic Risk Board Recommendation 2013/1).

[2079] Cf. Liedorp et al. (2013), who explain that transparency reduces the chances for interference with the work of a banking supervisor (as well as it increases its legitimacy and predictability) (p. 311). They distinguish between political, economic, procedural, policy and operational transparency (pp. 313-316). Transparency about a guided discretion mechanism is a form of procedural transparency.

[2080] For instance, the ECB's objective of price stability is quantified as an inflation rate below, but close to, 2% for the euro area as a whole. Intermediate objectives already help to evaluate macroprudential policy, because they are more specific than the overall objective. However, they still need to be quantified.

[2081] See sub-section 1.4.4.2 for an explanation of the three types of discretion.

and finding out what works best, the quest for finding reliable and well-functioning indicators of systemic risks is still ongoing.[2082] Furthermore, some systemic risks are hard to measure by means of quantitative indicators.[2083] Moreover, as the economic and legal situation is subject to change, developing indicators remains work in progress. Nevertheless, although indicators are not perfect, they can be made as suitable as possible and, subsequently, be used in the daily work of a macroprudential supervisor. Moreover, this problem is less pronounced for household debt developments than for other systemic risks, because the risk of a credit bubble is easier to quantify than, for instance, the risk of contagion due to interconnectedness.[2084] For instruments for which there are no suitable indicators available, the strategy and decision-making process of a macroprudential authority can be made more concrete and transparent than currently is the case, for instance, by explaining the methods that are used to evaluate systemic risks.[2085] The supervisor's discretion can be influenced by requiring regular public evaluation of the relevant developments.

Secondly, in some instances a supervisor does not want to be transparent about systemic risks in order to prevent market panic.[2086] Again, this concern is absent for household debt, since information about house prices is publicly available. Furthermore, for indicators and situations where full transparency might indeed be inappropriate, information can only be disclosed to the actor to which the supervisor is accountable.[2087] Finally, practice shows that transparency of macroprudential supervisors, and publication of data related to financial stability is certainly possible. For instance, the Dutch Financial Stability Committee publishes minutes of its meetings, and, in 2016, the Central Bank of Ireland decided to do the same.[2088] Also, the ECB, DNB, the CBI and the Bundesbank all regularly publish reports with data about systemic risks.

[2082] See e.g. Giese et al. (2014) and Ibáñez-Hernándeza et al. (2015). Cf. sub-section 7.1.3.1 for a discussion of the type of indicators which can be used in relation to household debt levels.
[2083] Sarlin & Nyman (2015), p. 401. Indicators need not necessarily be quantitative or numerical, but can also be visual. Among others, Sarlin (2016) and Flood et al. (2016) provide a range of examples of visual maps to identify systemic risks.
[2084] Cf. European Systemic Risk Board (2016a), p. 20. But see the difficulties for finding suitable indicators for the CCB (*supra,* footnote 2084).
[2085] Cf. Committee on the Global Financial System (2016), pp. 13-15.
[2086] *Supra,* footnote 2078.
[2087] Note that Enriques & Hertig (2011, p. 377) and Ferran (2014, p. 19) also advocate greater transparency for financial supervisors – although they do not discuss macroprudential supervisors – while recognising that transparency is inappropriate in emergency situations and the like.
[2088] See http://www.financieelstabiliteitscomite.nl/nl/publicaties and https://www.centralbank.ie/news/article/central-bank-commission-meeting-minutes-published (last visited 23 June 2016).

7.3.3.3. Fostering accountability

The involvement of the legislator in setting policy objectives for all the instruments, combined with greater transparency, and the use of guided discretion, contributes to the ability and willingness of a supervisor to act, and facilitates holding the supervisor to account. In an optimal accountability mechanism, a supervisor may face consequences for its (in)action, among other things to create incentives to act adequately.[2089] Supervisors are subject to various accountability mechanisms – for instance, reporting requirements, (re)appointment procedures, and the threat of a revocation of the powers which they received. While some of these mechanisms attach consequences to inadequate action, they do not allow for swift and targeted accountability.[2090] Accountability can be fostered by strengthening some of the existing or proposed mechanisms, in order to create a wider palette of accountability mechanisms.

Firstly, for certain instruments, specific accountability arrangements have been developed, but not for others. Developing specific arrangements for the latter group of instruments would increase accountability. An example is requiring public justification for both using and refraining from using art. 124 and 164 CRR, to be explained in light of the objectives of the instrument.[2091] Also, public consultation can be made mandatory for decisions on all macroprudential instruments – except for emergency situations which require immediate action. The supervisor could be required to publish contributions, and to respond in detail to the contributions of certain actors, especially those of the Minister of Finance, but also those of consumer organisations.[2092] This increases its accountability, whilst maintaining its independence. This fits in a trend towards more transparency in financial supervision, as *inter alia* visible in the German requirement to explain the reasons for adopting or amending the LTV limit before the committee on financial supervision of the *Bundestag*.[2093]

Secondly, one-sided mechanisms for reviewing, justifying and overriding decisions – which currently only increase the inaction bias – could be transformed into two-sided mechanisms. For instance, the German rules for the LTV limit may be amended to require not only review of the restrictions, but also of the exceptions.[2094] Moreover, periodic review of developments in the housing market can be made

[2089] Cf. footnote 171.
[2090] For more information on accountability mechanisms, see the references in footnotes 171-174.
[2091] Cf. (sub-)sections 3.4 and 7.3.2.
[2092] Cf. the Central Bank (Supervision and Enforcement) (Amendment) Bill 2016, as discussed in sub-section 4.2.3.
[2093] See sub-section 4.3.3.2. Cf. art. 20-21 Regulation 1024/2013.
[2094] Cf. sub-section 4.3.1.2.

compulsory, combined with an obligation to justify any decision related to LTV limit. Also, the Dutch override-mechanism with respect to regulatory powers of DNB and the AFM can be improved, by amending it to allow the Minister of Finance to use it also if DNB and the AFM adopt generally binding regulations which are inadequate, and not only if these regulations are burdensome.[2095] This would also be better in line with the vision of the Dutch Ministry of Finance that DNB needs to be decisive (*slagvaardig*) in its supervision.[2096] Now, the override mechanism is only aimed at restricting DNB if it is too decisive.

In general, the accountability mechanisms between the supervisor and the legislator can also be improved by taking these aforementioned issues into account. This means that the parliament – or the government/Minister of Finance on its behalf – can ask questions about macroprudential decisions or the outcome of a periodic review – the review needs to be mandatory to increase accountability – or provide input to consultation to the supervisor. The latter is required to respond in detail. If decisions about the use of a macroprudential instrument are subject to a guided discretion mechanism, and the supervisor deviates from the guidance, the legislator or the Minister of Finance is allowed to issue a public recommendation, subject to a comply-or-explain mechanism. This semi-override mechanism simultaneously achieves the objectives of ensuring supervisory independence and increasing accountability.[2097] Since a recommendation will be issued by another actor, this mechanism differs from an act-or-explain principle attached to a threshold value in a guided discretion mechanism. Because a recommendation can only be issued if the supervisor deviates from the *ex ante* guidance, the supervisor is protected against active involvement of the legislator or Ministry of Finance. This possibility to issue a recommendation, subject to a comply-or-explain mechanism, should not replace similar powers of Financial Stability Committees to issue such recommendations, since these are not primarily aimed at increasing accountability.

Meanwhile, even if the legislator or Minister of Finance only has a semi-override mechanism at its disposal, tightening or activating macroprudential instruments becomes more difficult, if the supervisor already lacks independence, like BaFin due to the legal and technical supervision of the BMF.[2098] Therefore, although the aforementioned mechanism in general improves accountability, it is not suitable for application to every macroprudential authority; for instance not to BaFin, unless it becomes more independent.

[2095] Cf. sub-section 3.3.1.

[2096] Cf. Ministerie van Financiën (2011), pp. 11-12.

[2097] This semi-override mechanism respects the supervisory independence, because it is not binding.

[2098] Cf. sub-sections 3.3.1 and 4.3.3.2.

Also, as discussed, in the Netherlands already a hard override mechanism exists. If it is reformed, it can further increase the accountability of the supervisor. Besides making it two-sided, it is important to make it rule-based. This ensures accountability and avoids political pressure for the wrong reasons. Firstly, subjective elements must be reduced. Currently, it can be triggered if rules are 'burdensome'. Changing this into 'demonstrable burdensome or inadequate' makes it two-sided and more objective. Secondly, insofar as it concerns macroprudential instruments, the use of the override-mechanism could be limited to the situation that the supervisor takes decisions on macroprudential rules which significantly deviate from the guidance, while its justification is highly questionable. Of course, this must be further detailed, in light of the specific instruments and *ex ante* guidance. Thirdly, any use of the override mechanism needs to be explained in light of achieving the objectives of the respective instrument.

7.3.3.4. Limiting inaction by allowing limited EU involvement

Despite these mechanisms to reduce the inaction bias, every national actor faces pressure to abstain from tightening macroprudential requirements. To further reduce this risk, it is necessary to allow EU involvement – albeit limited – since actors at EU level are probably less prone to pressure of national politicians and the national industry. Currently, the ESRB is the most obvious candidate for this task, since it has already been allotted the tasks of identifying and prioritising systemic risks, as well as issuing recommendations for remedial action to, among others, member states and supervisors.[2099] The ECB would have been another candidate for this role, were it not that the scope of its actions is limited to the euro area and to credit institutions.[2100]

It is recommendable to provide the ESRB with limited legally binding powers. This would enable the ESRB to require national supervisors to act. In this way, its powers function as a second override-mechanism, besides the national possibilities to override a supervisory decision. Of course, these powers must be circumscribed and subject to strict conditions in order to avoid that the ESRB takes the actual macroprudential decisions and the division of competences is eroded. Firstly, the ESRB must only be able to require macroprudential supervisors to use their powers in an emergency situation, where urgent action is indispensable to avert potentially serious negative consequences for financial stability.[2101] In the absence of an emergency situation, it is inappropriate to cut across the

[2099] Art. 3 and 15-18 Regulation 1092/2010.
[2100] Moreover, there is a risk that the ECB becomes too powerful, without being subject to meaningful checks.
[2101] This inevitable vague definition of an emergency situation displays similarities with the definition of the situation which allows using the enhanced surveillance procedure: cf. art. 1(1)(a) and 2(1) Regulation 472/2013.

opportunities of national supervisors to take action. Furthermore, the ESRB needs to demonstrate that adverse cross-border effects of inaction are present; otherwise, it is a purely national issue.[2102] Moreover, if an instrument is subject to a guided discretion mechanism, the ESRB can only require action if supervisory decisions significantly deviate from the guidance, while the justification is highly questionable. An ESRB assessment team can evaluate the national measures and justifications, and prepare the decisions of the Advisory Technical Committee and ultimately the General Board.[2103] In the absence of such a mechanism, the ESRB can only use this power if its research demonstrates the potentially serious negative consequences for financial stability, caused by inadequate action. Furthermore, to ensure sufficient support for the decisions and to avoid that decisions will be taken lightly, the ESRB should decide by means of a two-thirds majority.[2104] Decisions must be made public automatically to foster transparency and to increase pressure to comply with them.[2105]

Finally, it is necessary to create a decision-making procedure that reconciles the exercise of legally binding powers by the ESRB with the *Meroni* doctrine, as it stands after the *ESMA-short selling* case.[2106] Most likely, the ESRB cannot require national supervisors to tighten national macroprudential measures, without permission of or objection possibilities for the Commission or the Council. Indeed, such a power in the hands of the ESRB would imply the exercise of a wide margin of discretion – especially in light of the potential distributional consequences of these decisions – which cannot be sufficiently delineated by conditions and criteria.[2107] The required involvement of EU institutions could be modelled along the lines of art. 18 Regulation 1093/2010, which allows the EBA to adopt individual decisions requiring authorities to take necessary action, on condition that the Council determined the existence of an emergency situation. However, this provision is subject to some serious limitations,

[2102] This condition is not difficult to fulfil, since financial instability often has cross-border effects: see e.g. sub-section 1.2.1 and Schoenmaker & Wierts (2016), p. R54. Note that the presence of potential adverse spillover effects to other euro area member states is also a condition for allowing the use of the enhanced surveillance procedure: cf. art. 1(1)(a) and 2(1) Regulation 472/2013.
[2103] Assessment teams of the ESRB consist of a mix of staff from the ESRB and from national authorities. On the position of assessment teams in the organisational structure of the ESRB, see: http://www.esrb.europa.eu/shared/pdf/Organisational-Chart.pdf (last visisted 16 August 2017).
[2104] Cf. art. 10 Regulation 1092/2010.
[2105] Currently, it requires a separate decision to make an ESRB warning or recommendation public (art. 18 Regulation 1092/2010).
[2106] For these cases: *supra,* footnote 169.
[2107] Although it is possible to impose similar conditions and criteria upon the ESRB as those imposed upon ESMA for exercising its powers of prohibiting certain short-selling activities, the power of requiring national authorities to tighten macroprudential requirements involves a much wider margin of discretion than the disputed power of ESMA. See art. 28 Regulation 236/2012 of the European Parliament and of the Council of 14 March 2012, OJ 2012, L 86/1 and para. 41-54 of Case C-270/12 *United Kingdom v European Parliament and Council* [2014]. For a discussion of this case, see e.g. Adamski (2014), Scholten & Van Rijsbergen (2014) and Bergström (2015).

while this crucial role of the Council easily results in a situation where political factors trump financial stability.[2108] Alternatively, the ESRB could receive the power to adopt draft decisions, to which the Commission or the Council can object within a short period of time.[2109] Objecting should only be allowed for a limited number of reasons of public interest, for example that it can be plausibly shown that the tightening of the macroprudential requirements will be disproportionate in relation to its objective. This design creates a shield against too much political involvement, and a form of accountability for the use of these powers by the ESRB.

Granting the ESRB some binding powers allows it also to coordinate macroprudential action in the presence of global or EU-wide drivers of a credit bubble, as touched upon in sub-section 7.1.3.2. However, EU-wide coordinated action is only possible if national authorities are empowered to set LTV and LTI caps. The process of creating a legal basis to activate borrower-based limits can be lengthy, as the German example highlights. Therefore, timely macroprudential policy requires that the legal basis is established in advance. The ESRB has already recommended member states to ensure that macroprudential authorities can directly control or recommend the use of at least one instrument to mitigate and prevent excessive credit growth, with LTV and LTI limits listed as indicative instruments.[2110] Obviously, this does not ensure an effective use of the caps, since member states can ignore the ESRB recommendation or comply with it, but without giving the macroprudential authority direct control over the caps. Hence, it is strongly advised that the ESRB recommends member states to ensure that macroprudential authority can directly control macroprudential instruments. In addition, ideally, member states face more pressure to comply with ESRB recommendations, even before an emergency situation arises. A possibility to increase pressure is to include non-complied ESRB recommendations in the country-specific recommendations under the system of economic governance in the EU. Issuing these kinds of country-specific recommendations is possible: in 2016, Sweden has been recommended to '[e]nsure that the macro-prudential authority has the legal mandate to implement measures to safeguard financial stability in a timely manner.'[2111]

The ESRB can as well contribute to improving operational independence for macroprudential supervisors. It already recommended member states to ensure that 'in the pursuit of its objective, the

[2108] Cf. Adamski (2014), p. 822.
[2109] This design would copy some aspects of the decision-making procedure within the Single Resolution Mechanism (cf. art. 18 Regulation 806/2014 of the European Parliament and of the Council of 15 July 2014, OJ 2014, L225/1).
[2110] Recommendations A and B of European Systemic Risk Board Recommendation 2013/1.
[2111] Council Recommendation of 12 July 2016 on the 2016 National Reform Programme of Sweden and delivering a Council opinion on the 2016 Convergence Programme of Sweden, *OJ* 2016, C 299/53.

macro-prudential authority is as a minimum operationally independent, in particular from political bodies and from the financial industry'.[2112] Furthermore, according to the ESRB, a macroprudential authority should be able to initiate macroprudential policies and to control appropriate instruments for realising its objectives.[2113] While the recommendaton about operational independence lacks specifity, the follow-up report from 2014 contains compliance criteria.[2114] Yet, these are not exhaustive in light of the literature on supervisory independence.[2115] The ESRB can contribute to improving independence for macroprudential supervisors by being more specific *ex ante* in future recommendations.[2116]

The discussed options to involve the ESRB in limiting inaction and coordinating EU-wide macroprudential action respect the proportionality principle, by being suitable and not going further than necessary to achieve these objectives. However, if it turns out that the ESRB is not able to attain these aims, it might be necessary to adopt a directive on macroprudential regulation and supervision. This directive could require member states to guarantee sufficient independence for macroprudential supervisors, and oblige them to create the legal basis for borrower-based instruments. Adopting a directive – instead of a regulation – allows the EU to provide member states with crucial flexibility in making design choices, by imposing only a few basic requirements.

Thus, the present research strongly suggests that macroprudential policy in the EU should be built on an institutional framework in which decisions are taken by independent supervisors, based on mechanisms of guided discretion, with top up possibilities for the Minister of Finance and the ESRB, under strict conditions. Yet, more research is necessary to examine how this can be operationalised for different kinds of macroprudential instruments. Suitable indicators and thresholds need to be found. To allow practical implementation, the proposed institutional features need to be expounded per member state and per instrument, explaining how this can be integrated in existing processes and relationships. Using guided discretion in macroprudential policy helps to overcome an inaction bias, which might have devastating effects, as well as to foster supervisory accountability. Let the academic literature further take up this theme.

[2112] Recommendation 2011/3, E(1). In the literature, operational independence is also called functional or decision-making independence: cf. sub-section 1.4.4.1, in particular footnote 164.
[2113] Recommendations A2 & C4 of European Systemic Risk Board Recommendation 2011/3.
[2114] European Systemic Risk Board (2014c), p. 32.
[2115] See sub-section 1.4.4 for a detailed discussion of measuring supervisory independence.
[2116] International organisations are currently also actively promoting supervisory independence. For instance, the International Monetary Fund (2013, 2014b) has published analytical and comparative papers on the institutional framework of macroprudential policy (cf. International Monetary Fund, Financial Stability Board and Bank for International Settlements, 2016). Also in its peer review reports the IMF evaluates national frameworks and issues recommendations for improvements (e.g. International Monetary Fund (2016e, 2017)).

Bibliography

Monographs and contributions to edited volumes

Acemoglu, D., Johnson, S., & Robinson, J. A. (2005), Institutions as a fundamental cause of long-run growth, In: P. Aghion, & S. Durlauf N (Eds.), *Handbook of economic growth. Volume 1A* (), Amsterdam: North-Holland.

Adamczyk, L. (2013), The sources of EU law relevant for direct taxation, In: M. Lang, P. S. J. Pistone & C. Staringer (Eds.), *Introduction to european tax law: Direct taxation* (3rd ed., pp. 13-42), Wien: Spiramus Press.

Adams, M. (2011), Doing what Doesn't come naturally. On the distinctiveness of comparative law, In: M. Van Hoecke (Ed.), *Methodologies of legal research: Which kind of method for what kind of discipline?* (), Oxford: Hart Publishing.

Admati, A., & Hellwig, M. (2013), *The bankers' new clothes: What's wrong with banking and what to do about it*, Princeton and Oxford: Princeton University Press.

Aelen, M. (2014), *Beginselen van goed markttoezicht*, Den Haag: Boom Juridische Uitgevers.

Albers, C. L. G. F. H. (2014), Bestraffend bestuur 2014, In: VAR Vereniging voor Bestuursrecht (Ed.), *Boetes en andere bestraffende sancties: Een nieuw perspectief?* (pp. 7-108), Den Haag: Boom Juridische Uitgevers.

Alexander, K. (2015b), The role of capital in supporting banking stability, In: N. Moloney, E. Ferran & J. Payne (Eds.), *The Oxford Handbook of Financial Regulation* (pp. 334-363), Oxford: Oxford University Press.

Allen, F., Beck, T., & Carletti, E. (2013), The impact of the regulatory framework on investment in the European Union, In European Investment Bank (Ed.), *Investment and investment finance in europe* (pp. 243-275), Luxembourg: Imprimerie Centrale SA.

Amtenbrink, F. (1999), *The democratic accountability of central banks*, Oxford: Hart Publishing.

Amtenbrink, F., & Lastra, R. M. (2008), Securing democratic accountability of financial regulatory agencies - A theoretical framework, In: R. V. De Mulder (Ed.), *Mitigating risk in the context of safety and security* (pp. 107-131), Rotterdam: Erasmus School of Law and the Research School for Safety and Security, Erasmus University Rotterdam.

Amtenbrink, F., & Repasi, R. (2017), Compliance and enforcement in economic policy coordination in EMU, In A. Jakab, & D. Kochenov (Eds.), *The enforcement of EU law and values* (pp. 145-181), Oxford: Oxford University Press.

Amtenbrink, F., & Vedder, H. H. B. (2017), *Recht van de Europese Unie* (6th ed.), Den Haag: Boom Juridische Uitgevers.

Ayuso, J., & Blanco, R. (2013), The 2007-financial crisis – a EURO-pean perspective, In: M. Balling, & E. Gnan (Eds.), *50 years of money and finance: Lessons and challenges* (pp. 415-444), Vienna: Larcier.

Bankowski, Z., D.N. MacCormick, R.S. Summers & J. Wróblewski (1991), On method and methodology, In D. MacCormick N, & R. Summers S (Eds.), *Interpreting statutes – A comparative study* (pp. 9-28), Aldershot: Ashgate.

Barth, J. R., Caprio Jr., G., & Levine, R. (2006), *Rethinking banking regulation*, New York: Cambridge University Press.

Beijering-Beck, A. C. (2012), Naming and shaming op grond van de wet of het financieel toezicht, In: J. J. Reuveny, A. C. Beijering-Beck, B. De Haan & M. C. T. M. Sonneregger (Eds.), *Genoemd or gedoemd? over actieve openbaarmaking door bestuursorganen* (pp. 53-109), Den Haag: Boom Juridische Uitgevers.

Biemans, J. W. A. (2013), *Consumentenkrediet - Monografiën BW, nr. 67*, Deventer: Kluwer.

Bierman, B., Van der Eerden, F. W. J., Reijmer, J., Silverentand, L., Sprecher, J. M., & De Wit, T. W. G. (2015), *Hoofdlijnen wft* (3rd ed.), Deventer: Wolters Kluwer.

Bix, B. (1993), *Law, language, and legal determinacy*, Oxford: Clarendon Press.

Black, D. (1976), *The behaviour of law*, New York: Academic Press.

Blomberg, A. B. (2013), Methoden en technieken van handhaving, In: Doorenbos, D.R., M.J.C. Somsen & G.V. Naber (Eds.), *Onderneming en sanctierecht - handhaving van financieel toezichtrecht, in het bijzonder onder de Wft en Pw* (pp. 127-155), Deventer: Kluwer.

Bohnert, J., Krenberger, B., & Krumm, C. (2016), *Ordnungswidrigkeitengesetz - Kommentar* (4th ed.), München: C.H. Beck.

Boos, K., Fischer, R., & Schulte-Mattler, H. (2016), *Kommentar zu Kreditwesengezetz, VO (EU) nr. 575/2013 (CRR) und Ausführungsvorschriften* (5th ed.), München: C.H. Beck.

Boyle, A. (2010), Soft law in international law-making, In: M. Evans (Ed.), *International law* (3rd ed., pp. 122-140), Oxford: Oxford University Press.

Breslin, J. (2013), *Banking law* (3rd ed.), Dublin: Round Hall.

Breslin, J. (2015), *Banking law - Supplement to the third Edition*, Dublin: Round Hall.

Broekhuizen, K.W.H. (2016), *Klantbelang, belangenconflict en zorgplicht*, Den Haag: Boom Juridische Uitgevers

Brown, A. C., Stern, J., Tenenbaum, B., & Gencer, D. (2006), *Handbook for evaluating infrastructure regulatory systems*, Washington: The World Bank.

Burda, M. C., & Wyplosz, C. (2005), *Macroeconomics – A European text* (4th ed.), Oxford: Oxford University Press.

Byrne, E. (2012), *Political corruption in ireland 1922–2010: A crooked Harp?*, Manchester: Manchester University Press.

Cafaggi, F., & Micklitz, H. (Eds.). (2009), *New frontiers of consumer protection - the interplay between private and public enforcement*, Antwerpen: Intersentia.

Coglianese, C., & Mendelson, E. (2012), Meta-regulation and self-regulation, In: R. Baldwin, M. Cave & M. Lodge (Eds.), *The Oxford Handbook of Regulation* (5th ed., pp. 146-168), Oxford: Oxford University Press.

Constâncio, V. (2016), The role of stress testing in supervision and macroprudential policy, In: R. W. Anderson (Ed.), *Stress testing and macroprudential regulation - A transatlantic assessment* (pp. 51-68), London: CEPR Press.

Craig, P., & De Búrca, G. (2011), *EU law: Text, cases, and materials*, Oxford: Oxford University Press.

Davis, K. (2010), Institutions and economic performance, In K. Davis (Ed.), *Institutions and economic performance* () Edward Elgar.

De Bandt, O., Hartmann, P., & Peydró, J.,Luis. (2010), Systemic risk in banking, In: A. Berger N, P. Molyneux & J. O. S. Wilson (Eds.), *The oxford handbook of banking* (pp. 633-672), Oxford: Oxford University Press.

De Haan, J., Oosterloo, S., & Schoenmaker, D. (2009), *European financial market and institutions*, Cambridge: Cambridge University Press.

De Hullu, J. (2012), *Materieel strafrecht* (5th ed.), Deventer: Kluwer.

De Jong, E. (2009), *Culture and economics – on values, economics and international business*, London: Routledge.

De La Parra, S. (2017), The economic dialogue: An effective accountability mechanism? In: L. Daniele, P. Simone & R. Cisotta (Eds.), *Democracy in the EMU in the aftermath of the crisis* (pp. 101-120), Cham: Springer International Publishing AG and G. Giappichelli Editore.

De Streel, A. (2014), EU fiscal governance and the effectiveness of its reform, In: M. Adams, F. Fabbrini & P. Larouchi (Eds.), *Constitutionalization of European budgetary constraints: Comparative and interdisciplinary perspectives* (pp. 85-104), Oxford: Hart Publishing.

De Vries, F. (2013), Curatele, In: Doorenbos, D.R., M.J.C. Somsen & G.V. Naber (Eds.), *Onderneming en sanctierecht - handhaving van financieel toezichtrecht, in het bijzonder onder de Wft en Pw* (pp. 283-301), Deventer: Kluwer.

Deaton, A. (1987), Life-cycle models of consumption: Is the evidence consistent with the theory? In T. F. Bewley (Ed.), *Advances in econometrics: Fifth world congress, vol II* (pp. 121-148), Cambridge: Cambridge University Press.

Deaton, A. (1992), *Understanding consumption*, Oxford: Oxford University Press.

Devenney, J., & Kenny, M. (2012), *Consumer credit, debt and investment in Europe*, Cambridge: Cambridge University Press.

Donnelly, A., & Walsh, M. (2002), *Revenue investigations and enforcement* Buttersworths.

Donnelly, M. (2011), *The law of credit and security* (1st ed.), Dublin: Round Hall.

Donnelly, M. (2015), *The law of credit and security* (2nd ed.), Dublin: Round Hall.

Donnelly, M., & White, F. (2014), *Consumer law: Rights and regulation* (1st ed.), Dublin: Round Hall.

Dragomir, L. (2010), *European prudential banking regulation and supervision - The legal dimension*, London & New York: Routledge.

Durkin, T. A., & Elliehausen, G. (2010), Consumer lending, In: A. Berger N, P. Molyneux & J. O. S. Wilson (Eds.), *The oxford handbook of banking* (pp. 550-564), Oxford: Oxford University Press.

Engelhart, M. (2012), *Sanktionierung von Unternehmen und Compliance*, Berlin: Duncker & Humblot.

Evers, J., & De Boer, F. (2007), Het ontwerpen van een individueel interview, In: J. Evers (Ed.), *Kwalitatief interviewen: Kunst én kunde* (1st ed., pp. 48-67), Den Haag: Lemma.

Ferran, E. (2015), Institutional design: The choices for national systems, In: N. Moloney, E. Ferran & J. Payne (Eds.), *The oxford handbook of financial regulation* (pp. 97-128), Oxford: Oxford University Press.

Franken, S. M. (2009), The political economy of the EC consumer credit directive, In: J. Niemi, I. Ramsay & W. C. Whitford (Eds.), *Consumer credit, debt & bankruptcy* (pp. 129-152), Oxford and Potland, Oregon: Hart Publishing.

Friedman, M. (1957), *A theory of the consumption function*, Princeton: Princeton University Press.

Gilardi, F., & Maggetti, M. (2011), The independence of regulatory authorities, In: D. Levi-Faur (Ed.), *Handbook on the politics of regulation* (pp. 201-214), Cheltenham: Edward Elgar.

Groenewegen, J., Spitshoven, A., & Van den Berg, A. (2010), *Institutional economics – an introduction* Palgrave Macmillan.

Gunningham, N. (2010), Enforcement and compliance strategies, In: R. Baldwin, M. Cave & M. Lodge (Eds.), *The oxford handbook of regulation* (pp. 120-145), Oxford: Oxford University Press.

Hart, H. L. A. (1961), *The concept of law*, Oxford: Clarendon Press.

Hartley, T. C. (2010), *The foundations of European Union law* (Seventh edition ed.), Oxford: Oxford University Press.

Hartmann, A. R. (2013), De bestuurlijke boete, In: Doorenbos, D.R., M.J.C. Somsen & G.V. Naber (Eds.), *Onderneming en sanctierecht - handhaving van financieel toezichtrecht, in het bijzonder onder de Wft en Pw* (pp. 227-249), Deventer: Kluwer.

Hartmann, A. R., & Keupink, B. J. V. (2011), Enkele opmerkingen over de reikwijdte van de publiekrechtelijke aansprakelijkheid bij zorgplichten in de financiële toezichtswetgeving, In: R. Stijnen, & R. Kruisdijk (Eds.), *Zorgplicht en financieel toezicht* (pp. 87-93), Deventer: Kluwer.

Heremans, D., & Pacces, A. M. (2012), Regulation of banking and financial markets, In: A. Pacces M, & R. Van den Bergh J (Eds.), *Regulation and economics: In encyclopedia of law and economics* (2nd ed., pp. 558-606), Cheltenham: Elgar.

Herlin-Karnell, E. (2012), *The constitutional dimension of european criminal law*, Oxford: Hart Publishing.

Jansen, O. J. D. M. L. (2013), De zelfstandige last en de bindende aanwijzing, In: Doorenbos, D.R., M.J.C. Somsen & G.V. Naber (Eds.), *Onderneming en sanctierecht - handhaving van financieel toezicht, in het bijzonder onder de Wft en Pw* (pp. 173-189), Deventer: Kluwer.

Jappelli, T., & Pagano, M. (2006), The role and effects of credit information sharing, In: G. Bertola, R. Disney & C. Grant (Eds.), *The economics of consumer credit* (pp. 347-371), Cambridge, Massachusetts, London, England: The MIT Press.

Jentzsch, N. (2007), *Financial privacy - an international comparison of credit reporting systems* (2nd ed.), Berlin Heidelber New York: Springer.

Joskow, P. L. (2008), Introduction to new institutional economics: A report card, In: E. Brousseau, & J. M. Glachant (Eds.), *New Institutional Economics – A Guidebook* (pp. 1-19), Cambridge: Cambridge University Press.

Kastelein, M., & Sour, R. (2014), Eigen woning, hypotheek en levensverzekering, In: R. Niessen (Ed.), *De wet inkomstenbelasting 2001* (12th ed., pp. 441-521), Den Haag: Sdu Uitgevers.

Kindleberger, C. P. (1978), *Manias, panics and crashes: A history of financial crises* (1st ed.), New York: Basic Books.

Klamert, M. (2014), *The principle of loyalty in EU law*, Oxford: Oxford University Press.

Lehnert, A. (2010), Residential mortgages, In: A. Berger N, P. Molyneux & J. O. S. Wilson (Eds.), *The oxford handbook of banking* (pp. 565-598), New York: Oxford University Press.

Lemmens, K. (2012), Comparative law as an act of modesty: A pragmatic and realistic approach to comparative legal scholarship, In M. Adams, & J. Bomhoff (Eds.), *The theory and practice of comparative law* (), Cambridge: Cambridge University Press.

Luyendijk, J. (2015), *Swimming with sharks: My journey into the world of the bankers*, London: Guardian Faber.

MacNeil, I. (2015), Enforcement and sanctioning, In: N. Moloney, E. Ferran & J. Payne (Eds.), *The oxford handbook of financial regulation* (pp. 280-306), Oxford: Oxford University Press.

Mak, V. (2013c), The 'Average consumer' of EU law in domestic litigation: Examples from consumer credit and investment cases, In: D. Leczykiewicz, & S. Weatherill (Eds.), *The involvement of EU law in private law relationships* (pp. 333-356), Oxford: Hart Publishing.

Marmor, A. (2010), *Philosophy of law*, Princeton: Princeton University Press.

Marques Ibanez, D., & Scheicher, M. (2010), Securitization - instruments and implications, In: A. N. Berger, P. Molyneux & J. O. S. Wilson (Eds.), *The oxford handbook of banking* (pp. 599-629), Oxford: Oxford University Press.

Masciandaro, D., & Quintyn, M. (2013), The evolution of financial supervision: The continuing search for the holy grail, In M. Balling, & E. Gnan (Eds.), *50 years of money and finance: Lessons and challenges* (pp. 263-318), Vienna: Larcier.

McGrath, J. (2015), *Corporate and white-collar crime in Ireland: A new architecture of regulatory enforcement*, Manchester: Manchester University Press.

Metz, R. (2014), Credit scoring: Will our digital identity replace the real person? In: K. Purnhagen, & P. Rott (Eds.), *Varieties of European economic law and regulation* (pp. 635-650), Cham Heidelberg New York Dordrecht London: Springer.

Mian, A., & Sufi, A. (2015), *House of debt*, Chicago and London: The University of Chicago Press.

Mitnick, B.M. (2011), *Capturing "Capture": Definition and Mechanisms*

Modigliani, F., & Brumberg, R. (1954), Utility analysis and the consumption function: An interpretation of cross-section data, In K. Kurihara (Ed.), *Post Keynesian economics*, New Brunswick: Rutgers University Press.

Modigliani, F., & Brumberg, R. (1979), Utility analysis and aggregate consumption functions: An attempt at integration, In: A. Abel (Ed.), *Collected papers of France Modigliani, Vol. 2*, Cambridge: The MIT Press.

Niemi, J. (2009), Overindebted households and law: Prevention and rehabilitation in europe, In: J. Niemi, I. Ramsay & W. Whitford C (Eds.), *Consumer credit, debt & bankruptcy* (pp. 91-104), Oxford and Portland, Oregon: Hart Publishing.

North, D. C. (1990), *Institutions, institutional change, and economic performance*, New York: Cambridge University Press.

Orakhelashvili, A. (2008), *The interpretation of acts and rules in public international law*, Oxford: Oxford University Press.

Ottow, A. (2015), *Market and competition authorities: Good agency principles*, Oxford: Oxford University Press.

Pacces, A. M., & Van den Bergh, R. J. (2012), An introduction to the law and economics of regulation, In: A. M. Pacces, & R. J. Van den Bergh (Eds.), *Regulation and economics: In encyclopedia of law and economics* (2nd ed.,), Cheltenham: Elgar.

Palm-Steyerberg, I. P. (2009), Handhaving door de AFM: De toezichthouder op bezoek. Voorkomen is beter dan genezen, In: C. A. Wielenga (Ed.), *Jaarboek compliance 2009* (pp. 35-50), Nieuwerkerk aan den IJssel: Gelling Publishing.

Poscher, R. (2012), Ambiguity and vagueness in legal interpretation, In: L. Solan M, & P. Tiersma M (Eds.), *The oxford handbook of language and law* (pp. 128-144), Oxford: Oxford University Press.

Ramsay, I. (2012c), *Consumer law and policy: Text and materials on regulating consumer markets*, Oxford: Hart Publishing.

Ramsay, I. (2016), Changing policy paradigms of EU consumer credit and debt regulation, In: D. Leczykiewicz, & S. Weatherill (Eds.), (1st ed., pp. 159-182), Oxford: Hart Publishing.

Reich, N. (2014), Legal protection of individual and collective consumer interest, In: H. Micklitz, P. Rott & K. Tonner (Eds.), *European consumer law* (2nd ed., pp. 339-392), Cambridge - Antwerp - Portland: Intersentia.

Reich, N. (2016), Vulnerable consumers in EU law, In: D. Leczykiewicz, & S. Weatherill (Eds.), *The images of the consumer in EU la* (1st ed., pp. 139-158), Oxford: Hart Publishing.

Reich, N., & Micklitz, H. (2014), Economic law, consumer interests and EU integration, In: H. Micklitz, N. Reich & P. Rott (Eds.), *Understanding EU consumer law* (2nd ed., pp. 1-65), Antwerp Oxford Portland: Intersentia.

Reifner, U., Niemi-Kiesiläinen, J., Huls, N., & Springeneer, H. (2010), *Overindebtedness in European consumer law*, Norderstedt: Books on Demand GmbH.

Romer, D. (2012), *Advanced macroeconomics* (4th ed.), New York: McGraw-Hill Irwin.

Ross, S., & Webb, N. (2012), *The untouchables: The people who helped wreck Ireland - and are still running the show*, London: Penguin Books.

Roth, G. P. (2013), Publicatie van sancties, In: Doorenbos, D.R., M.J.C. Somsen & G.V. Naber (Eds.), *Onderneming en santierecht - handhaving van financieel toezichtrecht, in het bijzonder onder de Wft en Pw* (pp. 251-267), Deventer: Kluwer.

Rott, P. (2007), Effective enforcement and different enforcement cultures in europe, In: T. Wilhelmsson, E. Paunio & A. Pohjolainen (Eds.), *Private law and the many cultures of Europe* (pp. 305-321), Deventer: Kluwer Law International.

Rott, P. (2013), The court of justice's principle of effectiveness and its unforseeable impact on private law relationships, In: D. Leczykiewicz, & S. Weatherill (Eds.), *The involvement of EU law in private law relationships* (pp. 181-198), Oxford: Hart Publishing.

Rott, P. (2014a), Consumer credit, In: H. Micklitz, N. Reich & P. Rott (Eds.), *Understanding EU consumer law* (2nd ed., pp. 197-238), Antwerp - Oxford - Portland: Intersentia.

Rott, P. (2014b), The low-income consumer in european private law, In K. Purnhagen, & P. Rott (Eds.), *Varieties of european economic law and regulation - liber amicorum for hans micklitz* (pp. 675-691), Cham Heidelberg New York Dordrecht London: Springer.

Roubini, N., & Mihm, S. (2011), *Crisis economics – A crash course in the future of finance*, London: Penguin Books.

Sachse, H.,J. (2013), Normoverdragend gesprek en waarschuwingsbrief, In: D. Doorenbos, D.R., M.J.C. Somsen & G.V. Naber (Eds.), *Onderneming en sanctierecht - handhaving van financieel toezichtrecht, in het bijzonder onder de Wft en Pw* (pp. 395-408), Deventer: Kluwer.

Säcker, F. J., Rixecker, R., Oetker, H., & Limperg, B. (2016), *Münchener kommentar zum bürgerlichen gesetzbuch* (7th ed.), München: C.H. Beck.

Schlössels, R. J. N., & Zijlstra, S. E. (2010), *Bestuursrecht in de sociale rechtsstaat* (6th ed.), Deventer: Kluwer.

Schoenmaker, D. (2013), *Governance of international banking: The financial trilemma*, Oxford: Oxford University Press.

Schumpeter, J. A. (1939), *Business cycles*, New York: McGraw-Hill.

Shiller, R.J., *Irrational exuberance* (2nd ed.), Princeton: Princeton University Press.

Smola, R. (2014), *PfandBG* (2nd ed.), Berlin: De Gruyter.

Spangler, M., & Werner, R. (2014), *German covered bonds - overview and risk analysis of Pfandbriefe*, Heidelberg: Springer.

Stern, J. (2012), The evaluation of regulatory agencies, In: R. Baldwin, M. Cave & M. Lodge (Eds.), *The oxford handbook of regulation* (5th ed., pp. 223-258), Oxford: Oxford University Press.

Taekema, S., & Van Klink, B. (2011), On the border. Limits and possibilities of interdisciplinary research, In: B. Van Klink, & S. Taekema (Eds.), *Law and method. Interdisciplinary research into law* (pp. 7-32), Tübingen: Mohr Siebeck.

Taylor, A. M. (2013), The great leveraging, In: V. V. Acharya, T. Beck, G. G. Kaufmann & R. Portes (Eds.), *The social value of the financial sector: Too big to fail or just too big?* (pp. 33-65) World Scientific Publishing.

Terra, B. J. M., & Wattel, P. J. (2012), *European tax law* (6th ed.), Deventer: Kluwer.

Theissen, R. (2013a), *EU banking supervision*, Den Haag: Eleven International Publishing.

Theissen, R. (2013b), *Are EU banks safe?*, Den Haag: Eleven International Publishing.

Valkenburg, W. E. C. A. (2010), *Fiscaal straf- en procesrecht* (4th ed.), Deventer: Kluwer.

Van Boom, W. H., & Loos, M. (Eds.). (2007), *Collective enforcement of consumer law* Europa Law Publishing.

Van den Ing, E. (2012), *Markttoegang financiëledienstverleners Wft*, Deventer: Kluwer.

Van Emmerik, M. L., & Saris, C. M. (2014), Evenredige bestuurlijke boetes, In: VAR Vereniging voor Bestuursrecht (Ed.), *Boetes en andere bestraffende sancties: Een nieuw perspectief?* (pp. 109-204), Den Haag: Boom Juridische Uitgevers.

Van Es, A. J., & Verrest, M. E. J. (2013), Besluitvorming omtrent handhaving, In: Doorenbos, D.R., M.J.C. Somsen & G.V. Naber (Eds.), *Onderneming en sanctierecht - handhaving van financieel toezichtrecht, in het bijzonder onder de Wft en Pw* (pp. 97-111), Deventer: Kluwer.

Van Ooik, R. H. (1999), *De keuze der rechtsgrondslag voor besluiten van de Europese Unie*, Deventer: Kluwer.

Van Poelgeest, J. M. (2015), *Kredietverstrekking aan consumenten* (2nd ed.), Deventer: Kluwer.

Van Wijk, H. D., Konijnenbelt, W., & Van Male, R. (2014), *Hoofdstukken van bestuursrecht* (16th ed.), Deventer: Kluwer.

Vandone, D. (2009), *Consumer credit in Europe - risks and opportunities of a dynamic industry*, Heidelberg: Physica-Verlag.

Voerman, J. A., & Bast, H. E. (2012), Actualiteiten financieel sanctierecht. Amerikaanse toestanden?, In: C. A. Wielenga (Ed.), *Jaarboek compliance 2012* (pp. 109-129), Capelle aan den IJssel: Nederlands Compliance Instituut.

Westrup, J. (2012), Regulatory governance, In N. Hardiman (Ed.), *Irish governance in crisis* (pp. 64-82), Manchester: Manchester University Press.

Wolf, M. (2015), *The shifts and the shocks: What we've learned - And have still to learn - from the financial crisis*, UK: Penguin Books.

Wolswijk, G. (2010), Fiscal aspects of housing, In: P. Arestis, P. Mooslechner & K. Wagner (Eds.), *Housing market challenges in Europe and the United States* (pp. 158-177), Basingstoke: Palgrave Macmillan.

Articles, papers, working papers, reports and theses

Abdou, H.A. and J. Pointon (2011), Credit Scoring, Statistical Techniques and Evaluation Criteria: A Review of the Literature, *Intelligent Systems in Accounting, Finance and Management 18*(2-3), pp. 59-88.

Achtziger, A., M. Hubert, P. Kenning, G. Raab and L. Reisch (2015), Debt Out of Control: The Links between Self-Control, Compulsive Buying, and Real Debts, *Journal of Economic Psychology 49*, pp. 141-149.

Adamski, D. (2012), National Power Games and Structural Failures in the European Macroeconomic Governance, *Common Market Law Review 49*, pp. 1319-1364.

Adamski, D. (2014), The ESMA Doctrine: A Constitutional Revolution and the Economics of Delegation, *European Law Review 39*(6), pp. 812-834.

Adamski, D. (2016), Economic Policy Coordination as a Game Involving Economic Stability and National Sovereignty, *European Law Journal 22*(2), pp. 180-203.

Addison-Smyth, D., K. McQuinn and G. O'Reilly (2009), Modelling Credit in the Irish Mortgage Market, *The Economic and Social Review 40*(4), pp. 371-392.

Admati, A. (2016), The Missed Opportunity and Challenge of Capital Regulation, *National Institute Economic Review* (235), pp. 4-14.

Advisory Scientific Committee of the European Systemic Risk Board (2013), *The consequences of the single supervisory mechanism for Europe's macro-prudential policy framework,* Report No. 3, September.

Advisory Scientific Committee of the European Systemic Risk Board (2014), *Allocating macro-prudential powers,* Report No. 5, November.

Aelen, M. (2013), Terugkerende vragen bij naming en shaming door toezichthouders, *Tijdschrift voor Toezicht 4*(3), pp. 91-98.

Aelen, M. and M. Van den Broek (2014), De dubbele rol van het recht bij de effectiviteit van het financieel toezicht, *Tijdschrift voor Financieel Recht* (1/2), pp. 12-22.

Agénor, P. and L.A. Pereira da Silva (2012), Cyclical Effects of Bank Capital Requirements with Imperfect Credit Markets, *Journal of Financial Stability 8*(1), pp. 43-56.

Agnello, L. and L. Schuknecht (2011), Booms and Busts in Housing Markets: Determinants and Implications, *Journal of Housing Economics 20*(3), pp. 171-190.

Agur, I. and S. Sharma (2013), *Rules, discretion, and macro-prudential policy,* IMF Working Paper WP/13/65.

Aiyar, S., C.W. Calomiris and T. Wieladek (2014a), Identifying Channels of Credit Substitution when Bank Capital Requirements are Varied, *Economic Policy 29*(77), pp. 45-77.

Aiyar, S., C.W. Calomiris and T. Wieladek (2014b), Does Macro-Prudential Regulation Leak? Evidence from a UK Policy Experiment, *Journal of Money, Credit and Banking 46*(s1), pp. 181-214.

Aiyar, S., C.W. Calomiris and T. Wieladek (2016), How does Credit Supply Respond to Monetary Policy and Bank Minimum Capital Requirements? *European Economic Review 82*, pp. 142-165.

Akerlof, G.A. (2002), Behavioral Macroeconomics and Macroeconomic Behavior, *The American Economic Review 92*(3), pp. 411-433.

Akinbami, F. (2013), Is Meta-Regulation all it's Cracked Up to be? the Case of UK Financial Regulation, *Journal of Banking Regulation 14*(1), pp. 16-32.

Alan, S., S. Leth-Petersen and A. Munk-Nielsen (2016), Tax Incentives and Borrowing, *Economics Letters 145*, pp. 162-164.

Albert, P.G.H. (2013), Wet fiscale behandeling eigen woning: gammele, kwetsbare wetgeving, *Weekblad voor Fiscaal Recht*, pp. 459.

Alesina, A. and G. Tabellini (2007), Bureaucrats or Politicians? Part I: A Single Policy Task, *The American Economic Review 97*(1), pp. 169-179.

Alesina, A. and G. Tabellini (2008), Bureaucrats or Politicians? Part II: Multiple Policy Tasks, *Journal of Public Economics 92*(3–4), pp. 426-447.

Alexander, C. (2009), Kollektiver Rechtsschutz Im Zivilrecht Und Zivilprozessrecht, *Juristische Schulung* (7), pp. 590-594.

Alexander, K. (2012), Bank Capital Management and Macro-Prudential Regulation, *Zeitschrift Für Bankrecht Und Bankwirtschaft (ZBB/JBB)* (5), pp. 331-341.

Alexander, K. (2015a), European Banking Union: A Legal and Institutional Analysis of the Single Supervisory Mechanism and the Single Resolution Mechanism, *European Law Review 40*(2), pp. 154-187.

Allen & Overy (2014), *Capital requirements directive IV framework - unfunded credit risk mitigation in the banking book: Guarantees and credit derivatives,* Allen & Overy Client Briefing Paper 6, January.

Allen, F. and E. Carletti (2010), An Overview of the Crisis: Causes, Consequences, and Solutions, *International Review of Finance 10*(1), pp. 1-26.

Allen, L. (2004), The Basel Capital Accords and International Mortgage Markets: A Survey of the Literature, *Financial Markets, Institutions & Instruments 13*(2), pp. 41-108.

Allott, A. (1981), The Effectiveness of Laws, *Valparaiso University Law Review 15*(2), pp. 229-242.

Alloway, T. (2015, 04-02-2015). Big data: Credit where credit's due. *Financial Times.*

Amri, P.D. and B.M. Kocher (2012), The Political Economy of Financial Sector Supervision and Banking Crises: A Cross-Country Analysis, *European Law Journal 18*(1), pp. 24-43.

Amtenbrink, F. (2011), Naar een effectievere economische governance in de Europese Unie? *SEW: Tijdschrift voor Europees en Economisch Recht 10*(10), pp. 429-443.

Amtenbrink, F. (2012), Legal Developments, *Journal of Common Market Studies 50*(Supplement s2), pp. 132-146.

Amtenbrink, F. and J. de Haan (2003), Economic Governance in the European Union - Fiscal Policy Discipline Versus Flexibility, *Common Market Law Review 40*, pp. 1057-1106.

Amtenbrink, F. and J. De Haan (2006), Reforming the Stability and Growth Pact, *European Law Review 31*(3), pp. 402-413.

Anari, A., J. Kolari, S. Pynnönen and A. Suvanto (2002), Further Evidence on the Credit View: The Case of Finland, *Applied Economics 34*(3), pp. 267-278.

Andenas, M. and I.H.Y. Chiu (2013), Financial Stability and Legal Integration in Financial Regulation, *European Law Review 38*(3), pp. 335-359.

Anderloni, L. and D. Vandone (2008), *Households over-indebtedness in the economic literature,* Universita Degli Studi di Milano, Working Paper No. 2008-46, December

Andersen, A.L., C. Duus and T.L. Jensen (2016), Household Debt and Spending during the Financial Crisis: Evidence from Danish Micro Data, *European Economic Review 89*, pp. 96-115.

Andersen, H. (2011), Procyclical Implications of Basel II: Can the Cyclicality of Capital Requirements be Contained?, *Journal of Financial Stability 7*(3), pp. 138-154.

Andrews, D. and A. Sánchez Caldera (2011), The Evolution of Homeownership Rates in Selected OECD Countries: Demographic and Public Policy Influences, *OECD Journal: Economic Studies* (1), pp. 207-243.

Angel, S. and K. Heitzmann (2015), Over-Indebtedness in Europe: The Relevance of Country-Level Variables for the Over-Indebtedness of Private Households, *Journal of European Social Policy 25*(3), pp. 331-351.

Angeloni, I. (2014), European Macroprudential Policy from Gestation to Infancy, *Financial Stability Review 18*, pp. 71-84.

Angeloni, I. (2016), *Macroprudential policies to contain systemic risks,* Keynote speech at the SUERF/Deutsche Bundesbank/IMFS Conference on “The SSM at 1”, Deutsche Bundesbank, Frankfurt am Main, 4 February.

Arends, A.J.M. and R.P. Bitter (2013), De eigenwoningaftrek anno 2013 onder de Loep, *Weekblad voor Fiscaal Recht*, pp. 174.

Armour, J., C. Mayer and A. Polo (2015), *Regulatory sanctions and reputational damage in financial markets,* Oxford Legal Studies Research Paper No. 62/2010

Armstrong, K. (2013), The New Governance of EU Fiscal Discipline, *European Law Review 38*, pp. 601-617.

Arts, W. and J. Gelissen (2002), Three Worlds of Welfare Capitalism or More? A State-of-the-Art Report, *Journal of European Social Policy 12*(2), pp. 137-158.

Athanasoglou, P.P., I. Daniilidis and M.D. Delis (2014), Bank Procyclicality and Output: Issues and Policies, *Journal of Economics and Business 72*(0), pp. 58-83.

Ausschuss für Finanzstabilität (2014), *Erster bericht an den deutschen bundestag zur finanzstabilität in deutschland,* June.

Ausschuss für Finanzstabilität (2015), *Empfehlung vom 30. juni 2015 zu neuen instrumenten für die regulierung der darlehensvergabe zum bau oder erwerb von wohnimmobilien,* AFS/2015/1.

Avesani, R.G., A.G. Pascual and E. Ribakova (2007), *The use of mortgage covered bonds,* IMF Working Paper WP/07/20.

Babecký, J., T. Havránek, J. Matějů, M. Rusnák, K. Šmídková and B. Vašíček (2014), Banking, Debt, and Currency Crises in Developed Countries: Stylized Facts and Early Warning Indicators, *Journal of Financial Stability 15*(0), pp. 1-17.

Babis, V. (2015), Single Rulebook for Prudential Regulation of EU Banks: Mission Accomplished?, *European Business Law Review 26*(6), pp. 779-803.

Badarau, C. and A. Popescu (2014), Monetary Policy and Credit Cycles: A DSGE Analysis, *Economic Modelling 42*(0), pp. 301-312.

Bae, K. and V.K. Goyal (2009), Creditor Rights, Enforcement, and Bank Loans, *The Journal of Finance 64*(2), pp. 823-860.

Baek, E. and G. Hong (Journal of Family and Economic Issues), Effects of Family Life-Cycle Stages on Consumer Debts, *2004 25*(3), pp. 359-385.

Baker, A. (2013), The Gradual Transformation? The Incremental Dynamics of Macroprudential Regulation, *Regulation & Governance 7*(4), pp. 417-434.

Baldi, G. (2014), The Economic Effects of a Central Bank Reacting to House Price Inflation, *Journal of Housing Economics 26*(0), pp. 119-125.

Baldwin, R. and J. Black (2008), Really Responsive Regulation, *The Modern Law Review 71*(1), pp. 59-94.

Balogh, P. (2012), Macro Prudential Supervision Tools in the European Banking System, *Procedia Economics and Finance 3*(0), pp. 642-647.

Bancel, F. and U.R. Mittoo (2004), Cross-Country Determinants of Capital Structure Choice: A Survey of European Firms, *Financial Management 33*(4), pp. 103-132.

Barakova, I. and A. Palvia (2014), Do Banks' Internal Basel Risk Estimates Reflect Risk? *Journal of Financial Stability 13*(0), pp. 167-179.

Barba, A. and M. Pivetti (2009), Rising Household Debt: Its Causes and Macroeconomic implications – a Long-Period Analysis, *Cambridge Journal of Economics 33*, pp. 113-137.

Bar-Gill, O. and O. Ben-Shahar (2013), Regulatory Techniques in Consumer Protection: A Critique of European Consumer Contract Law, *Common Market Law Review 50*, pp. 109-126.

Bar-Gill, O. and F. Ferrari (2010), Informing Consumer about Themselves, *Erasmus Law Review 3*(2), pp. 93-119.

Baron, J.D. and R.S. Bekker (2014), The Usual Suspects: doen geloven dat een aan fraus legis gekoppelde boete niet bestaat, *Weekblad voor Fiscaal Recht* (7068), p. 1292.

Baron, J.D. and R.S. Bekker (2015), Spider-Man: With Great Power, Comes Great Responsibility, *Tijdschrift Formeel Belastingrecht* (3).

Barrett, A., D. Duffy and K. McQuinn (2015), *Tax breaks and the residential property market,* ESRI Final Report, Submitted to the Department of Finance.

Barrett, M. (2011), The New Consumer Credit Regulations, *Hibernian Law Journal 10*, pp. 61-81.

Barro, R.J. and D.B. Gordon (1983), Rules, Discretion and Reputation in a Model of Monetary Policy, *Journal of Monetary Economics 12*(1), pp. 101-121.

Barta, S. and U. Braune (2014), Schadensersatz Als Rechtsfolge Der Unzureichenden Prüfung Der Kreditwürdigkeit Des Verbrauchers – Konsequenzen Aus Der Entscheidung Des EuGH in Sachen Le Crédit Lyonnais SA/Fesih Kalhan Für Das Verständnis Des Deutschen Rechts, *Zeitschrift Für Bank- Und Kapitalmarktrecht* (8), pp. 324-330.

Barth, J.R., C. Lin, Y. Ma, J. Seade and F.M. Song (2013), Do Bank Regulation, Supervision and Monitoring Enhance Or Impede Bank Efficiency? *Journal of Banking & Finance 37*(8), pp. 2879-2892.

Basel Committee on Banking Supervision (2000), *Principles for the Management of Credit Risk,* No. 75.

Basel Committee on Banking Supervision (2006), *International Convergence of Capital Measurement and Capital Standards,* No. 128.

Basel Committee on Banking Supervision (2010), *Countercyclical Capital Buffer Proposal,* Consultative Document, No. 172.

Basel Committee on Banking Supervision (2012), *Core Principles for Effective Banking Supervision,* No. 203.

Basel Committee on Banking Supervision (2014a), *Regulatory Consistency Assessment Programme (RCAP): Assessment of Basel III Regulations – European Union,* No. 300.

Basel Committee on Banking Supervision (2014b), *Capital floors: The Design of a Framework Based on Standardised Approaches,* Consultative Document, No. 306.

Basel Committee on Banking Supervision (2014c), *Revisions to the Standardised Approach for Credit Risk,* Consultative Document, No. 307.

Basel Committee on Banking Supervision (2015), *Revisions to the Standardised Approach for Credit Risk,* Second consultative document, No. 347.

Basel Committee on Banking Supervision (2016), *Reducing Variation in Credit Risk-Weighted Assets – Constraints on the Use of Internal Model Approaches,* Consultative Document, No. 362.

Basten, C. and C. Koch (2015), The Causal Effect of House Prices on Mortgage Demand and Mortgage Supply: Evidence from Switzerland, *Journal of Housing Economics 30*, pp. 1-22.

Battes, P. (2015a, 19-02-2015). 'Strenge hypotheeknormen leiden tot onnodig hoge lasten'. *Het Financieele Dagblad*, p. 4.

Battes, P. (2015b, 16-11-2015). Grootbanken zakken weg op markt voor hypotheken. *Het Financieele Dagblad*, p. 15.

Battes, P., & Bökkerink, I. (2015, 19-08-2015). Voor Nederlandse bank is huizenkoper allang geen droomklant meer; de dreiging van hogere kapitaaleisen maakt banken huiverig, terwijl de concurrentie toeneemt en de marges dalen. *Het Financieele Dagblad*, p. 2.

Beau, E., J. Hill and T. Hussain (2014), Bank Funding Costs: What are They, What Determines Them and Why do they Matter? *Bank of England Quarterly Bulletin Q4*, pp. 1-15.

Beck, T., B. Büyükkarabacak, F. Rioja K and N. Valev T (2012), Who Gets the Credit? And does it Matter? Household vs. Firm Lending Across Countries, *The B.E. Journal of Macroeconomics 12*(1), pp. 1-44.

Beck, T. and D. Gros (2012), Monetary Policy and Banking Supervision: Coordination Instead of Separation, *CESifo Forum* (4), pp. 33-39.

Becker, G.S. (1968), Crime and Punishment: An Economic Approach, *Journal of Political Economy 76*(2), pp. 169-217.

Beesley, A. (2014, 17-12-2014). ESRI urges caution on applying loan caps; central bank says Dublin house prices gaining at rate close to pre-crash peak. *The Irish Times*, p. 3.

Beesley, A. (2015, 18-09-2015). Noonan ready to ease burden on 'overtaxed middle Ireland'; minister for finance indicates biggest winners in budget will be those earning up to EUR 70,000. *The Irish Times*, p. 6.

Beesley, A., & Bardon, S. (2015, 19-09-2015). Central bank unlikely to lift mortgage caps; loan limits on first-time buyers may be too restrictive, noonan says in interview. *The Irish Times*, p. 6.

Behn, M., R. Haselmann and V. Vig (2016), *The limits of model-based regulation,* European Central Bank Working Paper Series No. 1928, July.

Bekiros, S.D. and A. Paccagnini (2015), Macroprudential Policy and Forecasting using Hybrid DSGE Models with Financial Frictions and State Space Markov-Switching TVP-VARS, *Macroeconomic Dynamics 19*(07), pp. 1565-1592.

Benicke, C. and J.F. Hellwig (2014), Das System Der Schadensersatzhaftung Wegen Leistungspflichtverletzung, *Neue Juristische Wochenschrift* (24), pp. 1697-1702.

Benink, H. and G. Benston (2005), The Future of Banking Regulation in Developed Countries: Lessons from and for Europe, *Financial Markets, Institutions & Instruments 14*(5), pp. 289-328.

Benöhr, I. (2014), Collective Redress in the Field of European Consumer Law, *Legal Issues of Economic Integration 41*(3), pp. 243-256.

Ben-Shahar, O. and C. Schneider E (2011), The Failure of Mandated Disclosure, *University of Pennsylvania Law Review 159*, pp. 647-749.

Bergström, C.F. (2015), Shaping the New System for Delegation of Powers to EU Agencies: *United Kingdom v. European Parliament and Council (Short Selling)*, *Common Market Law Review 52*, pp. 219-242.

Berlemann, M. and J. Salland (2016), The Joneses' Income and Debt Market Participation: Empirical Evidence from Bank Account Data, *Economics Letters 142*, pp. 6-9.

Berlin, W. F. (2015, 01-07-2015). Stabilitätswächter dringen auf vorsorge für immobilienblase - bundesregierung soll die aufsicht stärken. *Börsen-Zeitung*, pp. 6.

Bernanke, B.S. (1993), Credit in the Macroeconomy, *Federal Reserve Bank of New York Quarterly Review* (Spring), pp. 50-70.

Bertola, G. and S. Hochguertel (2007), Household Debt and Credit: Economic Issues and Data Problems, *Economic Notes 36*(2), pp. 115-146.

Bertrand, M. and A. Morse (2011), Information Disclosure, Cognitive Biases, and Payday Borrowing, *The Journal of Finance 66*(6), pp. 1865-1893.

Betlem, G. (2007), Public and Private Transnational Enforcement of EU Consumer Law, *European Business Law Review 18*(4), pp. 683-708.

Betti, G., N. Dourmashkin, M. Rossi and Y. Ping Yin (2007), Consumer over-indebtedness in the EU: Measurement and Characteristics, *Journal of Economic Studies 34*(2), pp. 136-156.

Bezemer, D.J. (2011), The Credit Crisis and Recession as a Paradigm Test, *Journal of Economic Issues XLV*(1), pp. 1-18.

Bezemer, D.J. (2009), This is Not a Credit Crisis? It is a Debt Crisis, *Economic Affairs 29*(3), pp. 95-97.

Bezemer, D.J. (2010), Understanding Financial Crisis through Accounting Models, *Accounting, Organizations and Society 35*(7), pp. 676-688.

Bezemer, D.J. (2012), Lessen uit de crisis: waarom we opnieuw moeten nadenken over geld, *Tpedigitaal 6*(3/4), pp. 63-73.

Bezemer, D.J. (2014), Schumpeter might be Right again: The Functional Differentiation of Credit, *Journal of Evolutionary Economics 24*, pp. 935-950.

Bezemer, D.J. and L. Zhang (2014), *From boom to bust in the credit cycle: The role of mortgage credit,* SOM Research Reports, Vol. 14025-GEM.

Bhattacharya, S., C.A.E. Goodhart, D.P. Tsomocos and A.P. Vardoulakis (2015), A Reconsideration of Minsky's Financial Instability Hypothesis, *Journal of Money, Credit and Banking 47*(5), pp. 931-973.

Bianchi, J. and E. Mendoza (2011), *Overborrowing, financial crises and 'macroprudential' policy,* IMF Working Paper WP/11/24, February.

Bianchi, J. and E. Mendoza (2013), *Optimal time-consistent macroprudential policy,* NBER Working Paper 19704, December.

Biela, J. and Y. Papadopoulos (2014), The Empirical Assessment of Agency Accountability: A Regime Approach and an Application to the German Bundesnetzagentur, *International Review of Administrative Sciences 80*(2), pp. 362-381.

Biemans, J.W.A. (2012), De consumentenkredietovereenkomst in Titel 7.2A BW. Over losse eindjes en rafelige randen, *Nederlands Tijdschrift voor Burgerlijk Recht*, pp. 46.

Bierens, B. (2013), Het waarheen en waarvoor van de bancaire zorgplicht, *Nederlands Tijdschrift voor Burgerlijk Recht* (3), pp. 15-27.

Bijak, K., L.C. Thomas and C. Mues (2014), Dynamic Affordability Assessment: Predicting an Applicant's Ability to Repay Over the Life of the Loan, *The Journal of Credit Risk 10*(1), pp. 3-32.

Bix, B. (1991), H. L. A. Hart and the "Open Texture" of Language, *Law and Philosophy 10*(1), pp. 51-72.

Black, J. (2008), Forms and Paradoxes of Principles-Based Regulation, *Capital Markets Law Journal 3*(4), pp. 425-457.

Black, J. (2012), Paradoxes and Failures: 'New Governance' Techniques and the Financial Crisis, *The Modern Law Review 75*(6), pp. 1037-1063.

Black, J., M. Hopper and C. Band (2007), Making a Success of Principles-Based Regulation, *Law and Financial Markets Review 1*(3), pp. 191-206.

Blaney, F. (2014, 17-12-2014). ESRI economists come out against 20pc deposit plan. *Irish Daily Mail*, pp. 2.

Blum, J. and M. Hellwig (1995), The Macroeconomic Implications of Capital Adequacy Requirements for Banks, *European Economic Review 39*(3–4), pp. 739-749.

Boelhouwer, P. and K. Schiffer (2015), *Kopers verdienen meer! - Naar een evenwichtige toepassing van de NIBUD-normen,* Essay in opdracht van NVB en Vereniging voor ontwikkelaars & bouwondernemers.

Boissay, F., F. Collard and F. Smets (2016), *Booms and banking crises,* BIS Working Papers No. 545, February.

Bonoli, G. (1997), Classifying Welfare States: A Two-Dimension Approach, *Journal of Social Policy 26*(03), p. 351.

Borio, C. (2014), The Financial Cycle and Macroeconomics: What have we Learnt? *Journal of Banking & Finance 45*, pp. 182-198.

Borio, C. and M. Drehmann (2009), Assessing the Risk of Banking Crises – Revisited, *BIS Quarterly Review* (March), pp. 29-46.

Börsen-Zeitung. (2015, 02-09-2015). Mehr Spielraum für Bausparkassen; Bundesfinanzministerium schiebt mit einer Gesetzesnovelle Hilfe in der Niedrigzinsphase an. *Börsen-Zeitung*, p. 3.

Bovens, M. (2007), Analysing and Assessing Accountability: A Conceptual Framework1, *European Law Journal 13*(4), pp. 447-468.

Bover, O., J. Casado Maria, S. Costa, P. Du Caju, Y. McCarthy, E. Sierminska, P. Tzamourani, E. Villanueva and T. Zavadil (2014), *The distribution of debt across euro area countries: The role of individual characteristics, institutions and credit conditions,* European Central Bank Working Paper Series, No. 1639, February.

Brady, N. (2016, 30-01-2016). Mortgage lending curbs a mistake, says expert. *The Sunday Times.*

Braspenning, J.J.A. and V. Mak (2015), Nieuwe regels voor hypothecaire kredietverstrekking aan consumenten: over leren en bezweren, *Tijdschrift voor Consumentenrecht en Handelspraktijken* (2), pp. 73-81.

Braunstein, S. and C. Welch (2002), Financial Literacy: An Overview of Practice, Research, and Policy, *Federal Reserve Bulletin 88*, pp. 445-457.

Brei, M. and L. Gambacorta (2014), *The leverage ratio over the cycle,* BIS Working Papers No. 471, November.

Breuer, W., T. Hens, A.J. Salzmann and M. Wang (2015), On the Determinants of Household Debt Maturity Choice, *Applied Economics 47*(5), pp. 449-465.

Breuer, W., M. Riesener and A. Salzmann Juliane (2014), Risk Aversion Vs. Individualism: What Drives Risk Taking in Household Finance? *The European Journal of Finance 20*(5), pp. 446-462.

Broberg, M. (2008), Acte Clair Revisited: Adapting the Acte Clair Criteria to the Demands of the Times, *Common Market Law Review 45*(5), pp. 1383-1397.

Broekhuizen, K.W.H. (2017), De pluriforme betekenis van de klant centraal, *Tijdschrift voor Financieel recht* (7/8), pp. 330-340.

Broekhuizen, K.W.H. and C.E. Du Perron (2012), De fundamentele uitgangs punten van een generieke zorgplicht, *Tijdschrift voor Financieel recht* (5), pp. 168-170.

Broekhuizen, K.W.H. and R.E. Labeur (2006), Verantwoorde kredietverlening aan consumenten, *Tijdschrift voor Financieel recht* (10), pp. 248-254.

Brosens, T., W. Bijkerk and J. Gevaert (2008), Keuzes in Gedragstoezicht: De Casus Kredietverstrekking, *Justitiële Verkenningen 34*(6), pp. 52-65.

Brown, C. and C. Scott (2011), Regulation, Public Law, and Better Regulation, *European Public Law 17*(3), pp. 467-484.

Brown, M., T. Jappelli and M. Pagano (2009), Information Sharing and Credit: Firm-Level Evidence from Transition Countries, *Journal of Financial Intermediation 18*(2), pp. 151-172.

Brown, M. and C. Zehnder (2007), Credit Reporting, Relationship Banking, and Loan Repayment, *Journal of Money, Credit and Banking 39*(8), pp. 1883-1918.

Brown, M., W. Van der Klaauw, J. Wen and B. Zafar (2013), *Financial education and the debt behavior of the young,* Federal Reserve Bank of New York Staff Report No. 634, September.

Brown, S. (2015), EU and UK Consumer Credit Regulation: Principles, Conduct, and Consumer Protection: Divergence or Convergence of Approach? *European Business Law Review 26*(4), pp. 555-580.

Bruijsten, C. (2012a), De vergrijpboete: opzet en grove schuld, *Weekblad voor Fiscaal Recht* (6943), pp. 286-294.

Bruijsten, C. (2012b), Het leerstuk van het pleitbare standpunt, *Weekblad voor Fiscaal Recht* (6945), pp. 366-375.

Bruijsten, C. (2015), Het fiscale instrumentarium ter bestrijding van belastingontwijking, *Weekblad voor Privaatrecht, Notariaat en Registratie 146*(7077), pp. 808-813.

Bruijsten, C. and M.L.A. Van Rij (2007), Hypotheekrenteaftrek: verleden, heden en toekomst, *Weekblad voor Fiscaal Recht*, p. 119.

Bruneau, G., I. Christensen and C.A. Meh (2016), *Housing market dynamics and macroprudential policy,* Bank of Canada Staff Working Paper 2016-31, July.

Buck-Heeb, P. (2015), Aufklärungs- Und Beratungspflichten Bei Kreditverträgen - Verschärfungen Durch Die EuGH-Rechtsprechung Und Die Wohnimmobilienkredit-Richtlinie, *Zeitschrift Für Bank- Und Kapitalmarktrecht* (5), pp. 177-186.

Buckley, R.P. and G. North (2012), Financial Transactions Tax: Inefficient or Needed Systemic Reform?, *Georgetown Journal of International Law 43*, pp. 745-795.

Buijze, A. (2014), Shared Regulatory Regimes through the Lens of Subsidiarity: Towards a Substantive Approach, *Utrecht Law Review 10*(5), pp. 67-79.

Buiter, W. H. (2009, 05-05-2009). What's left of central bank independence? *Financial Times.*

Buiter, W.H. and E. Rahbari (2012), *Debt, financial crisis and economic growth,* Paper presented at the Conference on Monetary Policy and the Challenge of Economic Growth at the South Africa Reserve Bank, Pretoria, South Africa, November 1-2.

Burda, M.,C and S. Gerlach (2010), *A credible stability and growth pact: Raising the bar for budgetary transparency,* in: VoxEU.org, Completing the Eurozone Rescue: What More Needs to be Done?, London: Centre for Economic Policy Research.

Busch, B., M. Grömling and J. Matthes (2011), Current Account Deficits in Greece, Portugal and Spain – Origins and Consequences, *Intereconomics 46*(6), pp. 354-360.

Busuioc, M. (2009), Accountability, Control and Independence: The Case of European Agencies, *European Law Journal 15*(5), pp. 599-615.

Büyükkarabacak, B. and N. Valev (2012), Credit Information Sharing and Banking Crises: An Empirical Investigation, *Journal of Macroeconomics 34*(3), pp. 788-800.

Caiani, A., A. Godin, E. Caverzasi, M. Gallegati, S. Kinsella and J.E. Stiglitz (2016), Agent Based-Stock Flow Consistent Macroeconomics: Towards a Benchmark Model, *Journal of Economic Dynamics and Control 69*, pp. 375-408.

Calem, P.S. and M. LaCour-Little (2004), Risk-Based Capital Requirements for Mortgage Loans, *Journal of Banking & Finance 28*(3), pp. 647-672.

Calza, A., T. Monacelli and L. Stracca (2013), Housing Finance and Monetary Policy, *Journal of the European Economic Association 11*, pp. 101-122.

Campbell, J.Y. (2012), Mortgage Market Design, *Review of Finance 17*, pp. 1-33.

Campbell, J.Y. (2016), Restoring Rational Choice: The Challenge of Consumer Financial Regulation, *American Economic Review 106*(5), pp. 1-30.

Carbo-Valverde, S., H. Degryse and F. Rodríguez-Fernández (2015), The Impact of Securitization on Credit Rationing: Empirical Evidence, *Journal of Financial Stability 20*, pp. 36-50.

Carroll, C.D. (2001), A Theory of the Consumption Function, with and without Liquidity Constraints, *Journal of Economic Perspectives 15*(3), pp. 23-45.

Carroll, C.D. (2014), *Representing consumption and saving without a representative consumer,* CFS Working Paper, No. 464.

Case, K.E. and R.J. Shiller (2003), Is there a Bubble in the Housing Market? *Brookings Papers on Economic Activity* (2), pp. 299-342.

Cassidy, M. and N. Hallissey (2016), The Introduction of Macroprudential Measures for the Irish Mortgage Market, *The Economic and Social Review 47*(2), pp. 271-297.

Centraal Planbureau (2010), *Hervorming van het Nederlandse woonbeleid,* CPB Bijzondere Publicatie No. 84.

Central Bank of Ireland (2014a), *CRD IV and CRR implementation notice on competent authority discretions and options.*

Central Bank of Ireland (2014b), *A macro-prudential policy framework for Ireland.*

Central Bank of Ireland (2014c), *Inquiry guidelines prescribed pursuant to section 33BD of the Central Bank Act 1942.*

Central Bank of Ireland (2014d), *Outline of the Administrative Sanctions Procedure.*

Central Bank of Ireland (2014e), *Macro-prudential policy for residential mortgage lending,* Consultation paper CP87.

Central Bank of Ireland (2015a), *Feedback statement on CP87: Macro-prudential policy for residential mortgage lending.*

Central Bank of Ireland (2015b), *Information note: Restrictions on residential mortgage lending.*

Central Bank of Ireland (2016a), *Central credit register: Feedback response to CP93.*

Central Bank of Ireland (2016b), *Feedback statement on call for submissions: Review of residential mortgage lending requirements.*

Central Bank of Ireland (2016c), *Review of residential mortgage lending requirements.*

Centro Europa Ricerche (2012), *Report on Europe. European imbalances,* Rome: Centro Europa Ricerche S.r.l.

Cerutti, E., S. Claessens and L. Laeven (2015), *The use and effectiveness of macroprudential policies: New evidence,* IMF Working Paper WP/15/61.

Chambers, W.B. (2004), Towards an Improved Understanding of Legal Effectiveness of International Environmental Treaties, *The Georgetown International Environmental Law Review 16*, pp. 501-532.

Chang, K., J.B. Wee and H. Yi (2012), Does National Culture Influence the Firm's Choice of Debt Maturity? *Asia-Pacific Journal of Financial Studies 41*(4), pp. 424-457.

Chang, S. (2010), *Mortgage lending in Korea: An example of a countercyclical macroprudential approach,* Policy Research Working Paper No. 5505The World Bank.

Cherednychenko, O.O. and J.M. Meindertsma (2014), verantwoorde kredietverstrekking aan consumenten in een multilevel governancesysteem, *Tijdschrift voor Consumentenrecht en Handelspraktijken* (4), pp. 181-191.

Cherednychenko, O.O. (2014a), Public Supervision Over Private Relationships: Towards European Supervision Private Law? *European Review of Private Law 22*(1), pp. 37-67.

Cherednychenko, O.O. (2014b), Public Regulation, Contract Law, and the Protection of the Weaker Party: Some Lessons from the Field of Financial Services, *European Review of Private Law 22*(5), pp. 663-683.

Cherednychenko, O.O. (2014c), Financial Consumer Protection in the EU: Towards a Self-Sufficient European Contract Law for Consumer Financial Services? *European Review of Contract Law 10*(4), pp. 476-495.

Cherednychenko, O.O. (2015a), Public and Private Enforcement of European Private Law: Perspectives and Challenges, *European Review of Private Law 23*(4), pp. 481-489.

Cherednychenko, O.O. (2015b), Public and Private Enforcement of European Private Law in the Financial Services Sector, *European Review of Private Law 23*(4), pp. 621-647.

Chien, Y. and S.A. Devaney (2001), The Effects of Credit Attitude and Socioeconomic Factors on Credit Card and Installment Debt, *Journal of Consumer Affairs 35*(1), pp. 162-179.

Chmelar, A. (2013), *Household debt and the European crisis,* European Credit Research Institute, Research Report No. 13.

Civic Consulting (2013), *The over-indebtedness of European households: Updated mapping of the situation, nature and causes, effects and initiatives for alleviating its impact,* Summary document for stakeholder workshop.

Cizel, J., J. Frost, A. Houben and P. Wierts (2016), *Effective macroprudential policy: Cross-sector substitution from price and quantity measures,* IMF Working Paper WP/16/94, April.

Claassen, M.H.P. and J.L. Snijders (2014), Overkreditering bij consumentenkrediet, *Maandblad voor Vermogensrecht* (7/8), pp. 188-194.

Claessens, S. (2015), Important Questions for Housing Markets and Housing Policy, *Journal of Money, Credit and Banking 47*(S1), pp. 419-421.

Claessens, S., S.R. Ghosh and R. Mihet (2013), Macro-Prudential Policies to Mitigate Financial System Vulnerabilities, *Journal of International Money and Finance 39*, pp. 153-185.

Claessens, S. and L. Kodres (2014), *The regulatory responses to the global financial crisis: Some uncomfortable questions,* IMF Working Papers WP/14/46, March

Claessens, S., M.A. Kose and M.E. Terrones (2011), *Financial cycles: What? How? When?* IMF Working Paper WP11/76.

Claeys, G., M. Hallerberg and O. Tschekassin (2014), *European central bank accountability: How the monetary dialogue could evolve,* Bruegel Policy Contribution 2014/04, March.

Clerc, L., A. Derviz, C. Mendicino, S. Moyen, K. Nikolov, L. Stracca, J. Suarez and A. Vardoulakis (2014), Macroprudential Capital Tools: Assessing their Rationale and Effectiveness, *Financial Stability Review 18*, pp. 183-193.

Clerc, L., A. Derviz, C. Mendicino, S. Moyen, K. Nikolov, L. Stracca, J. Suarez and A.P. Vardoulakis (2015), *Capital regulation in a macroeconomic model with three layers of default,* ECB Working Paper Series No. 1827, July.

Coffee, J.C. (2007), Law and the Market: The Impact of Enforcement, *University of Pennsylvania Law Review 156*(2), pp. 229-311.

Coffinet, J., V. Coudert, A. Pop and C. Pouvelle (2012), Two-Way Interplays between Capital Buffers and Credit Growth: Evidence from French Banks, *Journal of International Financial Markets, Institutions and Money 22*(5), pp. 1110-1125.

Colaert, V. (2015), European Banking, Securities and Insurance Law: Cutting through Sectoral Lines?, *Common Market Law Review 52*, pp. 1579-1616.

Collins, K. (2011), Irish Financial Regulation: Failures and Reforms, *Commercial Law Practitioner 18*(6), pp. 124-134.

Collins, M. and M. Walsh (2010), *Ireland's tax expenditure system: International comparisons and a reform agenda,* Studies in Public Policy, No. 25The Policy Institute at Trinity College Dublin.

Commissie Structuur Nederlandse Banken (2013), *Naar een dienstbaar en stabiel bankwezen,* June.

Committee on the Global Financial System (2010), *Macroprudential instruments and frameworks: A stocktaking of issues and experiences,* CGFS Papers No. 38.

Committee on the Global Financial System (2012), *Operationalising the selection and application of macroprudential instruments,* CGFS Papers No. 48, December.

Committee on the Global Financial System (2016), *Objective-setting and communication of macroprudential policies,* CGFS Papers No. 57.

Common Market Law Review (2012), Editorial Comments: A Revival of the Commission's Role as Guardian of the Treaties? *Common Market Law Review 49*(5), pp. 1553-1564.

Connor, G., T. Flavin and B. O'Kelly (2012), The U.S. and Irish Credit Crises: Their Distinctive Differences and Common Features, *Journal of International Money and Finance 31*(1), pp. 60-79.

Constâncio, V. (2014), *Making macro-prudential policy work,* Speech at high-level seminar organised by De Nederlandsche Bank, 10 June.

Constâncio, V. (2015a), *Financial integration and macro-prudential policy,* Speech at the joint conference organised by the European Commission and the European Central Bank "European Financial Integration and Stability", 27 April.

Constâncio, V. (2015b), *Strengthening macroprudential policy in europe,* Speech at the Conference on "The macroprudential toolkit in Europe and credit flow restrictions", organised by Lietuvos Bankas, Vilnius, 3 July 2015.

Cortenraad, W.H.F.M. (2012), Hoe bijzonder is de bijzondere zorgplicht? *Ondernemingsrecht 128*(16), pp. 700-710.

Cortés, P. (2015), A New Regulatory Framework for Extra-Judicial Consumer Redress: Where we are and how to Move Forward, *Legal Studies 35*(1), pp. 114-141.

Cosma, S. and F. Pattarin (2012), *Attitudes, personality factors and household debt decisions: A study of consumer credit,* CEFIN Working Papers No. 31.

Council of the European Union (2012a), *Report from presidency to COREPER / council, document no. 15663/12, 6 November 2012.*

Council of the European Union (2012b), *Report from presidency to COREPER, document no. 16672/12, 27 November 2012.*

Council of the European Union (2012c), *Note from presidency to delegations, document no. 17141/12, 3 December 2012.*

Cox, D. and T. Jappelli (1993), The Effect of Borrowing Constraints on Consumer Liabilities, *Journal of Money, Credit and Banking 25*(2), pp. 197-213.

Craig, P. (2012), Subsidiarity: A Political and Legal Analysis, *Journal of Common Market Studies 50*, pp. 72-87.

Crook, J.N., D.B. Edelman and L.C. Thomas (2007), Recent Developments in Consumer Credit Risk Assessment, *European Journal of Operational Research 183*(3), pp. 1447-1465.

Crook, J. and S. Hochguertel (2007), *US and European household debt and credit constraints,* Tinbergen Institute Discussion Paper TI 2007-087/3.

Crotty, J. (2009), Structural Causes of the Global Financial Crisis: A Critical Assessment of the 'New Financial Architecture', *Cambridge Journal of Economics 33*, pp. 563-580.

Crouch, C. (2012), Employment, Consumption, Debt, and European Industrial Relations Systems, *Industrial Relations: A Journal of Economy and Society 51*, pp. 389-412.

Crowe, C., G. Dell'Ariccia and D. Igan P (2011), *How to deal with real estate booms: Lessons from country experiences,* IMF Working Paper WP/11/91, April.

Crowe, C., G. Dell'Ariccia, D. Igan and P. Rabanal (2013), How to Deal with Real Estate Booms: Lessons from Country Experiences, *Journal of Financial Stability 9*(3), pp. 300-319.

Cubillas, E. and F. González (2014), Financial Liberalization and Bank Risk-Taking: International Evidence, *Journal of Financial Stability 11*(0), pp. 32-48.

Cuerpo, C., I. Drumond, J. Lendvai, P. Pontuch and R. Raciborski (2013), *Indebtedness, deleveraging dynamics and macroeconomic adjustment,* European Economy – Economic Papers No. 477, April.

Davis, J.S., A. Mack, W. Phoa and A. Vandenabeele (2016), Credit Booms, Banking Crises, and the Current Account, *Journal of International Money and Finance 60*, pp. 360-377.

Dawson, M. (2011), Three Waves of New Governance in the European Union, *European Law Review 36*, pp. 208-225.

Dawson, M. (2014), How does the European Court of Justice Reason? A Review Essay on the Legal Reasoning of the European Court of Justice, *European Law Journal 20*(3), pp. 423-435.

Dawson, M. (2015), The Legal and Political Accountability Structure of 'Post-Crisis' EU Economic Governance, *Journal of Common Market Studies 53*(5), pp. 976-993.

De Grauwe, P. (2012), The Governance of a Fragile Eurozone, *Australian Economic Review 45*(3), pp. 255-268.

De Grauwe, P. and Y. Ji (2013), From Panic-Driven Austerity to Symmetric Macroeconomic Policies in the Eurozone, *Journal of Common Market Studies 51*, pp. 31-41.

De Grauwe, P. and C. Macchiarelli (2015), Animal Spirits and Credit Cycles, *Journal of Economic Dynamics and Control 59*, pp. 95-117.

De Groot, N., & Keultjes, H. (2016, 26-04-2016). 'Die mensen snijden op den duur zichzelf in de vingers'. *Algemeen Dagblad*, pp. 18.

De Haan, J. and F. Amtenbrink (2011), *Credit rating agencies,* DNB Working Papers No. 278.

De Haan, J., R. Inklaar and R. Jong-A-Pin (2008), Will Business Cycles in the Euro Area Converge? A Critical Survey of Empirical Research, *Journal of Economic Surveys 22*(2), pp. 234-273.

De Horde, C. (2016, 08-07-2016). Rabo verkoopt pluk hypotheken om haar balans te verkleinen. *Het Financieele Dagblad*, p. 21.

De Kleer, M.A. (2005), Dubbele proportionaliteit voor de fiscale boete, *Tijdschrift Formeel Belastingrecht* (6).

De Nederlandsche Bank (2014a), *Visie DNB toezicht 2014-2018.*

De Nederlandsche Bank (2014b), *Overview of financial stability – Spring 2014,* No. 19.

De Nederlandsche Bank (2015), *Effecten van een verdere verlaging van de LTV-limiet,* Occasional Studies Vol. 13 – 2.

De Nederlandsche Bank (2016), *De financiële stabiliteitstaak van DNB.*

De Nicolò, G., G. Favara and L. Ratnovski (2012), *Externalities and macroprudential policy,* IMF Staff Discussion Note SDN/12/05, June.

De Rijck, R.M.J. (2016), De geest van de WED: strenge straffen en publiek normbesef, *Tijdschrift voor Sanctierecht & Onderneming* (1), pp. 5-13.

De Streel, A. (2013), The Evolution of the EU Economic Governance since the Treaty of Maastricht: An Unfinished Task, *Maastricht Journal of European and Comparative Law 20*, pp. 336-362.

De Vries, F. (2013), Hoe kan *principles-based* regelgeving bijdragen aan goed toezicht?, *Tijdschrift voor Compliance* (4), pp. 344-352.

Dechent, F.A. (2015), Bundesanstalt Für Finanzdienstleistungsaufsicht Und Bundesanstalt Für Finanzmarktstabilisierung – Unabhängige Behörden in Der Bankenaufsicht? *Neue Zeitschrift Für Verwaltungsrecht* (12), pp. 767-772.

DeJuan, J.P. and J. J. Seater (1999), The Permanent Income Hypothesis: Evidence from the Consumer Expenditure Survey, *Journal of Monetary Economics 43*(2), pp. 351-376.

DeJuan, J.P. and J.J. Seater (2007), Testing the Cross-Section Implications of Friedman's Permanent Income Hypothesis, *Journal of Monetary Economics 54*(3), pp. 820-849.

Deku, S.Y., A. Kara and P. Molyneux (2016), Access to Consumer Credit in the UK, *The European Journal of Finance 22*(10), pp. 941-964.

Del Rio, A. and G. Young (2008), The Impact of Unsecured Debt on Financial Pressure among British Households, *Applied Financial Economics 18*(15), pp. 1209-1220.

Dell'Ariccia, G., D. Igan, L. Laeven, H. Tong, B. Bakker and J. Vandenbussche (2016), Credit Booms and Macrofinancial Stability, *Economic Policy 31*(86), pp. 299-355.

Demirgüç-Kunt, A., E. Detragiache and O. Merrouche (2013), Bank Capital: Lessons from the Financial Crisis, *Journal of Money, Credit and Banking 45*(6), pp. 1147-1164.

Demirgüç-Kunt, A. and V. Maksimovic (1999), Institutions, Financial Markets, and Firm Debt Maturity, *Journal of Financial Economics 54*(3), pp. 295-336.

Den Hertog, J. A. (2003), *Public and private interests in regulation: Essays in law & economics of regulation.*

Dermine, J. (2013), Bank Regulations after the Global Financial Crisis: Good Intentions and Unintended Evil, *European Financial Management 19*(4), pp. 658-674.

Deroose, S., D. Hodson and J. Kuhlmann (2008), The Broad Economic Policy Guidelines: Before and After the Re-Launch of the Lisbon Strategy, *Journal of Common Market Studies 46*(4), pp. 827-848.

Dettmann, G., J. Möbert and C. Weistroffer (2012), Bilateral Current Account Rebalancing in the EMU - the Link between Germany and the Eurozone Peripheral Countries, *Intereconomics 47*(4), pp. 257-264.

Deutsche Bundesbank (2015), *Financial stability review 2015.*

Di Noia, C. and M. Gargantini (2014), Unleashing the European Securities and Markets Authority: Governance and Accountability After the ECJ Decision on the Short Selling Regulation (Case C-270/12), *European Business Organization Law Review (EBOR) 15*(01), pp. 1-57.

Dincer, N.N. and B. Eichengreen (2012), The Architecture and Governance of Financial Supervision: Sources and Implications, *International Finance 15*(3), pp. 309-325.

Disney, R., S. Bridges and J. Gathergood (2008), *Drivers of over-indebtedness,* Centre for Policy Evalution of the University of Nottingham.

Disney, R. and J. Gathergood (2013), Financial Literacy and Consumer Credit Portfolios, *Journal of Banking & Finance 37*(7), pp. 2246-2254.

Djankov, S., O. Hart, C. McLiesh and A. Shleifer (2008), Debt Enforcement around the World, *Journal of Political Economy 116*(6), pp. 1105-1149.

Djankov, S., C. McLiesh and A. Shleifer (2007), Private Credit in 129 Countries, *Journal of Financial Economics 84*(2), pp. 299-329.

Dokko, J., B.M. Doyle, M.T. Kiley, J. Kim, S. Sherlund, J. Sim and S. Van Den Heuvel (2011), Monetary Policy and the Global Housing Bubble, *Economic Policy 26*(66), pp. 237-287.

Domurath, I. (2013), The Case for Vulnerability as the Normative Standard in European Consumer Credit and Mortgage Law – an Inquiry into the Paradigms of Consumer Law, *Journal of European Consumer and Market Law* (3), pp. 124-137.

Donnelly, M. (2012), The Financial Services Ombudsman: Asking the "Existential Question", *Dublin University Law Journal 35*, pp. 229-260.

Donnelly, M. and F. White (2013), Irish Consumer Law: Asserting a Domestic Agenda, *Dublin University Law Journal 36*, pp. 1-33.

Dorn, N. (2011). *To Catch a Thief, Ask a Thief: Reinforcing Sanctioning Regimes in Financial Services, a Response to a Communication of the European Commission.* Unpublished manuscript.

Drumond, I. (2009), Bank Capital Requirements, Business Cycle Fluctuations and the Basel Accords: A Synthesis, *Journal of Economic Surveys 23*(5), pp. 798-830.

Duffy, D., D. Byrne and J. FitzGerald (2014), Alternative Scenarios for New Household Formation in Ireland, *Quarterly Economic Commentary* (Spring), pp. 1-18.

Duffy, D., N. Mc Inerney and K. McQuinn (2015), *Macroprudential policy in a recovering market: Too much too soon?* ESRI Working Paper No. 500, May.

Duffy, D. and N. O'Hanlon (2014), Negative Equity in Ireland: Estimates using Loan-Level Data, *Journal of European Real Estate Research 7*(3), pp. 327-344.

Duygan-Bump, B. and C. Grant (2009), Household Debt Repayment Behaviour: What Role do Institutions Play?, *Economic Policy 24*(57), pp. 107-140.

Dynan, K.,E and D. Kohn L (2007), *The rise in U.S. household indebtedness: Causes and consequences,* Federal Reserve Board, Finance and Economics Discussion Series 2007-37.

Dynan, K., A. Mian and K.M. Pence (2012), Is a Household Debt Overhang Holding Back Consumption? *Brookings Papers on Economic Activity*, pp. 299-362.

Ebner, A. (2013), Capital Inflows to Greece, Spain, Portugal and Ireland: A Sector-Level View, *International Finance 16*(3), pp. 333-361.

Eerenstein, M.G. (2015), Eigenwoningregeling wel of niet van toepassing op in erfpacht verkregen woningen? *Vermogende Particulieren Bulletin* (3).

Eggertsson, G.B. and P. Krugman (2012), Debt, Deleveraging, and the Liquidity Trap: A Fisher-Minsky-Koo Approach, *Quarterly Journal of Economics 127*(3), pp. 1469-1513.

Eidenmüller, H. (2011), Why Withdrawal Rights? *European Review of Contract Law 7*(1), pp. 1-24.

EIM (2011), *Consumentengedrag op de hypotheekmarkt,* Zoetermeer, 21 maart.

Elder, S. (2013), Sanctions and Financial Regulation: A Meditation upon "Natural Necessity", *Dublin University Law Journal 36*, pp. 217-247.

Enria, A. (2015), *The single rulebook in banking: Is it 'single' enough?* Speech at Università di Padova, 28 September.

Enriques, L. and G. Hertig (2011), Improving the Governance of Financial Supervisors, *European Business Organization Law Review (EBOR) 12*(03), pp. 357-378.

EPN Newswire (2015, 26-02-2015). Central bank of ireland-address by lars frisell to irish economy conference: Learning from the crisis. *EPN Newswire.*

Ernst & Young (2015), *Regeldruk bij kredietverstrekking,* May.

Esping Andersen, G. (1989), The Three Political Economies of the Welfare State, *Canadian Review of Sociology 26*(1), pp. 10-36.

European Banking Authority (2013), *Summary report on the comparability and pro-cyclicality of capital requirements under the internal ratings based approach in accordance with article 502 of the capital requirements regulation,* 17 December.

European Banking Authority (2014a), *Fourth report on the consistency of risk weighted assets - Residential mortgages drill-down analysis,* 11 June.

European Banking Authority (2014b), *EBA opinion on the macroprudential rules in CRR/CRD,* EBA/Op/2014/06, 30 June.

European Banking Authority (2014c), *EBA report on EU covered bond frameworks and capital treatment.*

European Banking Authority (2015a), *Consultation paper: Draft regulatory technical standards on the conditions that competent authorities shall take into account when determining higher risk-weights, in particular the term of "financial stability considerations" under article 124(4)(b) CRR and the conditions that competent authorities shall take into account when determining higher minimum LGD values under article 164(6) CRR,* EBA/CP/2015/12, 6 July.

European Banking Authority (2015b), *Opinion of the European banking authority on mortgage lending value,* EBA/Op/2015/17, 5 October.

European Central Bank (2009), *Housing finance in the euro area,* Structural Issues Report, March.

European Central Bank (2012a), *Corporate indebtedness in the euro area,* Monthly Bulletin, February, pp. 87-103.

European Central Bank (2012b), *Competitiveness and external imbalances within the euro area,* ECB Occasional Paper Series No. 139, December.

European Central Bank (2013), *Financial stability review,* May.

European Central Bank (2015a), *Financial stability review,* May.

European Central Bank (2015b), *Financial stability review,* November.

European Central Bank (2016), *Macroprudential Bulletin,* Issue 1, March.

European Commission (2002), *Proposal for a Directive of the European Parliament and of the Council on the Harmonisation of the Laws, Regulations and Administrative Provisions of the Member States Concerning Credit for Consumers,* COM(2002) 443 final — 2002/0222(COD), OJ 2002, C 331 E/200.

European Commission (2006), *Report of the Mortgage Funding Expert Group,* Brussels, 22 December 2006.

European Commission (2008), *Communication from the Commission to the European Council: A european economic recovery plan,* 26.11.2008, COM(2008) 800 final.

European Commission (2009a), *Public finances in EMU - 2009,* European Economy Series 5/2009

European Commission (2009b), *Economic crisis in Europe: Causes, consequences and responses,* European Economy Series 7/2009.

European Commission (2009c), *Public consultation on responsible lending and borrowing in the EU,* Brussels, 15 June 2009

European Commission (2009d), *Summary of Responses to the Public Consultation on Responsible Lending and Borrowing in the EU,* Brussels, 30 November.

European Commission (2010), *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Reinforcing Sanctioning Regimes in the Financial Services Sector,* 8.12.2010 COM(2010) 716 final.

European Commission (2011a), *The Economic Adjustment Programme for Ireland,* European Economy Occasional Papers 76, February.

European Commission (2011b), *Proposal for a directive of the european parliament and of the council on credit agreements relating to residential property,* Brussels, 31.3.2011, COM(2011) 142 final.

European Commission (2011c), *Impact Assessment of the Proposal for a Directive of the European Parliament and of the Council on Credit Agreements Relating to Residential Property,* Brussels, 31.3.2011, SEC(2011) 356 final.

European Commission (2011d), *Annexes 1-5 to the Impact Assessment of the Proposal for a Directive of the European Parliament and of the Council on Credit Agreements Relating to Residential Property,* Brussels, 31.3.2011, SEC(2011) 356 final.

European Commission (2011e), *The Economic Adjustment Programme for Portugal,* European Economy Occasional Papers 79, June.

European Commission (2011f), *The Economic Adjustement Programme for Portugal, First Review – Summer 2011,* European Economy Occasional Papers 83, September.

European Commission (2012a), *Scoreboard for the Surveillance of Macroeconomic Imbalances,* European Economy Occasional Papers No. 92, February.

European Commission (2012b), *The Economic Adjustment Programme for Ireland – Winter 2011 Review,* European Economy Occasional Papers No. 93, March.

European Commission (2012c), *The Economic Adjustment Programme for Portugal, Third Review - Winter 2011/2012,* European Economy Occasional Papers No. 95, April.

European Commission (2012d), *The Economic Adjustment Programme for Ireland – Summer 2012 Review,* European Economy Occasional Papers No. 115, September.

European Commission (2012e), *The Economic Adjustment Programme for Portugal, Sixth Review – Autumn 2012,* European Economy Occasional Papers No. 124.

European Commission (2012f), *A Roadmap Towards a Banking Union,* Brussels, 12.9.2012, COM(2012) 510 final.

European Commission (2013), *Macroeconomic Imbalances - Netherlands 2013,* Occasional Papers 140, April.

European Commission (2014a), *The Economic Adjustment Programme for Portugal, Tenth Review,* European Economy Occasional Papers No. 171, February.

European Commission (2014b), *Macroeconomic Imbalances – Germany 2014,* European Economy Occasional Papers No. 174, March.

European Commission (2014c), *Macroeconomic Imbalances – Spain 2014,* European Economy Occasional Papers 176, March.

European Commission (2014d), *Macroeconomic Imbalances - Finland 2014,* European Economy Occasional Papers No. 177, March.

European Commission (2014e), *Macroeconomic Imbalances – France 2014,* European Economy Occasional Papers No. 178, March.

European Commission (2014f), *Macroeconomic Imbalances – Ireland 2014,* European Economy Occasional Papers No. 181, March.

European Commission (2014g), *Macroeconomic Imbalances – Italy 2014,* European Economy Occasional Papers 182, March.

European Commission (2014h), *Macroeconomic Imbalances – Netherlands 2014,* European Economy Occasional Papers No. 185, March.

European Commission (2014i), *Economic Governance Review,* Brussels, 28.11.2014, COM(2014) 905 final.

European Commission (2015a), Housing Taxation: From Micro Design to Macro Impact, *Quarterly Report on the Euro Area 14*(1), pp. 27-33.

European Commission (2015b), *Macroeconomic Imbalances: Country Report – Netherlands 2015,* European Economy Occasional Papers 221, June.

European Commission (2015c), *Completing Europe's Economic and Monetary Union,* The Five President's Report, 22 June.

European Commission (2015d), *Completing Europe's Economic and Monetary Union - A Revamped European Semester.*

European Commission (2015e), *Proposal for a Regulation of the European Parliament and of the Council Laying Down Common Rules on Securitisation and Creating a European Framework for Simple, Transparent and Standardised Securitisation and Amending Directives 2009/65/EC,* *2009/138/EC, 2011/61/EU and Regulations (EC) No. 1060/2009 and (EU) No. 648/2012,* Brussels, 30.9.2015, COM(2015) 472 final.

European Commission (2016a), *Commission Staff Working Document: Country Report for the Netherlands 2016 – Including an In-Depth Review on the Prevention and Correction of Macroeconomic Imbalances,* Brussels, 26.2.2016, SWD(2016) 87 final.

European Commission (2016b), *2016 European Semester: Assessment of Progress on Structural Reforms, Prevention and Correction of Macroeconomic Imbalances, and Results of In-Depth Reviews under Regulation (EU) no 1176/2011,* Brussels, 7.4.2016, COM(2016) 95 final/2.

European Commission (2016c), *Consultation Document Review of the EU Macro-Prudential Policy Framework.*

European Commission (2016d), *Proposal for a Regulation of the European Parliament and of the Council Amending Regulation (EU) no 575/2013 as regards the Leverage Ratio, the Net Stable Funding Ratio, Requirements for Own Funds and Eligible Liabilities, Counterparty Credit Risk, Market Risk, Exposures to Central Counterparties, Exposures to Collective Investment Undertakings, Large Exposures, Reporting and Disclosure Requirements and Amending Regulation (EU) No. 648/2012,* Brussels, 23.11.2016, COM(2016) 850 final.

European Commission (2016e), *Proposal for a Directive of the European Parliament and of the Council Amending Directive 2013/36/EU as regards Exempted Entities, Financial Holding Companies, Mixed Financial Holding Companies, Remuneration, Supervisory Measures and Powers and Capital Conservation Measures,* Brussels, 23.11.2016, COM(2016) 854 final.

European Commission (2016f), *Feedback Statement on Consultation Document Review of the EU Macro-Prudential Policy Framework.*

European Economic Advisory Group (2009), *The EEAG report on the european economy 2009,*CESifo Group Munich.

European Systemic Risk Board (2014a), *The ESRB Handbook on Operationalising Macro-prudential Policy in the Banking Sector.*

European Systemic Risk Board (2014b), *ESRB Response to the Call for Advice by the European Commission on Macro-prudential Rules in the CRD/CRR,* 30 April.

European Systemic Risk Board (2014c), *ESRB Recommendation on the Macro-Prudential Mandate of National Authorities (ESRB/2011/3) - Follow-up Report - Overall Assessment,* June.

European Systemic Risk Board (2015), *The ESRB Handbook on Operationalising Macro-prudential Policy in the Banking Sector - Addendum: Macroprudential Leverage Ratios.*

European Systemic Risk Board (2016a), *A Review of Macroprudential Policy in the EU in 2015,* May.

European Systemic Risk Board (2016b), *Macroprudential Policy Beyond Banking: An ESRB Strategy Paper,* July.

Eurosystem Household Finance and Consumption Network (2009), *Survey data on Household Finance and Consumption: Research Summary and Policy Use,* ECB Occasional Paper Series No. 100, January.

Everett, M.M. (2015), Blowing the Bubble: The Global Funding of the Irish Credit Boom, *The Economic and Social Review 46*(3), pp. 339-365.

Fabbri, D. and M. Padula (2004), Does Poor Legal Enforcement make Households Credit-Constrained? *Journal of Banking & Finance 28*(10), pp. 2369-2397.

Fabozzi, F.J., R. Chen, S. Hu and G. Pan (2010), Tests of the Performance of Structural Models in Bankruptcy Prediction, *The Journal of Credit Risk 6*(2).

Fama, E.F. and K.R. French (2002), Testing Trade-Off and Pecking Order Predictions about Dividends and Debt, *The Review of Financial Studies 15*(1), pp. 1-33.

Fan, J.P.H., S. Titman and G. Twite (2012), An International Comparison of Capital Structure and Debt Maturity Choices, *Journal of Financial and Quantitative Analysis 47*(01), p. 23.

Farag, M. (2013), Bank Capital and Liquidity, *Bank of England Quarterly Bulletin 2013*(Q3), pp. 201-215.

Faure, M., A. Ogus and N. Philipsen (2009), Curbing Consumer Financial Losses: The Economics of Regulatory Enforcement, *Law & Policy 31*(2), pp. 161-191.

Favara, G. and J. Imbs (2015), Credit Supply and the Price of Housing, *American Economic Review 105*(3), pp. 958-992.

Fenger, M. (2008), Governance Dynamics in European Employment Policy, *Central European Journal of Public Policy 2*(2), pp. 4-25.

Fernandes, D., J.G. Lynch and R.G. Netemeyer (2014), Financial Literacy, Financial Education, and Downstream Financial Behaviors, *Management Science 60*(8), pp. 1861-1883.

Ferran, E. (2014), *Institutional design for financial market supervision: The choice for national systems,* Cambridge Faculty of Law Legal Studies Research Paper Series No. 28/2014, April.

Ferran, E. and K. Alexander (2010), Can Soft Law Bodies be Effective? The Special Case of the European Systemic Risk Board, *European Law Review 35*, pp. 751-776.

Ferran, E. and V.S.G. Babis (2013), The European Single Supervisory Mechanism, *Journal of Corporate Law Studies 13*(2), pp. 255-285.

Ferreira, F.A.F., S.P. Santos, C.S.E. Marques and J. Ferreira (2014), Assessing Credit Risk of Mortgage Lending using MACBETH: A Methodological Frameworknull, *Management Decision 52*(2), pp. 182-206.

Ferrera, M. (1996), The "Southern" Model of Welfare in Social Europe, *Journal of European Social Policy 16*(1), pp. 17-37.

Ferretti, F. (2009), The Credit Scoring Pandemic and the European Vaccine: Making Sense of EU Data Protection Legislation, *Journal of Information, Law & Technology* (1),

Ferretti, F. (2010), A European Perspective on Consumer Loans and the Role of Credit Registries: The Need to Reconcile Data Protection, Risk Management, Efficiency, Over-Indebtedness, and a Better Prudential Supervision of the Financial System, *Journal of Consumer Policy 33*, pp. 1-27.

Ferretti, F. (2013), The Legal Framework of Consumer Credit Bureaus and Credit Scoring in the European Union: Pitfalls and Challenges- Overindebtedness, Responsible Lending, Market Integration, and Fundamental Rights, *Suffolk University Law Review 46*, pp. 791-828.

Ferretti, F. (2015), The Over-Indebtedness of European Consumers: Time for a 'fresh-Start' of the EU Policy and Legal Agenda? *European Review of Contract Law 11*(4), pp. 346-375.

Ferretti, F., R. Salomone, H. Sutschet and V. Tsiafoutis (2016), The Regulatory Framework of Consumer Over-Indebtedness in the UK, Germany, Italy, and Greece: Comparative Profiles of Responsible Credit and Personal Insolvency Law – Part I, *Business Law Review 37*(2), pp. 64-70.

Feteris, M.W.C. (2015), Invloed van het strafrecht op het fiscale boeterecht, *Weekblad voor Fiscaal Recht* (7082), pp. 140-144.

Financial Stability Board (2012), *FSB principles for Sound Residential Mortgage Underwriting Practices,* April.

Financial Stability Board (2014), *Peer review of the Netherlands,* 11 November 2014.

Finansinspektionen (2013a), *Risk Weight Floor for Swedish Mortgages,* Memorandum, FI Ref. 12-11920, 21 May.

Finansinspektionen (2013b), *How FI can Decrease the Risks Inherent in Household Debt,* Memorandum, FI Ref. 13-12811, 14 November.

Finansinspektionen (2014), *Capital Requirements for Swedish banks,* Memorandum, FI Ref: 14-6258, 8 May.

FinCoNet (2014), *FinCoNet report on responsible lending - Review of supervisory tools for suitable consumer lending practices,* July.

Fitzgerald, C. (2013), The Debt Crisis in Ireland, *The Quarterly Review of Economics and Finance 53*(4), pp. 353-363.

Flavin, M. (1993), The Excess Smoothness of Consumption: Identification and Interpretation, *The Review of Economic Studies 60*(3), pp. 651-666.

Flood, M.D., V.L. Lemieux, M. Varga and B.L. William Wong (2016), The Application of Visual Analytics to Financial Stability Monitoring, *Journal of Financial Stability 27*, pp. 180-197.

Forkel, H. (2011), Für Eine Unabhängige Bankenaufsicht, *Zeitschrift Für Rechtspolitik* (4), pp. 100-102.

Frederick, S., G. Loewenstein and T. O'Donoghue (2002), Time Discounting and Time Preference: A Critical Review, *Journal of Economic Literature 40*(2), pp. 351-401.

Fredriksson, M., P. Blomqvist and U. Winblad (2012), Conflict and Compliance in Swedish Health Care Governance: Soft Law in the 'Shadow of Hierarchy', *Scandinavian Political Studies 35*(1), pp. 48-70.

Gabrisch, H. (2012), A Macroeconomist's View on EU Governance Reform: Why and how to Establish Policy Coordination? *Economic Annals LVI*(191), pp. 69-88.

Gadinis, S. (2013), From Independence to Politics in Financial Regulation, *California Law Review 101*(2), pp. 327-406.

Galati, G. and R. Moessner (2013), Macroprudential Policy - A Literature Review, *Journal of Economic Surveys 27*(5), pp. 846-878.

Galati, G. and R. Moessner (2014), *What do we know about the effects of macroprudential policy?* DNB Working Papers No. 440, September.

Gambacorta, L. and H. Shin Song (2016), *Why bank capital matters for monetary policy,* BIS Working Papers No. 558, April.

Gandrud, C. and M. Hallerberg (2015), Does Banking Union Worsen the EU's Democratic Deficit? The Need for Greater Supervisory Data Transparency, *Journal of Common Market Studies 53*(4), pp. 769-785.

García, M.J.R. (2013), Financial Education and Behavioral Finance: New Insights into the Role of Information in Financial Decisions, *Journal of Economic Surveys 27*(2), pp. 297-315.

Garicano, L. and R.M. Lastra (2010), Towards a New Architecture for Financial Stability: Seven Principles, *Journal of International Economic Law 13*(3), pp. 597-621.

Gathergood, J. (2012), Self-Control, Financial Literacy and Consumer Over-Indebtedness, *Journal of Economic Psychology 33*(3), pp. 590-602.

Gathergood, J. and J. Weber (2014), Self-Control, Financial Literacy & the Co-Holding Puzzle, *Journal of Economic Behavior & Organization 107, Part B*, pp. 455-469.

Geiger, F., J. Muellbauer and M. Rupprecht (2016), *The housing market, household portfolios and the german consumer,* ECB Working Paper Series, No. 1904, April.

Gelain, P., K. Lansing J and C. Mendicino (2013), House Prices, Credit Growth, and Excess Volatility: Implications for Monetary and Macroprudential Policy, *International Journal of Central Banking 9*(2), pp. 219-276.

Georgarakos, D., M. Haliassos and G. Pasini (2014), Household Debt and Social Interactions, *The Review of Financial Studies 27*(5), pp. 1404-1433.

Georgopoulos, D., T. Papadogonas and G. Sfakianakis (2011), Household Debt Developments and Sustainability: A Comparison between Greece and Spain, *MIBES Transactions 5*(1), pp. 41-57.

Georgosouli, A. (2013), Judgement-Led Regulation: Reflections on Data and Discretion, *Journal of Banking Regulation 14*(3/4), pp. 209-220.

Gerardi, K.S., H.S. Rosen and P.S. Willen (2010), The Impact of Deregulation and Financial Innovation on Consumers: The Case of the Mortgage Market, *The Journal of Finance LXV*(1), pp. 333-360.

Gerlach-Kristen, P. (2014), Testing the Permanent Income Hypothesis for Irish Households, 1994 to 2005, *The Economic and Social Review 45*(4), pp. 511-535.

Getter, D.E. (2006), Consumer Credit Risk and Pricing, *Journal of Consumer Affairs 40*(1), pp. 41-63.

Gibbard, P. and I. Stevens (2011), Corporate Debt and Financial Balance Sheet Adjustment: A Comparison of the United States, the United Kingdom, France and Germany, *Annals of Finance 7*(1), pp. 95-118.

Giese, J., H. Andersen, O. Bush, C. Castro, M. Farag and S. Kapadia (2014), The Credit-to-GDP Gap and Complementary Indicators for Macroprudential Policy: Evidence from the UK, *International Journal of Finance and Economics 19*(1), pp. 25-47.

Gilardi, F. (2002), Policy Credibility and Delegation to Independent Regulatory Agencies: A Comparative Empirical Analysis, *Journal of European Public Policy 9*(6), pp. 873-893.

Gilardi, F. (2005). Strategy and structure the political economy of agency independence and accountability. *Designing Independent and Accountable Regulatory Authorities for High Quality Regulation. Proceedings of an Expert Meeting in London, 10-11 January 2005,* Organisation for Economic Co-Operation and Development, Paris, France. 101-125.

Gilardi, F. (2005b), The Formal Independence of Regulators: A Comparison of 17 Countries and 7 Sectors, *Swiss Political Science Review 11*(4), pp. 139-167.

Gilquin, G. (2014), Der Deutsche Bankensektor, *Wirtschaftsdienst* (6), pp. 420-427.

Giphart, N.M. (2014), De Richtlijn woningkredietovereenkomsten: een Europese oplossing voor de crisis op de woningmarkt? *Nederlands Tijdschrift voor Europees Recht* (5), pp. 139-146.

Goddard, J., P. Molyneux and J.O.S. Wilson (2009), The Financial Crisis in Europe: Evolution, Policy Responses and Lessons for the Future, *Journal of Financial Regulation and Compliance 17*(4), pp. 362-380.

Goodhart, C.A.E. (2011), The Macro-Prudential Authority: Powers, Scope and Accountability, *OECD Journal: Financial Market Trends* (2), pp. 1-26.

Goodhart, C.A.E. (2015), Linkages between Macro-Prudential and Microprudential Supervision. *Butterworths Journal of International Banking and Financial Law 30*(10), pp. 607-609.

Goodhart, C.A.E. and B. Hofmann (2008), House Prices, Money, Credit, and the Macroeconomy, *Oxford Review of Economic Policy 24*(1), pp. 180-205.

Gorton, G.B. and P. He (20008), Bank Credit Cycles, *The Review of Economic Studies 75*, pp. 1181-1214.

Gortsos, C. (2015), *The Power of the ECB to Impose Administrative Penalties as a Supervisory Authority: An Analysis of Article 18 of the SSM Regulation,* ECEFIL Working Paper No. 2015/11, March.

Grace, T., N. Hallissey and M. Woods (2015), *The instruments of macro-prudential policy,* Quarterly Bulletin 01, JanuaryCentral Bank of Ireland.

Gradus, R.H.J.M. (2012), KEW als smeerolie voor woningmarkt, *Weekblad voor Fiscaal Recht*, p. 1284.

Griller, S. and A. Orator (2010), Everything under Control? The 'Way Forward' for European Agencies in the Footsteps of the Meroni Doctrine, *European Law Review 35*, pp. 1-26.

Gros, D. (2012), *Macroeconomic imbalances in the euro area: Symptom or cause of the crisis?,* CEPS Policy Brief No. 266, April.

Gross, D.B. and N.S. Souleles (2002), Do Liquidity Constraints and Interest Rates Matter for Consumer Behavior? Evidence from Credit Card Data, *The Quarterly Journal of Economics 117*(1), pp. 149-185.

Grosse, S. and E. Schumann (2014), Cyclical Behavior of German Banks' Capital Resources and the Countercyclical Buffer of Basel III, *European Journal of Political Economy 34, Supplement*(0), pp. S40-S44.

Guiso, L., P. Sapienza and L. Zingales (2006), Does Culture Affect Economic Outcomes? *Journal of Economic Perspectives 20*(2), pp. 23-48.

Gungoraydinoglu, A. and Ö. Öztekin (2011), Firm- and Country-Level Determinants of Corporate Leverage: Some New International Evidence, *Journal of Corporate Finance 17*, pp. 1457-1474.

Gutiérrez-Nieto, B., C. Serrano-Cinca and J. Camón-Cala (2016), A Credit Score System for Socially Responsible Lending, *Journal of Business Ethics 133*(4), pp. 691-701.

Guttmann, R. and D. Plihon (2010), Consumer Debt and Financial Fragility, *International Review of Applied Economics 24*(3), pp. 269-283.

Hahn-Lorber, M. (2010), Are there Methods of Reasoning on 'Meta-Legislation'? the Interpretation of Legislative Competence Norms within the Methodology of European Constitutional Law, *European Law Journal 16*(6), pp. 760-779.

Haldane, A. G., & Madouros, V. (2012). The Dog and the Frisbee. *Economic Policy Symposium, Federal Reserve Bank of Kansas City,* Jackson Hole (109) 159.

Hall, R.E. (1978), Stochastic Implications of the Life Cycle-Permanent-Income Hypothesis: Theory and Evidence, *Journal of Political Economy 86*, pp. 971-986.

Hallissey, N., R. Kelly and T. O'Malley (2014), *Macro-prudential tools and credit risk of property lending at Irish banks,* Central Bank of Ireland Economic Letter Series No.10

Hamilton, R. (2003), Trends in Households' Aggregrate Secured Debt, *Bank of England Quarterly Bulletin,* Autumn, pp. 271-280.

Hamm, H. (2008), Housing Finance in Germany: A Stable Funding Scheme Model, *Housing Finance International 23*(2), pp. 44-49.

Hancock, C. (2014, 08-10-2014). Central bank lending rules a blow to first-time buyers. *The Irish Times*, p. 1.

Hancock, C. (2014b, 26-11-2014). Unbelievably a central credit database still does not exist. *The Irish Times*, p. 1.

Hand, D.,J. (2001), Modelling Consumer Credit Risk, *IMA Journal of Management Mathematics 12*, pp. 139-155.

Handke, S. (2012), A Problem of Chief and Indian – The Role of the Supervisory Authority BaFin and the Ministry of Finance in German Financial Market Policy, *Policy and Society 31*(3), pp. 237-247.

Hanretty, C. and C. Koop (2012), Measuring the Formal Independence of Regulatory Agencies, *Journal of European Public Policy 19*(2), pp. 198-216.

Hanretty, C. and C. Koop (2013), Shall the Law Set them Free? The Formal and Actual Independence of Regulatory Agencies, *Regulation & Governance 7*(2), pp. 195-214.

Harding, C. (1997), Member State Enforcement of European Community Measures: The Chimera of 'Effective' Enforcement, *Maastricht Journal of European and Comparative Law 4*(5), pp. 5-24.

Hartmann, P. (2015), Real Estate Markets and Macroprudential Policy in Europe, *Journal of Money, Credit and Banking 47*(S1), pp. 69-80.

Haug, A.A. (1991), The Random Walk Hypothesis of Consumption and Time Aggregation, *Journal of Macroeconomics 13*(4), pp. 691-700.

Heid, F. (2007), The Cyclical Effects of the Basel II Capital Requirements, *Journal of Banking & Finance 31*(12), pp. 3885-3900.

Heider, M. (2014), Der Ausschluss Von Geförderten Ausbildungsdarlehen Aus Dem Verbraucherkreditrecht, *Zeitschrift Für Bank- Und Kapitalmarktrecht* (7), pp. 277-282.

Heipertz, M. and A. Verdun (2004), The Dog that would Never Bite? What we can Learn from the Origins of the Stability and Growth Pact, *Journal of European Public Policy 11*(5), pp. 765-780.

Hekwolter of Hekhuis, M., R. Nijskens and W. Heeringa (2017), *De woningmarkt in de grote steden,* De Nederlandsche Bank Occasional Studies Vol. 15, No. 1.

Hellwig, M. (2010), *Capital regulation after the crisis: Business as usual?* Preprints of the Max Planck Institute for Research on Collective Goods, No. 2010/31.

Hendriks, M. (2007), De belastingadviseur in het fiscale strafrecht en boeterecht, *Weekblad voor Fiscaal Recht* (6721), pp. 552-563.

Héritier, A. and D. Lehmkuhl (2008), The Shadow of Hierarchy and New Modes of Governance, *Journal of Public Policy 28*(1), pp. 1-17.

Herresthal, C. (2014), Unionsrechtliche Vorgaben Zur Sanktionierung Eines Verstoßes Gegen Die Kreditwürdigkeitsprüfung, *EuZW - Europäische Zeitschrift Für Wirtschaftsrecht* (13), pp. 497-500.

Heslin, M. (2014), A Tort of Reckless Lending? *Commercial Law Practitioner 21*(7), pp. 164-166.

Het Financieele Dagblad. (2014b, 21-11-2014). Ongelukkige timing strenge leennorm. *Het Financieele Dagblad*, p. 2.

Het Financieele Dagblad. (2014c, 22-11-2015). 'Draai hogere norm hypotheek terug'. *Het Financieele Dagblad*, p. 3.

Het Financieele Dagblad. (2016, 26-01-2016). Te lage landen. *Het Financieele Dagblad*, p. 13.

Hillebrand, M. and T. Kikuchi (2015), A Mechanism for Booms and Busts in Housing Prices, *Journal of Economic Dynamics and Control 51*, pp. 204-217.

Hillmann, R. (2006), Aktuelle Entwicklungen in Der Deutschen Wohnungspolitik, *Wirtschaftsdienst* (10), pp. 675-684.

Hirata, H., M.A. Kose, C. Otrok and M.E. Terrones (2012), *Global house price fluctuations: Synchronization and determinants,* NBER Working Paper 18362.

Hodgson, G.,M (2006), What are Institutions? *Journal of Economic Issues XL*(1), p. 25.

Hodson, D. (2013), The Eurozone in 2012: 'Whatever it Takes to Preserve the Euro'? *Journal of Common Market Studies 51*, pp. 183-200.

Hodson, D. (2014), Eurozone Governance: Recovery, Reticence and Reform, *Journal of Common Market Studies 52*, pp. 186-201.

Hodson, D. (2015), Eurozone Governance: Deflation, Grexit 2.0 and the Second Coming of Jean-Claude Juncker, *Journal of Common Market Studies 53*, pp. 144-161.

Hodson, D. and I. Maher (2004), Soft Law and Sanctions: Economic Policy Co-Ordination and Reform of the Stability and Growth Pact, *Journal of European Public Policy 11*(5), pp. 798-813.

Hofmann, C. (2010), Die Pflicht Zur Bewertung Der Kreditwürdigkeit, *Neue Juristische Wochenschrift* (25), pp. 1782-1786.

Hofmann, C. (2012), Stabilizing the Financial Sector: EU Financial Services 2010–2012, *European Review of Contract Law 8*(4), pp. 426-455.

Horioka, C.Y. and S. Sekita (2011), The Degree of Judicial Enforcement and Credit Markets: Evidence from Japanese Household Panel Data, *International Review of Finance 11*(2), pp. 245-268.

House of Lords (2015), *The post-crisis EU financial regulatory framework: Do the pieces fit?* European Union Committee, 5th Report of Session 2014–15, HL Paper 103.

Houses of the Oireachtas (2016), *Report of the joint committee of inquiry into the banking crisis,* Volume 1: Report

Houston, J.F., C. Lin, P. Lin and Y. Ma (2010), Creditor Rights, Information Sharing, and Bank Risk Taking, *Journal of Financial Economics 96*(3), pp. 485-512.

Howarth, D. and L. Quaglia (2013), Banking Union as Holy Grail: Rebuilding the Single Market in Financial Services, Stabilizing Europe's Banks and 'Completing' Economic and Monetary Union, *Journal of Common Market Studies 51*, pp. 103-123.

Hunt, B. (2010), *The Role of the Houses of the Oireachtas in the Scrutiny of Legislation,* Parliamentary Fellowship of The Houses of the Oireachtas.

Huygen van Dyck-Jagersma, V.S. and M.F.T. Rijksen (2015), Fiscaal medeplegen of medeplichtigheid: waar ligt de grens? *Tijdschrift Formeel Belastingrecht* (3), pp. 4-8.

Huynh, F. (2013), Adapting Credit Scores to Evolving Consumer Behavior and Data, *Suffolk University Law Review XLVI*, pp. 829-844.

Hynes, R. and E. Posner A (2002), The Law and Economics of Consumer Finance, *American Law and Economics Review 4*(1), pp. 168-207.

Iff/ZEW (2010), *Study on interest rate restrictions in the EU,* Final Report for the EU Commission DG Internal Market and Services, Project No. ETD/2009/IM/H3/87.

Igan, D., A. Kabundi, F. Nadal De Simone, M. Pinheiro and N. Tamirisa (2011), Housing, Credit, and Real Activity Cycles: Characteristics and Comovement, *Journal of Housing Economics 20*(3), pp. 210-231.

Immobilien & Finanzierung. (2016, 15-02-2016). "Das Bausparkassengesetz normiert den Betrieb der Bausparkassen und Nicht das Bausparprodukt". *Immobilien & Finanzierung.*

Immobilien Zeitung. (2015, 09-07-2015). Gelbe Karte für Banken. *Immobilien Zeitung.*

In't Veld, J., R. Raciborski, M. Ratto and W. Roeger (2011), The Recent boom–bust Cycle: The Relative Contribution of Capital Flows, Credit Supply and Asset Bubbles, *European Economic Review 55*(3), pp. 386-406.

International Monetary Fund (2011a), *IMF Staff Comments on EU Commission Staff Consultation on Reinforcing Sanctioning Regimes in the Financial Services Sector.*

International Monetary Fund (2011b), *Global Financial Stability Report: Durable Financial Stability - Getting There from Here,* April.

International Monetary Fund (2011c), *Germany: Financial Sector Assessment Program - Detailed Assessment of Observance on the Basel Core Principles for Effective Banking Supervision,* IMF Country Report No. 11/273, September

International Monetary Fund (2012), *World Economic Outlook, Chapter 3: Dealing with Household Debt,* April.

International Monetary Fund (2013), *Key Aspects Of Macroprudential Policy.*

International Monetary Fund (2014a), *Ireland: Report on Observance of Standards and Codes,* IMF Country Report No. 14/137.

International Monetary Fund (2014b), *Staff Guidance Note on Macroprudential Policy.*

International Monetary Fund (2014c), *Kingdom of the Netherlands—Netherlands: Staff Report for the 2014 Article IV Consultation,* IMF Country Report No. 14/327.

International Monetary Fund (2015), *Housing Recoveries: Cluster Report on Denmark, Ireland, Kingdom of the Netherlands - The Netherlands, and Spain,* IMF Country Report No. 15/1.

International Monetary Fund (2016a), *Germany: Financial sector assessment program - financial system stability assessment,* IMF Country Report No. 16/189.

International Monetary Fund (2016b), *Germany: Financial Sector Assessment Program - Detailed Assessment of Observance on the Basel Core Principles for Effective Banking Supervision,* IMF Country Report No. 16/196.

International Monetary Fund (2016c), *Germany: 2016 Article IV Consultation,* IMF Country Report No. 16/202.

International Monetary Fund (2016d), *Staff Report for the 2016 Article IV Consultation and Fifth Post-Program Monitoring Discussions,* IMF Country Report No. 16/256, July.

International Monetary Fund (2016e), *Sweden: Financial System Stability Assessment,* IMF Country Report No. 16/355.

International Monetary Fund (2017), *Kingdom of the Netherlands - Netherlands: Financial System Stability Assessment,* Country Report No. 17/79.

International Monetary Fund, Financial Stability Board and Bank for International Settlements (2016), *Elements of Effective Macroprudential Policies - Lessons from International Experience,* 31 August.

Irish Examiner. (2015a, 21-10-2015). New central bank governor to face pressure on mortgages. *Irish Examiner.*

Irish Examiner. (2015b, 30-10-2015). Mortgage limits should be defended. *Irish Examiner*

Irish Examiner. (2016, 23-01-2016). Central bank mortgage rules review result due in November. *Irish Examiner.*

Irish Independent. (2015, 25-11-2015). Divided views as honohan finally withdraws from the bank. *Irish Independent*, p. 30.

Issing, O. (2011), The Crisis of European Monetary Union – Lessons to be Drawn, *Journal of Policy Modeling 33*, pp. 737-749.

Itzcovich, G. (2011), The Interpretation of Community Law by the European Court of Justice, *German Law Journal 10*(5), pp. 537-560.

Jackson, H.E. and M.J. Roe (2009), Public and Private Enforcement of Securities Laws: Resource-Based Evidence, *Journal of Financial Economics 93*(2), pp. 207-238.

Jacobzone, S. (2005). Independent regulatory authorities in OECD countries: An overview. *Designing Independent and Accountable Regulatory Authorities for High Quality Regulation. Proceedings of an Expert Meeting in London, 10-11 January 2005,* Organisation for Economic Co-Operation and Development, Paris, France. 72-100.

Jácome, L.I. and S. Mitra (2015), *LTV and DTI limits — Going granular,* IMF Working Paper WP/15/154, July.

Jakab, Z. and M. Kumhof (2015), *Banks are not intermediaries of loanable funds — and why this matters,* Bank of England Working Paper No. 529, May.

Jansen, R. and M. Aelen (2015), *Biases in supervision: What are they and how can we deal with them?* DNB Occassional Studies Vol. 13, No. 6.

Jappelli, T. (1990), Who is Credit Constrained in the U. S. Economy? *The Quarterly Journal of Economics 105*(1), pp. 219-234.

Jappelli, T. (1999), The Age-Wealth Profile and the Life-Cycle Hypothesis: A Cohort Analysis with a Time Series of Cross-Sections of Italian Households, *Review of Income and Wealth 45*(1), pp. 57-75.

Jappelli, T. and M. Pagano (1989), Consumption and Capital Market Imperfections: An International Comparison, *American Economic Review 79*(5), pp. 1088-1105.

Jappelli, T. and M. Pagano (2000), *Information sharing in credit markets: The European experience,* Centre for Studies in Economics and Finance Working Paper No. 35, March.

Jappelli, T. and M. Pagano (2002), Information Sharing, Lending and Defaults: Cross-Country Evidence, *Journal of Banking & Finance 26*(10), pp. 2017-2045.

Jappelli, T., M. Pagano and M. Bianco (2005), Courts and Banks: Effects of Judicial Enforcement on Credit Markets, *Journal of Money, Credit and Banking 37*(2), pp. 223-244.

Jappelli, T. and L. Pistaferri (2007), Do People Respond to Tax Incentives? An Analysis of the Italian Reform of the Deductibility of Home Mortgage Interests, *European Economic Review 51*(2), pp. 247-271.

Jeanne, O. and A. Korinek (2012), *Managing credit booms and busts: A pigouvian taxation approach,* NBER Working Paper 16377, September.

Jeanne, O. and A. Korinek (2014), Macroprudential Policy Beyond Banking Regulation, *Financial Stability Review 18*, pp. 163-171.

Jiménez, G., S. Ongena, J. Peydró and J. Saurina (2012), Credit Supply and Monetary Policy: Identifying the Bank Balance-Sheet Channel with Loan Applications, *American Economic Review 102*(5), pp. 2301-2326.

Jiménez, G., S. Ongena, J. Peydró and J. Saurina (2014), *Macroprudential policy, countercyclical bank capital buffers and credit supply: Evidence from the Spanish dynamic provisioning experiments,* European Banking Center Discussion Paper No. 2012-011.

Johnson, K.W. and G. Li (2010), The Debt-Payment-to-Income Ratio as an Indicator of Borrowing Constraints: Evidence from Two Household Surveys, *Journal of Money, Credit and Banking 42*(7), pp. 1373-1390.

Jokipii, T. and A. Milne (2008), The Cyclical Behaviour of European Bank Capital Buffers, *Journal of Banking & Finance 32*(8), pp. 1440-1451.

Joosen, E.P.M. (2015), Compliance met het Europese *Single Rule Book*, *Tijdschrift voor Compliance* (6), pp. 115-123.

Jordà, Ò., M.H.P. Schularick and A.M. Taylor (2011), Financial Crises, Credit Booms, and External Imbalances: 140 Years of Lessons, *IMF Economic Review 59*(2), pp. 340-378.

Jordà, Ò., M.H.P. Schularick and A.M. Taylor (2016), The Great Mortgaging: Housing Finance, Crises and Business Cycles, *Economic Policy 31*(85), pp. 107-152.

Jordà, Ò., M. Schularick and A.M. Taylor (2015), Betting the House, *Journal of International Economics 96, Supplement 1*, pp. S2-S18.

Jordana, J. and G. Rosas (2014), When do Autonomous Banking Regulators Promote Stability? *European Journal of Political Research 53*(4), pp. 672-691.

Jørgensen, T. (2015), Harmonization: A Need for EU Action on Consumer Credit? *European Business Law Review 26*(5), pp. 743-764.

Kahneman, D. (2003), Maps of Bounded Rationality: Psychology for Behavioral Economics, *The American Economic Review 93*(5), pp. 1449-1475.

Kalamees, P., K. Lilleholt and K. Sein (2015), Responsible Lending in Estonian and Norwegian Law, *Journal of European Consumer and Market Law 4*(1/2), pp. 29-38.

Kalapodas, E. and M. Thomson E. (2006), Credit Risk Assessment: A Challenge for Financial Institutions, *IMA Journal of Management Mathematics 17*, pp. 25-46.

Kamleitner, B., E. Hoelzl and E. Kirchler (2012), Credit use: Psychological Perspectives on a Multifaceted Phenomenon, *International Journal of Psychology 47*(1), pp. 1-27.

Kane, J. (2013), The Legal Implications of the Credit Reporting Act 2013, *Commercial Law Practitioner 21*(11), pp. 263-268.

Kastrop, C., S. Ciaglia, W. Ebert, S. Stoßberg and S. Wolff-Hamacher (2014), Fiscal, Economic and Financial Vulnerabilities: Implications for Euro Area Surveillance, *Applied Economics 46*(6), pp. 603-615.

Kaufmann, C. and R.H. Weber (2010), The Role of Transparency in Financial Regulation, *Journal of International Economic Law 13*(3), pp. 779-797.

Kauko, K. (2014), How to Foresee Banking Crises? A Survey of the Empirical Literature, *Economic Systems 38*(3), pp. 289-308.

Keen, M., A. Klemm and V. Perry (2010), Tax and the Crisis, *Fiscal Studies 31*(1), pp. 43-79.

Keen, S. (2009), Bailing Out the Titanic with a Timble, *Economic Analysis & Policy 39*(1), pp. 3-24.

Keen, S. (2009), Household Debt: The Final Stage in an Artificially Extended Ponzi Bubble, *Australian Economic Review 42*(3), pp. 347-357.

Keenan, E., C. Kinghan, Y. McCarthy and C. O'Toole (2016), *Macroprudential measures and Irish mortgage lending: A review of recent data,* Central Bank of Ireland Economic Letters Series Vol 2016, No. 3.

Keenan, M. (2014, 28-11-2014). Irish home loan rules 'strictest in europe' - agents. *Irish Independent*, pp. 19.

Keese, M. (2009), *Triggers and determinants of severe household indebtedness in Germany,* Ruhr Economic Papers No. 150.

Kelly, R. and F. McCann (2015), *Some defaults are deeper than others: Understanding long-term mortgage arrears,* Research Technical Paper 5/RT/15Central Bank of Ireland.

Kelly, R., T. O'Malley and C. O'Toole (2015), *Designing macro-prudential policy in mortgage lending: Do first time buyers default less?* Central Bank of Ireland Research Technical Paper 02/RT/15.

Kenna, P. and K. Lynch-Shally (2014), Comparing Mortgage Law in England and Ireland, *The Conveyancer and Property Lawyer* (4), pp. 294-316.

Kent, C., Ossolinski, C., & Willard, L. (2007). The rise of household indebtedness. *The Structure and Resilience of the Financial System,* in: C. Kent and J. Lawson (eds), Proceedings of a Conference, Reserve Bank of Australia, Sydney. 123-163.

Kerste, M., P. Risseeuw, B. Baarsma, N. Rosenboom and J. Weda (2011), *Publieke belangen en hypotheekregulering,* SEO Economisch Onderzoek, SEO-rapport No. 2011-19.

Keuning, W. (2016, 01-04-2016). Rabo verkoopt deel hypotheken. *Het Financieele Dagblad*, p. 15.

Kiema, I. and E. Jokivuolle (2014), Does a Leverage Ratio Requirement Increase Bank Stability? *Journal of Banking & Finance 39*(0), pp. 240-254.

Kilborn, J. (2005), Behavioral Economics, Overindebtedness & Comparative Consumer Bankruptcy: Searching for Causes and Evaluating Solutions, *Emory Bankruptcy Developments Journal 22*, pp. 13-46.

Kim, C. (2014), Macroprudential Policies in Korea - Key Measures and Experiences, *Financial Stability Review 18*, pp. 121-130.

Kincaid, R. and M. Watson (2015), Avoiding another Crisis in the Euro Area: Public and Private Imbalances and National Policy Responses, *Journal of European Integration 37*(7), pp. 787-801.

Kinghan, C., Y. McCarthy and C. O'Toole (2016), *The effects of macroprudential policy on borrower leverage,* Central Bank of Ireland Economic Letter Series Vol. 2016, No. 8

Kirchhartz, M. (2013), Europäisches Bankaufsichtsrecht 1.0: Das CRD IV-Paket Und Seine Auswirkungen Auf Das Kreditwesengesetz, *Gesellschafts- Und Wirtschaftsrecht* (19), pp. 395-414.

Kirkos, E. (2015), Assessing Methodologies for Intelligent Bankruptcy Prediction, *Artificial Intelligence Review 43*(1), pp. 83-123.

Knoester, S.C.J. and M.J.N. Vermeij (2012), De hedendaagse gevaren voor de belastingadviseur, *Weekblad voor Fiscaal Recht* (6980), pp. 1653-1657.

Knops, K. (2015), *Stellungnahme zur öffentlichen Anhörung des Ausschusses für Recht und Verbraucherschutz am 14.10.2015 zu dem Gesetzentwurf der Bundesregierung, Entwurf eines Gesetzes zur Umsetzung der Wohnimmobilien-Kreditrichtlinie, BT-drucksache 18/5922.*

Knot, K. (2014), Governance of Macroprudential Policy, *Financial Stability Review 18*, pp. 25-32.

Koch, H. (2001), Non-Class Group Litigation Under EU and German Law, *Duke Journal of Comparative & International Law 11*, pp. 355-367.

Koelewijn, J. (2015, 30-05-2015). Dansen op het waterbed. *Het Financieele Dagblad.*

Kofner, S. (2014), The German Housing System: Fundamentally Resilient? *Journal of Housing and the Built Environment 29*, pp. 255-275.

Krajewski, M. (2003), The New German Law of Obligations, *European Business Law Review 14*(2), pp. 201-215.

Krugman, P. (2011, January 12). Can Europe be Saved?, *The New York Times.*

Kurz, T., W.E. Thomas and M.A. Fonseca (2014), A Fine is a More Effective Financial Deterrent when Framed Retributively and Extracted Publicly, *Journal of Experimental Social Psychology 54*(0), pp. 170-177.

Kuttner, K.N. and I. Shim (2013), *Can non-interest rate policies stabilise housing markets? Evidence from a panel of 57 economies,* BIS Working Papers No. 433, November.

Kwok, C.C.Y. and S. Tadesse (2006), National Culture and Financial Systems, *Journal of International Business Studies 37*, pp. 227-247.

La Porta, R., F. Lopez-De-Silanes and A. Shleifer (2006), What Works in Securities Laws? *The Journal of Finance 61*(1), pp. 1-32.

Lainà, P., J. Nyholm and P. Sarlin (2015), Leading Indicators of Systemic Banking Crises: Finland in a Panel of EU Countries, *Review of Financial Economics 24*, pp. 18-35.

Lalkens, P., & Bökkerink, I. (2015, 02-02-2015). Rabobank voorziet een forse stijging van de hypotheekrente; hogere rente is indirect gevolg van strengere kapitaaleisen voor banken. *Het Financieele Dagblad*, p. 1.

Lambertini, L., C. Mendicino and M. Teresa Punzi (2013), Leaning Against boom–bust Cycles in Credit and Housing Prices, *Journal of Economic Dynamics and Control 37*(8), pp. 1500-1522.

Lane, P.R. (2012), The European Sovereign Debt Crisis, *Journal of Economic Perspectives 26*(3), pp. 49-68.

Lane, P.R. (2016), *Macro-financial stability under EMU,* ESRB Working Paper Series No. 1, February

Lastra, R.M. (2013), Defining Forward Looking, Judgement-Based Supervision, *Journal of Banking Regulation 14*(3/4), pp. 221-227.

Lastra, R.M. and J.V. Louis (2013), European Economic and Monetary Union: History, Trends, and Prospects, *Yearbook of European Law 32*(1), pp. 1-150.

Lavrijssen, S. and A. Ottow (2012), Independent Supervisory Authorities: A Fragile Concept, *Legal Issues of Economic Integration 39*(4), pp. 419-445.

Law Reform Commission of Ireland (2016), *Regulatory enforcement and corporate offences,* Issues Paper LRC IP 8 – 2016.

Leczykiewicz, D. (2012), 'Where Angels Fear to Tread': The EU Law of Remedies and Codification of European Private Law, *European Review of Contract Law* (1), pp. 47-81.

Leliveld, J.T.C. (2009), Kiezen voor een sanctiestelsel bij overtreding van de Wft, *Tijdschrift voor Financieel Recht* (5/6), pp. 218-223.

Leloux, S. (2013), *Peer-to-Peer* lending. De regulering van een innovatieve financieringsvorm, *Tijdschrift voor Financieel Recht* (5), pp. 143-149.

Leong, K. and M. McAleer (1999), Testing the Life-Cycle Permanent Income Hypothesis using Intra-Year Data for Sweden, *Mathematics and Computers in Simulation 48*(4–6), pp. 551-560.

Liedorp, F., R. Mosch, C. van der Cruijsen and J. de Haan (2013), Transparency of Banking Supervisors, *IMF Economic Review 61*(2), pp. 310-335.

Lim, C., F. Columba, A. Costa, P. Kongsamut, A. Otani, M. Saiyid, T. Wezel and X. Wu (2011), *Macroprudential policy: What instruments and how to use them?* IMF Working Paper WP/11/238, October

Littwin, A. (2008), Beyond Usury: A Study of Credit-Card use and Preference among Low-Income Consumers, *Texas Law Review 86*(3), pp. 451-506.

Livshits, I., J. Macgee and M. Tertilt (2007), Consumer Bankruptcy: A Fresh Start, *The American Economic Review 97*(1), pp. 402-418.

Lo Schiavo, G. (2014), From National Banking Supervision to a Centralized Model of Prudential Supervision in Europe? *Maastricht Journal of European and Comparative Law 21*(1), pp. 110-140.

López, M., F. Tenjo and H. Zárate (2014), Credit Cycles, Credit Risk and Countercyclical Loan Provisions, *Ensayos Sobre Política Económica 32*(74), pp. 9-17.

Loughlin, A. and D. Murphy (2007), *Journal of International Banking Law and Regulation 22*(1), pp. 15-16.

Louis, J.V. (2004), The Economic and Monetary Union: Law and Institutions, *Common Market Law Review 41*(2), pp. 575-608.

Louis, J.V. (2006), The Review of the Stability and Growth Pact, *Common Market Law Review 43*, pp. 85-106.

Louis, J.V. (2010), Guest Editorial: The no-Bailout Clause and Rescue Packages, *Common Market Law Review 47*, pp. 971-986.

Lunn, P.D. (2013), The Role of Decision-Making Biases in Ireland's Banking Crisis, *Irish Political Studies 28*(4), pp. 563-590.

Lusardi, A. and P. Tufano (2015), Debt Literacy, Financial Experiences, and Overindebtedness, *Journal of Pension Economics and Finance 14*(Special Issue 04), pp. 332-368.

Lusardi, A. and O.S. Mitchell (2014), The Economic Importance of Financial Literacy: Theory and Evidence, *Journal of Economic Literature 52*(1), pp. 5-44.

Lyons, R. (2015), Housing Supply in Ireland since 1990: The Role of Costs and Regulation, *Journal of the Statistical and Social Inquiry Society of Ireland XLIV*, pp. 141-155.

Lyons, R. (2016, 06-03-2016). Dear minister, all we want for housing is ... *Sunday Independent*

Maddaloni, A. and J. Peydró (2013), Monetary Policy, Macroprudential Policy, and Banking Stability: Evidence from the Euro Area, *International Journal of Central Banking 9*(1), pp. 121-169.

Maduro, M.P. (2008), *Interpreting European law-judicial adjudication in a context of constitutional pluralism,* Working Paper IE Law School WPLS08-02

Magri, S. (2007), Italian Households' Debt: The Participation to the Debt Market and the Size of the Loan, *Empirical Economics 33*, pp. 401-426.

Maigret, S.R.B. (2010), De strafrechtelijke aspecten van de vierde tranche Awb, *Tijdschrift Formeel Belastingrecht* (8).

Majone, G. (2005). Strategy and structure the political economy of agency independence and accountability. *Designing Independent and Accountable Regulatory Authorities for High Quality Regulation. Proceedings of an Expert Meeting in London, 10-11 January 2005. ,* Organisation for Economic Co-Operation and Development, Paris, France. 126-155.

Mak, V. (2012), The Myth of the 'Empowered Consumer' - Lessons from Financial Literacy Studies, *Journal of European Consumer and Market Law* (1), pp. 254-263.

Mak, V. (2013a), Stretching the Borders of EU Law? – Full Harmonisation in the Consumer Credit Directive and Mortgage Credit, *Journal of European Consumer and Market Law* (1), pp. 37-41.

Mak, V. (2013b), In het verleden behaalde rendementen… bepalen nu de toekomst. hervorming van Europees financieel consumentenrecht, *Nederlands Tijdschrift voor Europees Recht* (5), pp. 178-184.

Mak, V. (2015), What is Responsible Lending? The EU Consumer Mortgage Credit Directive in the UK and the Netherlands, *Journal of Consumer Policy 38*, pp. 411-430.

Manganelli, S. and G. Wolswijk (2009), What Drives Spreads in the Euro Area Government Bond Market? *Economic Policy 24*(58), pp. 191-240.

Mariathasan, M. and O. Merrouche (2014), The Manipulation of Basel Risk-Weights, *Journal of Financial Intermediation 23*(3), pp. 300-321.

Martin, M. (2007), *A literature review on the effectiveness of financial education,* Federal Reserve Bank of Richmond Working Paper WP 07-3.

Masciandaro, D., M. Quintyn and M.W. Taylor (2008), Inside and Outside the Central Bank: Independence and Accountability in Financial Supervision: Trends and Determinants, *European Journal of Political Economy 24*(4), pp. 833-848.

Mascini, P. (2013), Why Was the Enforcement Pyramid so Influential? And What Price Was Paid? *Regulation & Governance 7*(1), pp. 48-60.

Maurer, P. (2015, 02-07-2015). Regierung prüft Regulierungsinstrumente für Wohnungskredite. *Immobilien Zeitung Aktuell.*

Mavroudeas, S.D. and D. Papadatos (2012), Financial Regulation in the Light of the Current Global Economic Crisis, *International Critical Thought 2*(4), pp. 486-499.

May, P.J. (2005), Regulation and Compliance Motivations: Examining Different Approaches, *Public Administration Review 65*(1), pp. 31-44.

McBarnet, D. and C. Whelan (1991), The Elusive Spirit of the Law: Formalism and the Struggle for Legal Control, *The Modern Law Review 54*(6), pp. 848-873.

McBride, L. (2016, 24-01-2016). Break the lending rules to buy your first home. *Sunday Independent*, p. 9.

McCarthy, Y. and K. McQuinn (2015), Deleveraging in a Highly Indebted Property Market: Who does it and are there Implications for Household Consumption? *Review of Income and Wealth 63*(1), pp. 95-117.

McCartney, J. (2016, 14-02-2016). New mortgage rules get a mixed report one year on. *Sunday Independent*, p. 9.

McCrudden, C. (1993), The Effectiveness of European Equality Law: National Mechanisms for Enforcing Gender Equality Law in the Light of European Requirements, *Oxford Journal of Legal Studies 13*(3), pp. 320-367.

McDonald, C. (2015), *When is macroprudential policy effective?* BIS Working Papers No. 496, March.

McDonnell, B. (2013), Designing Countercylical Capital Buffers, *North Carolina Banking Institute Journal 18*, pp. 123-139.

McKernan, S., C. Ratcliffe and D. Kuehn (2013), Prohibitions, Price Caps, and Disclosures: A Look at State Policies and Alternative Financial Product use, *Journal of Economic Behavior & Organization 95*(0), pp. 207-223.

Mein, A. (2015a), *De boete uit balans - het gebruik van de bestuurlijke boete in de praktijk van het financieel toezicht,* PhD thesis.

Mein, A. (2015b), De boete uit balans, *Tijdschrift voor Financieel Recht* (7/8), pp. 271-277.

Mein, A. (2015c), Van licht naar zwaar, de evolutie van de bestuurlijke boete in het financieel toezicht, *Tijdschrift voor Sanctierecht & Onderneming* (5/6), pp. 257-262.

Mendicino, C. and M.T. Punzi (2014), House Prices, Capital Inflows and Macroprudential Policy, *Journal of Banking & Finance 49*, pp. 337-355.

Merler, S. (2015), *Squaring the cycle: Financial cycles, capital flows and macroprudential policy,* Bruegel Working Paper No. 2015/14.

Messina, J., C. Strozzi and J. Turunen (2009), Real Wages over the Business Cycle: OECD Evidence from the Time and Frequency Domains, *Journal of Economic Dynamics and Control 33*(6), pp. 1183-1200.

Mészáros, G. (2013), Macroprudential Regulation: A Contradiction in its Own Terms, *Journal of Banking Regulation 14*(2), pp. 164-182.

Mian, A., K. Rao, and A. Sufi (2013), Household Balance Sheets, Consumption, and the Economic Slump, *The Quarterly Journal of Economics 128*(4), pp. 1687-1726.

Michelangeli, V. and E. Sette (2016), *How does bank capital affect the supply of mortgages? Evidence from a randomized experiment,* BIS Working Papers No. 557, April.

Michiels, F.C.M.A. (2007), 'Naming and shaming' in het markttoezicht, *Nederlands Tijdschrift voor Bestuursrecht*, p. 16.

Micklitz, H. (2010), *Consumer loans and the role of the credit bureaus in Europe,* EUI Working Paper RSCAS 2010/44.

Micklitz, H. (2013), Do Consumers and Businesses Need a New Architecture of Consumer Law? A Thought Provoking Impulse, *Yearbook of European Law 32*(1), pp. 266-367.

Micklitz, H. (2015), The Transformation of Enforcement in European Private Law: Preliminary Considerations, *European Review of Private Law 23*(4), pp. 491-524.

Micklitz, H. and A. Stadler (2006), The Development of Collective Legal Actions in Europe, especially in German Civil Procedure, *European Business Law Review 17*(5), pp. 1473-1503.

Milcheva, S. and S. Sebastian (2016), The Housing Market Channel of Monetary Policy Transmission in the Euro Area, *Journal of European Real Estate Research 9*(1), pp. 76-97.

Miller, S. (2015), Information and Default in Consumer Credit Markets: Evidence from a Natural Experiment, *Journal of Financial Intermediation 24*(1), pp. 45-70.

Milo, M.S. (2007), *Integrated financial supervision: An institutional perspective for the Philippines,* ADB Institute Discussion Paper No. 81, October.

Ministerie van Financiën (2011), *Toezicht op afstand - de relatie tussen de Minister van Financiën en de financiële toezichthouders De Nederlandsche Bank (DNB) en de Autoriteit Financiële Marken (AFM),* February

Ministerie van Financiën (2015), *Outline of the 2015 Dutch covered Bond Regulations,* Information sheet.

Minsky, H.P. (1978), *The financial instability hypothesis: A restatement,* London: Thames Papers in Political Economy.

Minsky, H.P. (1980), Capitalist Financial Processes and the Instability of Capitalism, *Journal of Economic Issues 14*(2), pp. 505-523.

Modigliani, F. and M. Miller H (1958), The Cost of Capital, Corporation Finance and the Theory of Investment, *American Economic Review 48*, pp. 261-297.

Mody, A. and D. Sandri (2012), The Eurozone Crisis: How Banks and Sovereigns Came to be Joined at the Hip, *Economic Policy 27*, pp. 201-230.

Moloney, N. (2010), EU Financial Market Regulation after the Global Financial Crisis: “More Europe” Or More Risks? *Common Market Law Review 47*, pp. 1317-1383.

Moloney, N. (2013), I. Resetting the Location of Regulatory and Supervisory Control Over EU Financial Markets: Lessons from Five Years on, *International and Comparative Law Quarterly 62*(4), pp. 955-965.

Moloney, N. (2014), European Banking Union: Assessing its Risks and Resilience, *Common Market Law Review 51*, pp. 1609-1670.

Montag, J. (2013), Kollektiver Rechtsschutz in Europa Und Der Gesetzentwurf Zur Einführung Von Gruppenklagen, *Zeitschrift Für Rechtspolitik* (6), pp. 172-175.

Moosmayer, K. (2012), Modethema Oder Pflichtprogramm Guter Unternehmensführung? – Zehn Thesen Zu Compliance, *Neue Juristische Wochenschrift* (41), pp. 3013-3017.

Morgenroth, E. (2016), Housing Supply and House Price Trends: A County Level Analysis, *Quarterly Economic Commentary,* Spring, pp. 73-85.

Morris, R.,A (15), Consumer Debt and Usury: A New Rationale for Usury, *Pepperdine Law Review 2*(151), p. 179.

Moschella, M. (2014), Monitoring Macroeconomic Imbalances: Is EU Surveillance More Effective than IMF Surveillance? *Journal of Common Market Studies 52*(6), pp. 1273-1289.

Muellbauer, J. (1983), Surprises in the Consumption Function, *The Economic Journal 93*, pp. 34-50.

Muellbauer, J. (2011), *Resolving the eurozone crisis: Time for conditional eurobonds,* CEPS Policy Insight No. 59, October.

Muellbauer, J. and A. Murphy (2008), Housing Markets and the Economy: The Assessment, *Oxford Review of Economic Policy 24*(1), pp. 1-33.

Mulder, T. (2015, 24-01-2015). Shoppen bij hypotheekverstrekkers loont. *Het Financieele Dagblad*, p. 5.

Murphy, D. and J. O'Halloran (2012), Ireland: Consumer Protection - Financial Services, *Journal of International Banking Law and Regulation*, pp. 93-96.

Murphy, F. (2013), The Administrative Sanctions Regime for Regulated Financial Services Providers - Part I, *Commercial Law Practitioner 20*(11), pp. 253-261.

Murphy, F. (2014), The Administrative Sanctions Regime for Regulated Financial Services Providers - Part II, *Commercial Law Practitioner 21*(1), pp. 11-20.

Murphy, L. (2014), *Varieties of effectiveness: What matters?* Contribution to the AJIL Unbound symposium on “The Idea of Effective International Law".

Nebbia, P. (2008), The Double Life of Effectiveness, *Cambridge Yearbook of European Legal Studies 10*, pp. 287-302.

Nedergaard, P. and H. Snaith (2015), 'as I Drifted on a River I could Not Control': The Unintended Ordoliberal Consequences of the Eurozone Crisis, *Journal of Common Market Studies 53*(5), pp. 1094-1109.

Neyer, J. (2004), Explaining the Unexpected: Efficiency and Effectiveness in European Decision-Making, *Journal of European Public Policy 11*(1), pp. 19-38.

Nibud (2015), *Financieringslastnormen 2016.*

Nibud (2016), *Financieringslastnormen 2017.*

Nield, S. (2010), Responsible Lending and Borrowing: Whereto Low-Cost Home Ownership? *Legal Studies 30*(4), pp. 610-632.

Nier, E.W. (2011), Macroprudential Policy – Taxonomy and Challenges, *National Institute Economic Review* (216), pp. R1-R15.

Nketcha Nana, P.V. (2014), Legal Rights, Information Sharing, and Private Credit: New Cross-Country Evidence, *The Quarterly Review of Economics and Finance 54*(3), pp. 315-323.

Nofsinger, J.R. (2012), Household Behavior and boom/bust Cycles, *Journal of Financial Stability 8*(3), pp. 161-173.

Norris, M. and D. Coates (2014), How Housing Killed the Celtic Tiger: Anatomy and Consequences of Ireland’s Housing Boom and Bust, *Journal of Housing and the Built Environment 29*, pp. 299-315.

North, D.C. (1994), Economic Performance through Time, *American Economic Review 84*(3), pp. 359-368.

NOS (2016, 01-02-2016). 'Mensen met studieschuld krijgen onverantwoord hoge hypotheken'

O'Brien, M. (2009), Finance Bill 2009: An Overview of some Significant Measures, *Accountancy Ireland 41*(3), pp. 68-69.

O'Donnell, T.E. (2006), Summary v. Indictable: Choices in the Disposal of Criminal Cases, *Judicial Studies Institute Journal 6*(1), pp. 15-31.

O'Donovan, D. (2016, 08-04-2016). Central bank's board queries its response to banking inquiry. *Irish Independent*, p. 27.

Office of the Chief Inspector of Taxes (1998), *Tax briefing,* Issue No. 34, December.

Omlor, S. (2016), *Stellungnahme für den Rechtsausschuss des Deutschen Bundestages - öffentliche Anhörung zu dem Gesetzentwurf der Bundesregierung „Entwurf eines Gesetzes zur Umsetzung der Wohnimmobilienkreditrichtlinie“ am 15. Februar 2016, BT-drucks. 18/5922, 18/6286,*

Organisation for Economic Co-operation and Development (2011), *OECD Economic Surveys Ireland,* October 2011.

Organisation for Economic Co-operation and Development (2013), *OECD Economic Surveys Ireland,* September 2013.

Ortalo-Magné, F. and S. Rady (1999), Boom in, Bust Out: Young Households and the Housing Price Cycle, *European Economic Review 43*(4–6), pp. 755-766.

Osiński, J., K. Seal and L. Hoogduin (2013), *Macroprudential and microprudential policies: Toward cohabitation,* IMF Staff Discussion Note SDN 13/05, June.

O'Sullivan, K.P.V. and T. Kennedy (2010), What Caused the Irish Banking Crisis? *Journal of Financial Regulation and Compliance 18*(3), pp. 224-242.

O'Sullivan, K.P.V. and S. Kinsella (2013), Financial and Regulatory Failure: The Case of Ireland, *Journal of Banking Regulation 14*(1), pp. 1-15.

Pagano, M. and T. Jappelli (1993), Information Sharing in Credit Markets, *The Journal of Finance 48*(5), pp. 1693-1718.

Palmstorfer, R. (2014), The Reverse Majority Voting Under the 'Six Pack': A Bad Turn for the Union? *European Law Journal 20*(2), pp. 186-203.

Panara, C. (2016), The Enforceability of Subsidiarity in the EU and the Ethos of Cooperative Federalism: A Comparative Law Perspective, *European Public Law 22*(2), pp. 305-332.

Peuker, E. (2014), Die Anwendung Nationaler Rechtsvorschriften Durch Unionsorgane – Ein Konstruktionsfehler Der Europäischen Bankenaufsicht, *Juristenzeitung 69*, pp. 764-771.

Peydró, J. (2014), Macroprudential Policy and Credit Supply Cycles, *Financial Stability Review 18*, pp. 217-223.

Pintus, P.A. and Y. Wen (2013), Leveraged Borrowing and boom–bust Cycles, *Review of Economic Dynamics 16*(4), pp. 617-633.

Piorkowsky, M. (2012), Zunehmende Überschuldung Privater Haushalte – Konsequenzen Für Die Ökonomische Grundbildung, *Verbraucher Und Recht* (10), pp. 383-391.

Pistor, K., M. Raiser and S. Gelfer (2000), Law and Finance in Transition Economies, *Economics of Transition 8*(2), pp. 325-368.

Pistor, K. and C. Xu (2002), Incomplete Law, *New York University Journal of International Law and Politics 35*, pp. 931-1013.

Polinsky, A.M. and S. Shavell (2000), The Economic Theory of Public Enforcement of Law, *Journal of Economic Literature XXXVIII*, pp. 45-76.

Posner, R.A. (2010), From the New Institutional Economics to Organization Economics: With Applications to Corporate Governance, Government Agencies, and Legal Institutions, *Journal of Institutional Economics 6*(1), pp. 1-37.

Priemus, H. (2013), Public Mortgage Guarantee: Instrument to Cope with Impacts of the Financial Crisis on the Owner-Occupied Housing Market Evidence from the Netherlands, *Journal of Housing and the Built Environment 28*, pp. 345-362.

Priemus, H. and C. Whitehead (2014), Interactions between the Financial Crisis and National Housing Markets, *Journal of Housing and the Built Environment 29*, pp. 193-200.

Prudential Regulation Authority (2014), *Implementing the financial policy Committee's recommendation on loan to income ratios in mortgage lending,* Policy Statement, PS9/14, October

Pyykkö, E. (2013), *Towards better use of credit reporting in europe,* CEPS-ECRI Task Force Report, September.

Quintyn, M. (2009), Independent Agencies: More than a Cheap Copy of Independent Central Banks? *Constitutional Political Economy 20*, pp. 267-295.

Quintyn, M. and M. Taylor W (2003), Regulatory and Supervisory Independence and Financial Stability, *CESifo Economics Studies 49*(2), pp. 259-294.

Quirk, P. (2010), Cover me: The economy is on fire (the German *Pfandbrief*), *German Law Journal 11*(12), pp. 1323-1346.

Ramsay, I. (2001), The Alternative Consumer Credit Market and Financial Sector: Regulatory Issues and Approaches, *The Canadian Business Law Journal 35*(3), pp. 325-401.

Ramsay, I. (2010), 'to Heap Distress upon Distress?' Comparative Reflections on Interest-Rate Ceilings, *University of Toronto Law Journal 60*(2), pp. 707-730.

Ramsay, I. (2011), Regulation and the Constitution of the EU Single Market: The Contribution of Consumer Law, *Canadian Business Law Journal 50*, pp. 322-355.

Ramsay, I. (2012a), Consumer Credit Regulation after the Fall: International Dimensions, *Journal of European Consumer and Market Law* (1), pp. 24-34.

Ramsay, I. (2012b), A Tale of Two Debtors: Responding to the Shock of Over-Indebtedness in France and England - a Story from the Trente Piteuses, *The Modern Law Review 75*(2), pp. 212-248.

Ramsay, I. (2012d), Between Neo-Liberalism and the Social Market: Approaches to Debt Adjustment and Consumer Insolvency in the EU, *Journal of Consumer Policy 35*, pp. 421-441.

Raptis, J.L. (2012), European Financial Regulation: ESMA and the Lamfalussy Process, the Renewed European Legislative Process in the Field of Securities Regulation, *Columbia Journal of European Law Online 18*(3), pp. 61-68.

Ratsiborinskaya, D. (2016), *Evaluating the application of EU environmental standards in european public banks' investment projects in third countries: Towards legal environmental indicators,* PhD Thesis.

Raya, J.M. and A. Kucel (2016), Did Housing Taxation Contribute to Increase Riskier Borrowing? *Journal of Real Estate Finance and Economics 53*(1), pp. 90-113.

Reddan, F. (2014, 21-10-2014). Restrictions may bring stability but first-time buyers will pay the price; controlling lending seems to make sense given our experience but it is sure to have undesirable results. *The Irish Times*, p. 5.

Reddan, F. (2015, 04-02-2015). Extent of pressure on central bank over mortgage rules revealed. *The Irish Times*, p. 3.

Regling, K. and M. Watson (2010), *A preliminary report on the sources of Ireland's banking crisis,* Government Publications.

Reichling, T. (2013), Selbstanzeige Und Verbandsgeldbuße Im Steuerstrafrecht, *Neue Juristische Wochenschrift* (31), pp. 2233-2236.

Reinhardt, D. and R. Sowerbutts (2015), *Regulatory arbitrage in action: Evidence from banking flows and macroprudential policy,* Bank of England Staff Working Paper No. 546, September.

Renneboog, L. and C. Spaenjers (2011), Religion, Economic Attitudes, and Household Finance, *Oxford Economic Papers 64*, pp. 103-127.

Revenue Commissioners (2009), *Tax briefing,* Issue No. 77, September.

Revenue Commissioners (2015), *Code of practice for revenue audit and other compliance interventions,* revised version November 2015.

Rězác, M. (2015), ESIS2: Information Value Estimator for Credit Scoring Models, *Computational Economics 45*, pp. 303-322.

Riefa, C. (2014), Responsible Lending on the Horizon? – The New Directive on Credit Agreements Relating to Residential Property, *Journal of European Consumer and Market Law 4*(1), pp. 47-48.

Rietdijk, N. (2014, 08-12-2014). Gemiddelde huizenkoper bestaat niet; nieuwe normen hypotheek gaan voorbij aan diversiteit van mensen, hun voorkeuren en hun uitgavenpatroon. *Het Financieele Dagblad*, p. 9.

Risk and Policy Analysts Limited (2013), *Study on the Impact of the Legal Choices of the Member States and other Aspects of Implementing the Directive 2008/48/EC on the Functioning of the Consumer Credit Market in the European Union,* Final Report prepared for the Executive Agency for Health and Consumers, October.

Rodenburg, P. and P. Zuidhof (2012), De euro en de structurele verschillen in de eurozone, *Economisch Statistische Berichten 97*(4631), pp. 170-173.

Ross, M. (2006), Effectiveness in the European Legal Order(s): Beyond Supremacy to Constitutional Proportionality? *European Law Review 31*(4), pp. 476-498.

Roth, G.P. (2006), De publicatie van waarschuwingen en boetes onder de Wft, *Ondernemingsrecht*, p. 46.

Rothemund, M. and M. Gerhardt (2011), *The European Credit Information Landscape - an Analysis of a Survey of Credit Bureaus in Europe,* ECRI Industry Survey, February.

Rott, P. (2012), Legal Terminology: One Reason for Frictions between German and European Consumer Laws, *European Review of Private Law 20*(5/6), pp. 1353-1367.

Rott, P. (2015), Die Neue Immobiliarkredit-Richtlinie 2014/17/EU Und Ihre Auswirkungen Auf Das Deutsche Recht, *Zeitschrift Für Bank- Und Kapitalmarktrecht* (1), pp. 8-14.

Rott, P., E. Terryn and C. Twigg-Flesner (2011), Kreditwürdigkeitsprüfung: Verbraucherschutzverhinderung durch Zuweisung zum Öffentlichen Recht? *Verbraucher Und Recht* (5), pp. 163-169.

Roy, S. and D.M. Kemme (2012), Causes of Banking Crises: Deregulation, Credit Booms and Asset Bubbles, then and Now, *International Review of Economics & Finance 24*, pp. 270-294.

Ruffert, M. (2011), The European Debt Crisis and European Union Law, *Common Market Law Review 48*(6), pp. 1777-1806.

Russchen, D and J.A. Zwinkels (2017), Versterking transparantie in het financieel toezicht, *Ondernemingsrecht* 49(6), pp. 291-298.

Saarimaa, T. (2010), Tax Incentives and Demand for Mortgage Debt: Evidence from the Finnish 1993 Tax Reform, *International Journal of Housing Policy 10*(1), pp. 19-40.

Safavian, M. and S. Sharma (2007), When do Creditor Rights Work? *Journal of Comparative Economics 35*(3), pp. 484-508.

Salisbury, L.,Court (2014), Minimum Payment Warnings and Information Disclosure Effects on Consumer Debt Repayment Decisions, *Journal of Public Policy & Marketing 33*(1), pp. 49-64.

Sarat, A. (1985), Legal Effectiveness and Social Studies of Law: On the Unfortunate Persistance of a Research Tradition, *Legal Studies Forum IX*(1), pp. 23-31.

Sarlin, P. (2016), Macroprudential Oversight, Risk Communication and Visualization, *Journal of Financial Stability 27*, pp. 160-179.

Sarlin, P. and H.J. Nyman (2015), The Process of Macroprudential Oversight in Europe, *Global Policy 6*(4), pp. 389-407.

Scanlon, K., J. Lunde and C. Whitehead (2008), Mortgage Product Innovation in Advanced Economies: More Choice, More Risk 1, *International Journal of Housing Policy 8*(2), pp. 109-131.

Schäfer, F.L. (2014), Wohnimmobilienkreditrichtlinie - Geschichte Und Umsetzung Im Verbraucherdarlehensrecht, *Verbraucher Und Recht* (6), pp. 207-216.

Schauer, F. (2011). On the open texture of law. University of Frankfurt Symposium on Defeasibility in Epistemology, Ethics, law and Logic.

Scheltema, A.H. (2015), Pfandbriefe, covered bonds of gedekte obligaties, *Maandblad voor Vermogensrecht* (6), pp. 177-185.

Schermer, W.M. (2012), Het handhavingsbeleid, een overzicht, *Tijdschrift voor Financieel Recht* (12), pp. 466-471.

Schmidt, H. (2008), Bautätigkeit Zu Zeiten Der Eigenheimzulage, *Statistisches Monatsheft Baden-Württemberg* (11), pp. 33-35.

Schneider, S.H. (2014), Sanctioning by the ECB and National Authorities within the Single Supervisory Mechanism, *EuZW-Beilage* (1), pp. 18-24.

Schoenmaker, D. (2011), The Financial Trilemma, *Economics Letters 111*, pp. 57-59.

Schoenmaker, D. (2015), Regulatory Capital: Why is it Different? *Accounting and Business Research 45*(4), pp. 468-483.

Schoenmaker, D. and P. Wierts (2015), Regulating the Financial Cycle: An Integrated Approach with a Leverage Ratio, *Economics Letters 136*, pp. 70-72.

Schoenmaker, D. and P. Wierts (2016), Macroprudential Supervision: From Theory to Policy, *National Institute Economic Review 235*, pp. R50-R62.

Scholten, M. and M. Van Rijsbergen (2014), The *ESMA-Short Selling* Case: Erecting a New Delegation Doctrine in the EU upon the *Meroni-Romano* Remnants, *Legal Issues of Economic Integration 41*(4), pp. 389-405.

Schularick, M. and A.M. Taylor (2012), Credit Booms Gone Bust: Monetary Policy, Leverage Cycles, and Financial Crises, 1870–2008, *American Economic Review 102*(2), pp. 1029-1061.

Schüler, Y.S., P.P. Hiebert and T.A. Peltonen (2015), *Characterising the financial cycle: A multivariate and time-varying approach,* ECB Working Paper Series No. 1846, September.

Schwartz, H. and L. Seabrooke (2008), Varieties of Residential Capitalism in the International Political Economy: Old Welfare States and the New Politics of Housing, *Comparative European Politics 6*, pp. 237-261.

Scott, C. (2012), Regulating Everything: From Mega- to Meta-Regulation, *Administration 60*(1), pp. 61-89.

Scott, C. (2014), Evaluating the Performance and Accountability of Regulators, *Seattle University Law Review 37*, pp. 353-374.

Scott, H.S. (2010), Reducing Systemic Risk through the Reform of Capital Regulation, *Journal of International Economic Law 13*(3), pp. 763-778.

Seyad, S.M. (2015), A Legal Analysis of the Control of National Budgets by the EU Institutions, *Journal of International Banking Law and Regulation 30*(5), pp. 251-260.

Shambaugh, J.C. (2012), The Euro's Three Crises, *Brookings Papers on Economic Activity* (Spring), pp. 157-231.

Shefrin, H.M. and R.H. Thaler (1988), The Behavioral Life-Cycle Hypothesis, *Economic Inquiry 26*(4), pp. 609-643.

Shi, S., J. Jou and D. Tripe (2014), Can Interest Rates really Control House Prices? Effectiveness and Implications for Macroprudential Policy, *Journal of Banking & Finance 47*(0), pp. 15-28.

Shiller, R.,J. (2007). Understanding recent trends in house prices and homeownership. *Federal Reserve Bank of Kansas City Symposium Proceedings,* 89-123.

Shim, I., B. Bogdanova, J. Shek and A. Subelyte (2013), Database for Policy Actions on Housing Markets, *BIS Quarterly Review* (September), pp. 83-95.

Singer, D. (2013), *The role of institutions in international finance,* PhD Thesis, Tilburg University.

Singh, D. (2003), Enforcement Decisions in Banking Regulation and Supervision, *Journal of Banking Regulation 4*(4), pp. 301-319.

Sitsen, J.M. (2014), Het fiscale boetestelsel verder uitgebreid: nog enkele onderwerpen belicht, *Tijdschrift Formeel Belastingrecht* (5).

Smits, R. (2004), Het Stabiliteits- en Groeipact nagekeken, *SEW: Tijdschrift voor Europees en Economisch Recht 52*, pp. 50-57.

Smits, R. (2015), The Crisis Response in Europe's Economic and Monetary Union: Overview of Legal Developments, *Fordham International Law Journal 38*, pp. 1135-1191.

Snijders, P. (2014), 'Substance over form', tenzij de wetgever anders beslist, *Weekblad voor Fiscaal Recht* (7052), pp. 774.

Snoeks, G.G.M. and M.J.J.R. Van Mourik (2014), overgangsrecht voor de bestaande eigenwoningschuld, *Weekblad voor Privaatrecht, Notariaat en Registratie 145*(7001), pp. 1-18.

Snyder, F. (1993), The Effectiveness of European Community Law: Institutions, Processes, Tools and Techniques, *The Modern Law Review 56*(1), pp. 19-54.

Solum, L.B. (1987), On the Indeterminacy Crisis: Critiquing Critical Dogma, *The University of Chicago Law Review 54*(2), pp. 462-503.

Sorensen, R. (2001), Vagueness has no Function in Law, *Legal Theory 7*(04), pp. 387-417.

Sousa, M.R., J. Gama and E. Brandão (2016), A New Dynamic Modeling Framework for Credit Risk Assessment, *Expert Systems with Applications 45*, pp. 341-351.

Spiegler, P. and W. Milberg (2009), The Taming of Institutions in Economics: The Rise and Methodology of the '*New* New Institutionalism', *Journal of Institutional Economics 5*(03), pp. 289-313.

Stadler, A. (2014), European Developments in Collective Redress, *Journal of European Consumer and Market Law* (2), pp. 80-89.

Starr, M.A. (2010), Debt-Financed Consumption Sprees: Regulation, Freedom and Habits of Thought, *Journal of Economic Issues XLIV*(2), pp. 459-469.

Stiglitz, J.E. (2011), Rethinking Macroeconomics: What Failed, and how to Repair it, *Journal of the European Economic Association 9*(4), pp. 591-645.

Stikkelorum, M. (2016, 25-01-2016). Te hoge hypotheken verstrekt door verwarring over regels.

Szydlo, M. (2012), Independent Discretion or Democratic Legitimisation? The Relations between National Regulatory Authorities and National Parliaments under EU Regulatory Framework for Network-Bound Sectors, *European Law Journal 18*(6), pp. 793-820.

Takáts, E. and C. Upper (2013), *Credit and growth after financial crises,* BIS Working Papers No. 416.

Tang, G. and C. Upper (2010), Debt Reduction after Crises, *BIS Quarterly Review* (October), pp. 25-38.

Tax Strategy Group (2016), *Income tax & universal social charge: Incorporating an ex-ante equality impact assessment of possible changes to the income tax system,* TSG 16/05, 19 July.

Taylor, C. (2015, 26-10-2015). Blaming central bank for housing crisis is a mistake. *The Irish Times.*

Taylor, J.B. (2009), *The financial crisis and the policy responses: An empirical analysis of what went wrong,* NBER Working Paper 14631, January.

Ter Kuile, G., L. Wissink and W. Bovenschen (2015), Tailor-made Accountability within the Single Supervisory Mechanism, *Common Market Law Review 52*(1), pp. 155-189.

Terpan, F. (2015), Soft Law in the European Union? The Changing Nature of EU Law, *European Law Journal 21*(1), pp. 68-96.

Thatcher, M. (2002), Regulation after Delegation: Independent Regulatory Agencies in Europe, *Journal of European Public Policy 9*(6), pp. 954-972.

The High-Level Group on Financial Supervision in the EU (2009), *Report,* Brussels, 25 February.

The Irish Times. (2014, 18-12-2014). End the uncertainty; mortgage lending. *The Irish Times*, p. 17.

Thomas, L.C. (2000), A Survey of Credit and Behavioural Scoring: Forecasting Financial Risk of Lending to Consumers, *International Journal of Forecasting 16*(2), pp. 149-172.

Thomas, L.C. (2009), Modelling the Credit Risk for Portfolios of Consumer Loans: Analogies with Corporate Loan Models, *Mathematics and Computers in Simulation 79*(8), pp. 2525-2534.

Thomas, L.C. (2010), Consumer Finance: Challenges for Operational Research, *Journal of the Operational Research Society 61*(1), pp. 41-52.

Thomas, L.C., J. Ho and W.T. Scherer (2001), Time Will Tell: Behavioural Scoring and the Dynamics of Consumer Credit Assessment, *IMA Journal of Management Mathematics 12*, pp. 89-103.

Thommes, K., M. Faure and K. Heine (2015), The Internal Market and the Consumer: What Consumers Actually Choose, *Columbia Journal of European Law 21*(1), pp. 47-70.

Tombs, S. (2015), Crisis, what Crisis? Regulation and the Academic Orthodoxy, *The Howard Journal of Criminal Justice 54*(1), pp. 57-72.

Tonner, K. (2013), Das Gesetz Zur Umsetzung Der Verbraucherrechterichtlinie – Unionsrechtlicher Hintergrund Und Überblick, *Verbraucher Und Recht* (12), pp. 443-448.

Torpman, J. and F. Jörgensen (2005), Legal Effectiveness: Theoretical Developments Concerning Legal Transplants, *Archiv Für Rechts- Und Socialphilosophie 91*(4), pp. 138-159.

Tridimas, T. (2016). European banking union. Budapest*, FIDE Congress Proceedings Vol. 1.*

Tröger, T.H. (2014), The Single Supervisory Mechanism – Panacea Or Quack Banking Regulation? Preliminary Assessment of the New Regime for the Prudential Supervision of Banks with ECB Involvement, *European Business Organization Law Review (EBOR) 15*(04), pp. 449-497.

Trubek, D.M. and L. Trubek G (2005), Hard and Soft Law in the Construction of Social Europe: The Role of the Open Method of Co-Ordination, *European Law Journal 11*(3), pp. 343-364.

Tse, C., T. Rodgers and J. Niklewski (2014), The 2007 Financial Crisis and the UK Residential Housing Market: Did the Relationship between Interest Rates and House Prices Change? *Economic Modelling 37*, pp. 518-530.

Tudela, M. and G. Young (2005), *The Determinants of Household Debt and Balance Sheets in the United Kingdom,* Bank of England Working Paper No. 266.

Unberath, H. and A. Johnston (2007), The Double-Headed Approach of the ECJ Concerning Consumer Protection, *Common Market Law Review 44*, pp. 1237-1284.

Uwer, D. and M. Rademacher (2015), Das Verfassungsrechtliche Rückwirkungsverbot Bei Der Bekanntmachung Bankaufsichtlicher Maßnahmen Nach § 60b KWG, *Zeitschrift Für Bank- Und Kapitalmarktrecht* (4), pp. 145-149.

Vakstudie Nieuws (2014), Staatssecretaris rept over handhavingsbeleid, *Vakstudie Nieuws* (43).

Van Boom, W. H. & Loos, M. (2008). *Effective enforcement of consumer law in europe: Synchronizing private, public, and collective mechanisms.* Unpublished manuscript.

Van Boom, W. H. (2012), Hypothecair krediet aan consumenten – een overzicht, *Tijdschrift voor Consumentenrecht en Handelspraktijken* (6), pp. 268-278.

Van de Kerkhof, J. (2009), Vierde tranche Awb: de adviseur beboet? *Weekblad voor Fiscaal Recht* (6825), pp. 1084-1090.

Van den Berg, M.F.M. (2013), Better safe than sorry - Het probleem van een (te) open zorgplichtbepaling in de Wft, *Tijdschrift voor Financieel recht* (9), pp. 311-313.

Van den Berg, J.E. (2013), Tariefsaanpassing aftrek kosten eigen woning, *Fiscaal Advies* (6), pp. 20-21.

Van den Bergh, R.J. and L. Visscher (2008), The Preventive Function of Collective Actions for Damages in Consumer Law, *Erasmus Law Review 1*(2), pp. 5-30.

Van den End, J.W. (2016), A Macroprudential Approach to Address Liquidity Risk with the Loan-to-Deposit Ratio, *The European Journal of Finance 22*(3), pp. 237-253.

Van der Heijden, H., K. Dol and M. Oxley (2011), Western European Housing Systems and the Impact of the International Financial Crisis, *Journal of Housing and the Built Environment 26*, pp. 295-313.

Van der Paardt, R.N.G. (2013), Fiscale maatregelen voor de vastgoedmarkt, *Bouwrecht*, pp. 126.

Van der Wal, P. (2007), Schuld en boete; over toerekening van opzet en schuld van de fiscale gemachtigde, *Tijdschrift Formeel Belastingrecht* (2).

Van Erp, J. (2010), Regulatory Disclosure of Offending Companies in the Dutch Financial Market: Consumer Protection or Enforcement Publicity? *Law & Policy 32*(4), pp. 407-433.

Van Erp, J. (2011), Naming without Shaming: The Publication of Sanctions in the Dutch Financial Market, *Regulation & Governance 5*(3), pp. 287-308.

Van Gestel, R. and H. Micklitz (2011), *Revitalizing doctrinal legal research in Europe: What about methodology?* EUI Working Papers LAW 2011/05.

Van Gestel, R. and H. Micklitz (2014), Why Methods Matter in European Legal Scholarship, *European Law Journal 20*(3), pp. 292-316.

Van Mourik, M.J.J.R. (2013), De nieuwe eigenwoningschuld, *Weekblad voor Privaatrecht, Notariaat en Registratie 144*(6986), pp. 663-675.

Van Nieuwenhuyze, C. (2013), Debt, Assets and Imbalances in the Euro Area: An Aggregate View, *Revue De l'OFCE 2013/1*(N° 127), pp. 123-152.

Van 't Hof, A. (2016), Designing Macroprudential Regulation and Supervision Outside the Scope of the Banking Union: Lessons from the Netherlands and Ireland, *Journal of Banking Regulation*

Van Tuyll, C.F.J. (2012), Enkele AFM-Boetebesluiten ter zake van overkreditering langs de lat van het bepaalbaarheidsgebod, *Onderneming en Financiering 20*(2), pp. 30-38.

Van Wingerde, C. G. (2012), *De afschrikking voorbij,* PhD thesis.

Veltrop, D. and J. de Haan (2014), *I just cannot get you out of my head: Regulatory capture of financial sector supervisors,* DNB Working Paper No. 410, January.

Verband der Privaten Bausparkassen (2014), *The "Bauspar" System in Germany.*

Verbraucherzentrale Bundesverband (2015), *Verbraucherdarlehensverträge – transparente Verträge und verantwortliche Beratung bei Immobilienfinanzierung und Überziehungskrediten,* Stellungnahme des Verbraucherzentrale Bundesverbandes zum Gesetzentwurf der Bundesregierung zur Umsetzung der Wohnimmobilienkreditrichtlinie.

Verdun, A. (2013), The Building of Economic Governance in the European Union, *Transfer: European Review of Labour and Research 19*(1), pp. 23-35.

Verheij, A.,J. (2015), Should Private Lawyers Reconsider the Compensatory Principle in an Age of Administrative Enforcement? *European Review of Private Law 23*(4), pp. 551-565.

Viimsalu, S. (2010), The Over-Indebtedness Regulatory System in the Light of the Changing Economic Landscape, *Juridica International XVII*, pp. 217-226.

Vlaicu, A. (2011), Effectiveness of EU Law in Member States, *Lex ET Scientia International Journal 18*(1), pp. 162-173.

Voigt, S. (2013), How (Not) to Measure Institutions, *Journal of Institutional Economics 9*(01), pp. 1-26.

Waldron, J. (1994), Vagueness in Law and Language: Some Philosophical Issues, *California Law Review 82*(3), pp. 509-540.

Waldron, R. and D. Redmond (2014), The Extent of the Mortgage Crisis in Ireland and Policy Responses, *Housing Studies 29*(1), pp. 149-165.

Warnock, V.C. and F.E. Warnock (2008), Markets and Housing Finance, *Journal of Housing Economics 17*(3), pp. 239-251.

Weber, F. and M. Faure (2015), The Interplay between Public and Private Enforcement in European Private Law: Law and Economics Perspective, *European Review of Private Law 23*(4), pp. 525-550.

Weber, R.H. (2010), Multilayered Governance in International Financial Regulation and Supervision, *Journal of International Economic Law 13*(3), pp. 683-704.

Wefers, A. (2015, 31-12-2015). Niedrige zinsen fordern schwarz-rot; gesetzgeber greift in vielen feldern korrigierend ein - stabilisierung von banken und lebensversicherern. *Börsen-Zeitung*, p. 32.

Weston, C. (2016, 20-01-2016). Call for change in mortgage lending rules. *Irish Independent*, p. 16.

Whelan, K. (2014), Ireland's Economic Crisis: The Good, the Bad and the Ugly, *Journal of Macroeconomics 39, Part B*, pp. 424-440.

Whitehead, C., K. Scanlon and J. Lunde (2014), *The Impact of the Financial Crisis on European Housing Systems: A review,* Swedish Institute for European Policy Studies, SIEPS 2014:2, May.

Wieser, R. and A. Mundt (2014), Housing Subsidies and Taxation in Six EU Countries, *Journal of European Real Estate Research 7*(3), pp. 248-269.

Williamson, O.E. (1998), Transaction Cost Economics: How it Works; Where it is Headed, *De Economist 146*(1), pp. 23-58.

Williamson, O.E. (2000), The New Institutional Economics: Taking Stock, Looking Ahead, *Journal of Economic Literature XXXVIII*, pp. 595-613.

Willis, L.E. (2008), Against Financial-Literacy Education, *Iowa Law Review 94*, pp. 197-285.

Willis, L.E. (2009), Evidence and Ideology in Assessing the Effectiveness of Financial Literacy Education, *San Diego Law Review 46*, pp. 415-458.

Wilman, F.G. (2016), The End of the Absence? The Growing Body of EU Legislation on Private Enforcement and the Main Remedies it Provides for, *Common Market Law Review 53*, pp. 887-936.

Wissing, A. and E. Dieben (2014), Kapers op de kust van de financieel toezichthouders, *Tijdschrift voor Financieel Recht* (3), pp. 86-97.

Wolf, R.A. (2014), Misbruik van recht en fraus legis; de grenzen verkend? *Tijdschrift voor de Rechterlijke Macht* (9), pp. 310-315.

Wolfers, B. and T. Voland (2014), Europäische Zentralbank Und Bankenaufsicht – Rechtsgrundlage Und Demokratische Kontrolle Des Single Supervisory Mechanism, *Zeitschrift Für Bank- Und Kapitalmarktrecht* (5), pp. 177-185.

Wolswijk, G. (2006), Determinants of Mortgage Debt Growth in EU Countries, *International Journal of Housing Policy 6*(2), pp. 131-149.

Wonder, N., W. Wilhelm and D. Fewings (2008), The Financial Rationality of Consumer Loan Choices: Revealed Preferences Concerning Interest Rates, Down Payments, Contract Length, and Rebates, *Journal of Consumer Affairs 42*(2), pp. 243-270.

Wong, N.S., A. Lim and S.L. Wong (2013), Using Macroprudential Tools to Address Systemic Risks in the Property Sector in Singapore, *SEACEN Financial Stability Journal 4*, pp. 27-41.

World Bank (2013), *Responsible lending - Overview of regulatory tools,* World Bank Paper, October

Wösthoff, P. (2010), *Die Verbraucherkreditrichtlinie 2008/48/EG und deren Umsetzung ins Deutsche Recht,* Unpublished Dr. iur., Universität Wien, Wien.

Wymeersch, E. (2014), *The Single Supervisory Mechanism or "SSM", Part One of the Banking Union,* ECGI Law Working Paper N° 240/2014, February.

Wyplosz, C. (2005), Fiscal Policy: Institutions versus Rules, *National Institute Economic Review* (191), pp. 64-78.

Wyplosz, C. (2010), *The eurozone in the current crisis,* ADBI Working Paper Series No. 207, March.

Wyplosz, C. (2011), Fiscal Discipline: Rules rather than Institutions, *National Institute Economic Review* (217), pp. R19-R30.

Yap, B.W., S.H. Ong and N.H.M. Husain (2011), Using Data Mining to Improve Assessment of Credit Worthiness Via Credit Scoring Models, *Expert Systems with Applications 38*, pp. 13274-13283.

Yeung, K. (1999), Quantifying Regulatory Penalties: Australian Competition Law Penalties in Perspective, *Melbourne University Law Review 23*, pp. 440-475.

Yildirim, N. (2015), Kündigung Von Bausparverträgen: Wirksamkeit Und Folgen Für Den Bausparer, *Verbraucher Und Recht* (7), pp. 258-261.

Young, K. (2013), Financial Industry Groups' Adaptation to the Post-Crisis Regulatory Environment: Changing Approaches to the Policy Cycle, *Regulation & Governance 7*(4), pp. 460-480.

Young, K.L. (2012), Transnational Regulatory Capture? An Empirical Examination of the Transnational Lobbying of the Basel Committee on Banking Supervision, *Review of International Political Economy 19*(4), pp. 663-688.

Zemanek, H. (2010), Competitiveness within the Euro Area: The Problem that Still Needs to Be Solved, *Economic Affairs 30*(3), pp. 42-47.

Zemanek, H. (2012), How Governments should Support the Adjustment of Competitiveness in the Euro Area? And how they should Not, *Economic Affairs 32*(3), pp. 78-84.

Zheng, X., S. El Ghoul, O. Guedhami and C.C.Y. Kwok (2012), National Culture and Corporate Debt Maturity, *Journal of Banking & Finance 36*(2), pp. 468-488.

Zinman, J. (2010), Restricting Consumer Credit Access: Household Survey Evidence on Effects around the Oregon Rate Cap, *Journal of Banking & Finance 34*(3), pp. 546-556.

Legal acts of the European Union

Council Directive 85/577 of 20 December 1985, *OJ* 1985, L 372/31

Council Directive 87/102 of 22 December 1986, OJ 1986, L 42/48

Council Regulation 2223/96 of 25 June 1996, OJ 1996, L 310/1

Council Regulation 1466/97 of 7 July 1997, OJ 1997, L 209/1

Council Regulation 1467/97 of 7 July 1997, OJ 1997, L 209/6

Directive 98/27 of 19 May 1998 of the European Parliament and of the Council, OJ 1998, L 166/51

Council Regulation 2532/98 of 23 November 1998, OJ 1998, L 318/4

Directive 2000/31 of the European Parliament and of the Council of 8 June 2000, OJ 2000, L 178/1

Directive 2004/39 of the European Parliament and of the Council of 21 April 2004, OJ 2004, L 145/1

Council Regulation 1055/2005 of 27 June 2005, OJ 2005, L 174/1

Council Regulation 1056/2005 of 27 June 2005, OJ 2005, L 174/5

Directive 2008/48 of the European Parliament and of the Council of 23 April 2008, OJ 2008, L 133/66

Decision 2008/29 of the European Central Bank of 18 December 2008, OJ 2009, L3/4

Directive 2009/22 of the European Parliament and of the Council of 23 April 2009, OJ 2009, L 110/30

Directive 2009/65 of the European Parliament and of the Council of 13 July 2009, OJ 2009, L302/32

Directive 2009/138 of the European Parliament and of the Council of 25 November 2009, OJ 2009, L 335/1

Regulation 1093/2010 of the European Parliament and of the Council of 24 November 2010, OJ 2010, L 331/12

Regulation 1094/2010 of the European Parliament and of the Council of 24 November 2010, OJ 2010, L 331/48

Regulation 1095/2010 of the European Parliament and of the Council of 24 November 2010, OJ 2010, L 331/84

Directive 2010/78 of the European Parliament and of the Council of 24 November 2010, OJ 2010, L 331/120

Directive 2011/61 of the European Parliament and of the Council of 8 June 2011, OJ 2011, L 174/1

Regulation 1173/2011 of the European Parliament and of the Council of 16 November 2011, OJ 2011, L306/1

Regulation 1174/2011 of the European Parliament and of the Council of 16 November 2011, OJ 2011, L306/8

Regulation 1175/2011 of the European Parliament and of the Council of 16 November 2011, OJ 2011, L306/12

Regulation 1176/2011 of the European Parliament and of the Council of 16 November 2011, OJ 2011, L306/25

Council Regulation 1177/2011 of 8 November 2011, OJ 2011, L306/33

Council Directive 2011/85/EU of 8 November 2011, OJ 2011, L306/41

Regulation 236/2012 of the European Parliament and of the Council of 14 March 2012, OJ 2012, L 86/1

Council Recommendation of 10 July 2012 on the National Reform Programme 2012 of the Netherlands and delivering a Council opinion on the Stability Programme of the Netherlands, 2012-15, OJ 2012, C 219/88

Regulation 472/2013 of the European Parliament and of the Council of 21 May 2013, OJ 2013, L140/1

Regulation 473/2013 of the European Parliament and of the Council of 21 May 2013, OJ 2013, L140/11

Regulation 524/2013 of the European Parliament and of the Council of 21 May 2013, OJ 2013, L 165/1

Directive 2013/11/EU of the European Parliament and of the Council of 21 May 2013, OJ 2013, L 165/63

Directive 2013/36 of the European Parliament and of the Council of 26 June 2013, OJ 2013, L176/338

Regulation 575/2013 of the European Parliament and of the Council of 26 June 2013, OJ 2013, L176/1

Recommendation 2 of the Council Recommendation of 9 July 2013 on the National Reform Programme 2013 of the Netherlands and delivering a Council opinion on the Stability Programme of the Netherlands, 2012-2017, *OJ* 2013, C 217/89

Council Regulation 1024/2013 of 15 October 2013, OJ 2013, L287/63

Regulation 1022/2013 of the European Parliament and of the Council of 22 October 2013, OJ 2013, L287/5

Regulation 1303/2013 of the European Parliament and of the Council of 17 December 2013, OJ 2013, L 347/320

Directive 2014/17 of the European Parliament and of the Council of 4 February 2014, OJ 2014, L60/34

Directive 2014/91 of the European Parliament and of the Council of 23 July 2014, OJ 2014, L 257/186

Regulation 806/2014 of the European Parliament and of the Council of 15 July 2014, OJ 2014, L225/1

Regulation 468/2014 of the European Central Bank of 16 April 2014, OJ 2014, L 141/2

Council Recommendation of 8 July 2014 on the National Reform Programme 2014 of the Netherlands and delivering a Council opinion on the Stability Programme of the Netherlands, 2014, *OJ* 2013, C 247/88

Commission Delegated Regulation 2015/35 of 10 October 2014, OJ 2015, L12/1

Commission Delegated Regulation 2015/62 of 10 October 2014, OJ 2015, L11/37

Council Regulation 2015/159 of 27 January 2015, OJ 2015, L27/1

Council Recommendation of 14 July 2015 on the 2015 National Reform Programme of the Netherlands and delivering a Council opinion on the 2015 Stability Programme of the Netherlands, *OJ* 2015, C 272/83

Regulation 2016/445 of the European Central Bank of 14 March 2016, OJ 2016, L 78/60

Council Recommendation of 12 July 2016 on the 2016 National Reform Programme of Sweden and delivering a Council opinion on the 2016 Convergence Programme of Sweden, *OJ* 2016, C 299/53

Case law of the Court of Justice of the European Union

Case 9/56 *Meroni* [1958] ECR 11

Case 98/80 *Romano v Institut National d'Assurance Maladie-Invalidité* [1981] ECR 1241

Case 283/81, *CILFIT* [1982], ECR 3415

Case 220/83 *Commission v France* [1986] ECR 3663

Case 68/88, *Commission v Greece* [1989] ECR 2965

Case C-288/89 *Gouda* [1991] ECR I-4007

Case C-279/93 *Schumacker* [1994] ECR I-5535

Case C-233/94 *Germany v Parliament and Council* [1997] ECR I-2405.

Case C-376/98 *Germany v European Parliament and Council [Tobacco Advertising]* [2000] ECR I-8419.

Case C-301/02 P *Tralli v ECB* [2005] ECR I-4071

Joined Cases C-154/04 and C-155/04 *The Queen, on the application of Alliance for Natural Health and Others v Secretary of State for Health and National Assembly for Wales* [2005] ECR I-6541

Case C-527/06 *Renneberg* [2008] ECR I-7735

Case C-424/07 *Commission v. Germany* [2009], ECR I-11431, ECLI:EU:C:2009:749

Case C-602/10 *Volksbank România* [2012], ECLI:EU:C:2012:443

Case C 543/09 *Deutsche Telekom* [2011], ECR I-03441, ECLI:EU:C:2011:279

Case C-270/12 *United Kingdom v European Parliament and Council* [2014], EU:C:2014:18

Case C-370/12 *Pringle* [2012], ECLI:EU:C:2012:756

Case C-265/12 *Citroën Belux* [2013], ECLI:EU:C:2013:498

Case C-565/12 *LCL Le Crédit Lyonnais SA v. Kalhan* [2014], ECLI:EU:C:2014:190

Case C-62/14 *Gauweiler and Others* [not yet published], ECLI:EU:C:2015:400

Case C-449/13 *CA Consumer Finance SA v. Bakkaus and Bonato* [2015], ECLI:EU:C:2014:2464

Case C-508/13 *Estonia v Parliament and Council* [not yet published], ECLI:EU:C:2015:403

Case C‑110/14 *Horațiu Ovidiu Costea v. SC Volksbank România SA* [not yet published], ECLI:EU:C:2015:538

Recommendations and guidelines of EU agencies

European Systemic Risk Board Recommendation 2011/3 of 22 December 2011, OJ 2012, C 41/1

European Systemic Risk Board Recommendation 2012/2 of 20 December 2012, OJ 2013, C 119/1

European Systemic Risk Board Recommendation 2013/1 of 4 April 2013, OJ 2013, C 170/1

European Systemic Risk Board Recommendation 2014/1 of 18 June 2014, OJ 2014, C 293/1

European Banking Authority, Guidelines common procedures and methodologies for the supervisory review and evaluation process (SREP), EBA/GL/2014/13, https://www.eba.europa.eu/documents/10180/935249/EBA-GL-2014-13+(Guidelines+on+SREP+methodologies+and+processes).pdf

European Banking Authority, Guidelines on creditworthiness assessment, EBA/GL/2015/11, https://www.eba.europa.eu/regulation-and-policy/consumer-protection-and-financial-innovation/guidelines-on-creditworthiness-assessment/

European Banking Authority, Guidelines on sound remuneration policies under Articles 74(3) and 75(2) of Directive 2013/36/EU and disclosures under Article 450 of Regulation (EU) No 575/2013, EBA/GL/2015/22, https://www.eba.europa.eu/regulation-and-policy/remuneration/guidelines-on-sound-remuneration-policies#

European Systemic Risk Board Recommendation 2015/2 of 15 December 2015, OJ 2016, C 97/9

European Systemic Risk Board Recommendation 2016/4 of 24 June 2016, OJ 2016, C 290/1

European Systemic Risk Board Recommendation 2016/14 of 31 October 2016, OJ 2016, C 31/1

Dutch law and legislation

Wetten (acts)

Algemene wet bestuursrecht (Awb) (General administrative law act), available at http://wetten.overheid.nl/BWBR0005537/

Algemene wet inzake rijksbelastingen (AWR) (General act on state taxes), available at http://wetten.overheid.nl/BWBR0002320

Bankwet 1998 (Central Bank Act 1998), available at http://wetten.overheid.nl/BWBR0009508

Implementatiewet buitengerechtelijke geschillenbeslechting consumenten (Act on out- of-court settlement of consumer disputes), available at http://wetten.overheid.nl/BWBR0036550

Kaderwet zelfstandige bestuursorganen (Framework act for non-departemenal administrative bodies), available at http://wetten.overheid.nl/BWBR0020495

Successiewet (Inherentance Act), available at http://wetten.overheid.nl/BWBR0002226

Wet op de Economische Delicten (WED) (Act on Economic Offences), available at http://wetten.overheid.nl/BWBR0002063

Wet op het financieel toezicht (Wft) (Act on Financial Supervision), available at http://wetten.overheid.nl/BWBR0020368.

Wet inkomstenbelasting 2001 (Wet IB 2001) (Act on income tax 2001), available at http://wetten.overheid.nl/BWBR0011353

Wet waardering onroerende zaken (Act on Real Estate Valuation), available at http://wetten.overheid.nl/BWBR0007119

Algemene maatregelen van bestuur (general administrative orders)

Besluit bestuurlijke boetes financiële sector (Decree administrative fines financial sector), available at http://wetten.overheid.nl/BWBR0026204

Besluit Gedragstoezicht financiële ondernemingen Wft (Bgfo) (Decree on Conduct of Business Supervision of Financial Undertakings under the Wft), available at http://wetten.overheid.nl/BWBR0020421

Besluit prudentiële regels Wft (Decree on prudential rules Wft), available at http://wetten.overheid.nl/BWBR0020420

Besluit uitvoering EU-verordeningen financiële markten (Decree execution EU regulations financial markets), available at http://wetten.overheid.nl/BWBR0032230

Ministeriële en toezichthouderregelingen (ministerial decrees and supervisory regulations)

Besluit aanwijzing geschilleninstanties Wft (Ministerial decree designating settlement bodies Wft), available at http://wetten.overheid.nl/BWBR0036800

Instellingsbesluit Financieel Stabiliteitscomité (Decree on the estalishment of the Financial Stability Committee) is available at http://wetten.overheid.nl/BWBR0032179

Organisatie- en mandaatbesluit Ministerie van Financiën 2015 (Decree on the organisation and mandate of the Ministry of Finance), available at http://wetten.overheid.nl/BWBR0037135

Regeling specifieke bepalingen CRD IV en CRR (Regulation specific provisions CRD IV and CRR*),* available at http://wetten.overheid.nl/BWBR0034435/2015-10-15

Regeling taakuitoefening en grensoverschrijdende samenwerking financiële toezichthouders Wft (Decree on performance of duties and cross-border cooperation of financial supervisors), available at http://wetten.overheid.nl/BWBR0032529

Tijdelijke regeling hypothecair krediet (Trhk) (Temporary regulation of mortgage credit)*,* available at http://wetten.overheid.nl/BWBR0032503

Uitvoeringsregeling inkomstenbelasting 2001, available at: http://wetten.overheid.nl/BWBR0012031.

Uitvoeringsregeling schenk- en erfbelasting (Regulation on gift- and inherentance tax), available at http://wetten.overheid.nl/BWBR0027018

Uitvoeringsregeling Wft, available at http://wetten.overheid.nl/BWBR0020537

Dutch case law

Hoge Raad 26 May 1926, *NJ* 1926, 723

Hoge Raad 6 April 1938, B. nr. 6634

Hoge Raad 9 November 1954, *NJ* 1955, 55

Hoge Raad 27 December 1967, ECLI:NL:HR:1967:AX6049, *BNB* 1968/80

Hoge Raad 23 June 1976, ECLI:NL:HR:1976:AX3678, *BNB* 1976/199

Hoge Raad 15 July 1980, *BNB* 1980/315

Hoge Raad 22 July 1982, ECLI:NL:HR:1982:AW9473, *BNB* 1982/243

Hoge Raad 7 December 1983, ECLI:NL:HR:1983:AW8750, *BNB* 1984/21

Hoge Raad 11 July 1984, ECLI:NL:HR:1984:BH6683, *BNB* 1984/268

Hoge Raad 21 November 1984, ECLI:NL:HR:1984:AC8603, *BNB* 1985/32.

Hoge Raad 7 September 1988, ECLI:NL:HR:1988:ZC3892, *BNB* 1988/319

Hoge Raad 19 December 1990, ECLI:NL:HR:1990:ZC4481, *BNB* 1992/217

Hoge Raad 16 September 1992, ECLI:NL:HR:1992:ZC5102, *BNB* 1994/2

Hoge Raad 25 October 2000, ECLI:NL:HR:2000:AA7846, *BNB* 2001/123.

Hoge Raad 13 July 2001 ECLI:NL:HR:2001:AB2642, *BNB* 2001/398, *NTFR* 2001/1034

Hoge Raad 10 August 2001, ECLI:NL:HR:2001:AB3138, *BNB* 2001/399, *NTFR* 2001/1211

Hoge Raad 25 March 2003, *NJ* 2003, 552

Hoge Raad 13 February 2004, *BNB* 2004/160

Hoge Raad 22 October 2004, ECLI:NL:PHR:2004:AH9156

Hoge Raad 8 February 2005, ECLI:NL:HR:2005:AR3719

Hoge Raad 1 December 2006, ECLI:NL:HR:2006:AU7741, *BNB* 2007/151

Hoge Raad 27 April 2007, ECLI:NL:HR:2007:BA3865

Hoge Raad HR 29 februari 2008, ECLI:NL:HR:2008:BC5346, *BNB* 2008/156

CBb 1 April 2008, ECLI:NL:CBB:2008:BC8271, *PJ* 2008/42 or *RF* 2008/65 or *AB* 2010/142.

Rb Rotterdam 3 September 2008, ECLI:NL:RBROT:2008:BF1175, *JOR* 2008/274 or *AB* 2008/346 or *RF* 2008/94

Rb Rotterdam 2 July 2009, ECLI:NL:RBROT:2009:BJ1746, *JOR* 2009/262 or *JONDR* 2009/490

Rb Rotterdam 20 May 2010, ECLI:NL:RBROT:2010:BM5231, *JOR* 2010/196

Hoge Raad 3 December 2010, *BNB* 2011/59

Rb Rotterdam 16 December 2010, ECLI:NL:RBROT:2010:BP0011, *JOR* 2011/83 or *RF* 2011/27 or *JONDR* 2011/164

Rb Utrecht 6 April 2011, ECLI:NL:RBUTR:2011:BP9469, *NJF* 2011/298

Hoge Raad 15 April 2011, ECLI:NL:HR:2011:BN6350, *V-N* 2011/20.4

Rb Leeuwarden 27 April 2011, ECLI:NL:RBLEE:2011:BQ3459

Rb Rotterdam 4 May 2011, ECLI:NL:RBROT:2011:BQ3835, *JONDR* 2011/148

Rb 's-Gravenhage 10 August 2011, ECLI:RBSGR:2011:BU3314, *RF* 2012/26

Hof Amsterdam 13 October 2011, ECLI:NL:GHAMS:2011:BU1584

Hoge Raad 6 March, 2012, ECLI:NL:HR:2012:BQ8596

Hof Amsterdam 8 March 2012, ECLI:NL:GHAMS:2012:BV8669

CBb 19 July 2013, ECLI:NL:CBB:2013:69, *JOR* 2013/280

Hof 's-Hertogenbosch 28 August 2013, ECLI:NL:GHSHE:2013:3928

Hof Arnhem-Leeuwarden 3 September 2013, ECLI:NL:GHARL:2013:6476

Hof Arnhem-Leeuwarden 17 September 2013, ECLI:NL:GHARL:2013:6826, *JOR* 2013/313

CBb 10 September 2013, ECLI:NL:CBB:2013:104, *JOR* 2013/312

CBb 28 November 2013, ECLI:NL:CBB:2013:260, *JOR* 2014/41

Hof Amsterdam 13 March 2014, ECLI:NL:GHAMS:2014:1086

Rb Noord-Holland 9 April 2014, ECLI:NL:RBNHO:2014:8140, *NJF* 2015/10

Rb Amsterdam 14 April 2014, ECLI:NL:RBAMS:2014:2404, *RVR* 2014/78

Hoge Raad 13 June 2014, ECLI:NL:PHR:2014:76 and NL:HR:2014:1385, *JOR* 2014/206

Hoge Raad, 19 September 2014, ECLI:NL:HR:2014:2694, *BNB* 2015/11

Hoge Raad 3 October 2014, ECLI:NL:HR:2014:2872

Hoge Raad, 10 October 2014, ECLI:NL:HR:2014:2927, *BNB* 2015/38 or *FED* 2014/100

Hoge Raad, 21 November 2014, ECLI:NL:HR:2014:3349, *NJB* 2014/2162

Rb Amsterdam 31 December 2014, ECLI:NL:RBAMS:2014:9091

Hof Amsterdam 19 February 2015, ECLI:NL:GHAMS:2015:547

Hoge Raad 3 April 2015, ECLI:NL:HR:2015:809

Hof Arnhem-Leeuwarden 26 May 2015, ECLI:NL:GHARL:2015:3705

Hof Amsterdam 2 February 2016, ECLI:NL:GHAMS:2016:355, *NTHR* 2016/2

Hof Amsterdam 31 May 2016, ECLI:NL:GHAMS:2016:2028, *JOR* 2016/201

Rb Den Haag, 1 June 2016, ECLI:NL:RBDHA:2016:5961

Rb Amsterdam 15 June 2016, ECLI:NL:RBAMS:2016:3464

CBb 15 June 2017, ECLI:NL:CBB:2017:223

Hoge Raad 16 June 2017, ECLI:NL:HR:2017:1107

Irish law and legislation

Acts of the Oireachtas

Central Bank Act 1942, No. 22/1942, consolidated version available at http://revisedacts.lawreform.ie/eli/1942/act/22/front/revised/en/html

European Communities Act 1972, No. 27/1972, available at http://www.irishstatutebook.ie/eli/1972/act/27/enacted/en/print

Central Bank Act 1989, No. 16/1989, available at http://www.irishstatutebook.ie/eli/1989/act/16/enacted/en/index.html

Consumer Credit Act 1995, No. 7/1995, available at http://www.irishstatutebook.ie/eli/1995/act/24/enacted/en/html

Taxes Consolidation Act 1997, available at http://www.irishstatutebook.ie/eli/1997/act/39/enacted/en/html and (unofficial) consolidated version available at http://www.taxworld.ie/tca-1997/

Finance Act 2001, No. 7/2001, available at http://www.irishstatutebook.ie/eli/2001/act/7/enacted/en/html

Asset Covered Securities Act 2001, No. 47/2001 available at http://www.irishstatutebook.ie/eli/2001/act/47/enacted/en/html

Central Bank and Financial Services Authority of Ireland Act 2003, No. 12/2003, available at http://www.irishstatutebook.ie/eli/2003/act/12/enacted/en/html

Central Bank and Financial Services Authority of Ireland Act 2004, No. 21/2004, available at http://www.irishstatutebook.ie/eli/2004/act/21/enacted/en/print.html

Interpretation Act 2005, No. 23/2005, available at http://www.irishstatutebook.ie/eli/2005/act/23/enacted/en/html

Asset Covered Securities (Amendment) Act 2007, No. 13/2007, available at http://www.irishstatutebook.ie/eli/2007/act/13/enacted/en/html

Finance Act 2009, No. 12/2009, available at http://www.irishstatutebook.ie/eli/2009/act/12/enacted/en/html

Finance Act 2010, No. 5/2010, available at

http://www.irishstatutebook.ie/eli/2010/act/5/enacted/en/html

Fines Act 2010, No. 8/2010, available at http://www.irishstatutebook.ie/eli/2010/act/8/enacted/en/print.html

Central Bank Reform Act 2010, No. 23/2010, available at

http://www.irishstatutebook.ie/eli/2010/act/23/enacted/en/html and a consolidated version at http://revisedacts.lawreform.ie/eli/2010/act/23/front/revised/en/html

Ministers and Secretaries (Amendment) Act 2011, No. 10/2011, available at http://www.irishstatutebook.ie/eli/2011/act/10/section/101/enacted/en/index.html

Finance Act 2012, No. 9/2012, available at http://www.irishstatutebook.ie/eli/2012/act/9/enacted/en/html

Central Bank (Supervision and Enforcement) Act 2013, No. 26/2013, available at http://www.irishstatutebook.ie/eli/2013/act/26/enacted/en/html and a consolidated version at http://revisedacts.lawreform.ie/eli/2013/act/26/front/revised/en/html

Finance Act 2013, No. 8/2013, available at http://www.irishstatutebook.ie/eli/2013/act/8/enacted/en/html

Finance (No. 2) Act 2013, No. 41/2013, available at http://www.irishstatutebook.ie/eli/2013/act/41/enacted/en/html

Credit Reporting Act 2013, No. 45/2013, available at http://www.irishstatutebook.ie/eli/2013/act/45/enacted/en/html

Finance Act 2015, No. 52/2015, available at http://www.irishstatutebook.ie/eli/2015/act/52/enacted/en/html

Finance Act 2016, No. 18/2016, available at
http://www.irishstatutebook.ie/eli/2016/act/18/enacted/en/html

Statutory Instruments

S.I. 2/1923, Revenue Commissioners Order, 1923, available at
http://www.irishstatutebook.ie/eli/1923/sro/702/made/en/print

S.I. 558/2001, Mortgage Interest (Relief at Source) Regulations 2001, available at
http://www.irishstatutebook.ie/eli/2001/si/558/made/en/print

S.I. 190/2005, Central Bank Act 1942 (Financial Services Ombudsman Council) Regulations 2005, available at http://www.irishstatutebook.ie/eli/2005/si/190/made/en/print

S.I. 281/2010, European Communities (Consumer Credit Agreements) Regulations 2010, available at
http://www.irishstatutebook.ie/eli/2010/si/281/made/en/print

S.I. 424/2011, Mortgage Interest (Relief at Source) Regulations 2011, available at
http://www.irishstatutebook.ie/eli/2011/si/424/made/en/print

S.I. 408/2012 Housing (Local Authority Loans) Regulations 2012), available at
http://www.irishstatutebook.ie/eli/2012/si/408/made/en/print

S.I. 19/2014, Credit Reporting Act 2013 (Commencement) Order 2014, available at
http://www.irishstatutebook.ie/eli/2014/si/19/made/en/print

S.I. 158/2014, European Union (Capital Requirements) Regulations 2014, available at
http://www.irishstatutebook.ie/eli/2014/si/158/made/en/print

S.I. 159/2014, European Union (Capital Requirements) (No. 2) Regulations 2014, available at
http://www.irishstatutebook.ie/eli/2014/si/159/made/en/print

S.I. 495/2014, European Union (Single Supervisory Mechanism) Regulations 2014 available at:
http://www.irishstatutebook.ie/eli/2014/si/495/made/en/print

S.I. 47/2015, Central Bank (Supervision and Enforcement) Act 2013 (Section 48) (Housing Loan Requirements) Regulations 2015, available at
http://www.irishstatutebook.ie/eli/2015/si/47/made/en/print

S.I. 142/2016, European Union (Consumer Mortgage Credit Agreements) Regulations 2016, available at http://www.irishstatutebook.ie/eli/2016/si/142/made/en/print

S.I. 486/2016 Credit Reporting Act 2013 (Section 11) (Provision of Information for Central Credit Register) Regulations 2016, available at
http://www.irishstatutebook.ie/eli/2016/si/486/made/en/pdf

S.I. 487/2016 Credit Reporting Act 2013 (Section 17) (Access to Central Credit Register) Regulations 2016, available at http://www.irishstatutebook.ie/eli/2016/si/487/made/en/pdf

S.I. 488/2016 Credit Reporting Act 2013 (Section 20) (Verification of Identity of Credit Information Subjects) Regulations 2016, available at
http://www.irishstatutebook.ie/eli/2016/si/488/made/en/pdf

S.I. No. 568/2016, *Central Bank (Supervision and Enforcement) Act 2013 (Section 48) (Housing Loan Requirements) (Amendment) Regulations 2016*, available at http://www.irishstatutebook.ie/eli/2016/si/568/made/en/print

Irish case law

Melling v. Ó Mathgamhna [1962] IR 1

Clune v. Director of Public Prosecution [1981] ILRM 17

McLoughlin v. Tuite [1989] IR 82

Registrar of Companies v. Judge David Anderson [2004] IESC 103

Square Capital Ltd v. Financial Services Ombudsman [2009] IEHC 407

J & E Davy v. Financial Services Ombudsman [2010] IESC 30

ICS Building Society v. Grant [2010] IEHC 17

Zurich Bank v. McConnon [2011] IEHC 75

Stepstone Mortgage Funding v. Fitzell [2012] IEHC 142

Irish Life and Permanent v. Financial Services Ombudsman [2012] IEHC 367

Irish Life & Permament v. Duff [2013] IEHC 43

Gaffney v. The Revenue Commissioners [2013] IEHC 651

Ryan v. Danske Bank [2014] IEHC 236

Freeman v. Bank of Scotland [2014] IEHC 284

Allied Irish Bank v. O'Brien [2015] IEHC 260

Murphy v. The Revenue Commissioners [2015] IEHC 670

Bank of Ireland v. Quinn [2016] IECA 30

German law and legislation

Gesetze (acts)

Baugesetzbuch (Federal Building Act), BGBl. I, 2004, 2414, available at https://www.gesetze-im-internet.de/bbaug/index.html

Bausparkassengesetz (BauSparkG) (Act on building and loan associations), BGBl. I, 1991, 454, available at http://www.gesetze-im-internet.de/bausparkg/

Bundesdatenschutzgesetz (Federal Data Protection Act), BGBl. I, 2003, 66, available at http://www.gesetze-im-internet.de/bdsg_1990/

Gesetz über die Bundesanstalt für Finanzdienstleistungsaufsicht (FinDAG) (Act Establishing the Federal Financial Supervisory Authority), BGBl. I, 2002, 1310, available at http://www.gesetze-im-internet.de/findag/

Bürgerliches Gesetzbuch (BGB) (Civil Code), BGBl. I, 2002,42, 2909; BGBl. I, 2003 I, 738 available at https://www.gesetze-im-internet.de/bgb

Eigenheimzulagengesetz, BGBl. I, 1997, 734, available at http://www.gesetze-im-internet.de/eigzulg/.

Einführungsgesetzes zum Bürgerlichen Gesetzbuche (Introductory Act to the Civil Code), BGBl. I, 1994, 2494; BGBl. I, 1997, 1061, available at http://www.gesetze-im-internet.de/bgbeg/

Finanzstabilitätsgesetz (FinStabG) (Financial Stability Act), BGBl. I, 2012, 2369, available at http://www.gesetze-im-internet.de/finstabg/

Gewerbeordnung (Industrial Code), BGBl. I, 1999, 202, available at https://www.gesetze-im-internet.de/gewo/

Grundgesetz (Basic Law), available at https://www.gesetze-im-internet.de/gg/index.html

Kapitalanlagegesetzbuch (KAGB) (Capital Investment Act), BGBl. I, 2013, 1981, available at http://www.gesetze-im-internet.de/kagb/

Gesetz über das Kreditwesen (KWG) (Banking Act), BGBl. I, 1998, 2776, available at http://www.gesetze-im-internet.de/kredwg/

Gesetz über Ordnungswidrigkeiten (OWiG) (Act on Regulatory Offences), BGBl. I, 1987, 602, available at http://www.gesetze-im-internet.de/owig_1968/

Pfandbriefgesetz (PfandBG) (Act on covered bonds), BGBl. I, 2005, 1373, available at http://www.gesetze-im-internet.de/pfandbg/

Unterlassungsklagengesetzes (UKlaG) (Injunctions Act), BGBl. I, 2002, 3422, 4346, available at http://www.gesetze-im-internet.de/uklag/

Versicherungsaufsichtsgesetzes (VAG) (Act on the Supervision of Insurance Undertakings), BGBl. I, 2015, 434, available at http://www.gesetze-im-internet.de/vag_2016/

Wohnungsbau-Prämiengesetz (Housing Subsidies Act), BGBl. I, 1997, 2678, available at http://www.gesetze-im-internet.de/wopg

Verordnungen (regulations)

Bausparkassen-Verordnung (BausparkV) (Regulation on building and loan associations), BGBl. I, 2015, 2576, available at http://www.gesetze-im-internet.de/bausparkv_2015/index.html

Beleihungswertermittlungsverordnung (BelWertV), BGBl. I, 2006, 1175, available at http://www.gesetze-im-internet.de/belwertv/index.html

Verordnung über die Grundsätze für die Ermittlung der Verkehrswerte von Grundstücken (Regulation on the principles for the determination of the market value of property), BGBl. I, 2010, 639, available at https://www.gesetze-im-internet.de/immowertv/

Solvabilitätsverordnung, BGBl. I, 2013, 4168, available at http://www.gesetze-im-internet.de/solvv_2014

Nederlandse samenvatting

Hoofdstuk 1: Introductie

Omdat hoge schuldniveaus van huishoudens een belangrijke rol speelden in de crises die Europa vanaf 2008 troffen, is er de afgelopen jaren op zowel Europees als nationaal niveau een breed palet aan maatregelen genomen om oplopende schulden in te perken. De hoge schuld creëerde namelijk kwetsbaarheid voor zowel individuele huishoudens als het gehele financiële systeem. Vandaar dat financiële regelgeving en de structuur van het financieel toezicht grondig werden veranderd, belastingregels werden hervormd en nieuw financieel consumentenrecht werd geïntroduceerd.

Dit roept de vraag op in hoeverre instrumenten op Europees en nationaal niveau aan de juiste randvoorwaarden voldoen om effectief kunnen zijn in het beïnvloeden van huishoudelijke schuldniveaus. De juridische vormgeving van de nieuwe wet- en regelgeving is hiervoor van cruciaal belang. Terwijl de economische literatuur over de nieuwe regelgeving snel groeit, is het juridisch onderzoek hiernaar beperkt. Mede in het licht van de grote diversiteit in schuldniveaus tussen lidstaten is het tevens de vraag waar de EU en waar de lidstaten actie moeten ondernemen. Het antwoord op deze vraag wordt voor wat betreft het optreden van de EU deels bepaald door de randvoorwaarden voor effectiviteit, doordat het subsidiariteitsbeginsel een belangrijke rol speelt in de bevoegdheidsverdeling tussen de EU en haar lidstaten. Op grond van dit beginsel mag de EU immers slechts optreden 'indien en voor zover de doelstellingen van het overwogen optreden niet voldoende door de lidstaten (…) kunnen worden verwezenlijkt, maar (…) beter door de Unie kunnen worden bereikt.'[2117]

Dit onderzoek beantwoordt de vraag in hoeverre instrumenten gericht op regulering van schuld van huishoudens effectief kunnen zijn vanuit interdisciplinair perspectief. Het onderzoek bevindt zich op het snijvlak van recht en economie. Het onderzoeksobject is recht dat een economisch doel dient en het analytisch raamwerk integreert inzichten vanuit zowel economische als juridische sub-disciplines. Ook het doel van het onderzoek – het analyseren van de nieuwe wet- en regelgeving binnen het bestaande juridische kader, teneinde na te gaan of de instrumenten effectief kunnen zijn – combineert beide disciplines. Niettemin is de gebruikte methode vooral juridisch, namelijk interpretatie van juridische teksten op basis van letterlijke, teleologische en systematische uitleg. Deze interpretatie

[21172117] Art. 5(3) Verdrag betreffende de Europese Unie.

betreft meerdere rechtssystemen; het onderzoek is namelijk ook rechtsvergelijkend. Naast Europese regelgeving, wordt de wet- en regelgeving in Nederland, Ierland en Duitsland geanalyseerd. Deze lidstaten zijn gekozen op basis van variatie in schuldniveaus en variatie in de instrumenten om deze schuldniveaus in te dammen.

Het analytisch raamwerk om vast te stellen in hoeverre de instrumenten aan randvoorwaarden voldoen om effectief te kunnen zijn, is kwalitatief. Hiermee is het complementair aan bestaand empirisch, kwantitatief onderzoek naar deze instrumenten. Gebaseerd op bestaande literatuur, gaat dit onderzoek voor elk instrument na in hoeverre:

1. het bepaald en compleet is;
2. het handhaafbaar is met proportionele en afschrikwekkende sancties;
3. het onafhankelijk kan worden toegepast, gehandhaafd, en aangepast.

Verder gaat het onderzoek na of de relatie tussen de verschillende instrumenten niet conflicterend, maar, waar nodig, complementair of inwisselbaar is. De eerste drie criteria worden op onderstaande wijze geoperationaliseerd. Daarbij is er een inherente spanning aanwezig tussen de bepaaldheid en de compleetheid bij de keuze voor regulering gebaseerd op harde regels of op principes.

Bepaaldheid en compleetheid	**Mogelijkheid van proportionele en afschrikwekkende handhaving**	**Ruimte voor onafhankelijke toepassing, handhaving en aanpassing**
Bepaaldheid: • de regels zijn niet vaag, ambigu of onduidelijk: interpretatie in overeenstemming met hun gebruikelijke betekenis, in het licht van de context en doelen volstaat om het instrument te begrijpen *Compleetheid:* • de reikwijdte omvat alle relevante typen schuld, kredietnemers en kredietverstrekkers • er zijn geen mazen door inconsistentie of onvolledigheid • uitzonderingen zijn slechts toegestaan onder duidelijke en beschermende voorwaarden	*Proportionele handhaving:* • er is een heel scala aan sancties beschikbaar, van licht naar zwaar Afschrikwekkende handhaving*:* • er kunnen hoge bestuurlijke boetes worden opgelegd • publicatie van de opgelegde sancties is verplicht, behoudens specifieke uitzonderingen • het is mogelijk individuen te straffen • er zijn strenge sancties zoals het intrekken van de vergunning beschikbaar • strafrechtelijke vervolging is mogelijk	• de mogelijkheid en bereidwilligheid om op te treden wordt gefaciliteerd door een duidelijke rechtsgrondslag voor het instrument, goed gedefinieerde doelen die corresponderen met het mandaat van de toezichthouder, en een raamwerk dat handelen mogelijk maakt • de toezichthouder is operationeel onafhankelijk; er is geen interferentie door de uitvoerende macht of de onder toezicht staande sector • de besluitvormingsprocedure is gebaseerd op geleide beoordelingsvrijheid • er is een verantwoordingsmechanisme aanwezig

Om op een goed fundament te bouwen, wordt in hoofdstuk 2 de bestaande literatuur over de oorzaken van hoge schuldniveaus onderzocht. De hoofdstukken drie tot en met zes passen het analytisch raamwerk toe op verschillende soorten instrumenten, respectievelijk een aantal instrumenten op het gebied van kapitaaleisen (hoofdstuk 3), directe debt-service-to-income (DSTI), loan-to-income (LTI), debt-to-income (DTI) en loan-to-value (LTV) ratio's limieten (hoofdstuk 4), consumentenrecht (hoofdstuk 5) en de hypotheekrenteaftrek (hoofdstuk 6).

Hoofdstuk 2: De oorzaken van hoge huishoudelijke schulden en instrumenten om die te beïnvloeden

Bestaand onderzoek heeft aangetoond dat er vele oorzaken voor hoge schuldniveaus zijn. Terugkerende verklaringen zijn irrationele besluitvorming en opvattingen bij consumenten (onder meer over stijgende huizenprijzen), securitisatie (wat kredietgevers de mogelijkheid geeft risico's door te schuiven), deregulering, kapitaalinstroom, belastingregels die huisbezit en lenen stimuleren, financiële ongeletterdheid, gepercipieerd inkomen van de sociale omgeving, gebrek aan controle en prudentie en, ten slotte, plotselinge inkomensterugval, bijvoorbeeld door werkloosheid, scheiding, stijgende rentes of ziekte.

Bestaande literatuur laat tevens zien dat de effectiviteit van instrumenten om kredietverstrekking te beïnvloedend varieert. Directe limieten voor DSTI, LTI, DTI en LTV ratio's zijn effectief bevonden in het beperken van kredietverlening aan huishoudens. Ook voor kapitaaleisen zijn er positieve resultaten gevonden, maar is het beeld toch meer gemengd. Hierbij is het van cruciaal belang dat het weglekken van de effecten van het instrument via arbitrage wordt voorkomen. Belastingmaatregelen, zoals beperkingen van de hypotheekrenteaftrek, blijken een significant effect te hebben op schuldniveaus. Ten slotte is de literatuur overwegend positief over methoden om de kredietwaardigheid van consumenten te onderzoeken, zoals inmiddels verplicht is op grond van consumentenrecht.

Hoofdstuk 3: Kapitaal- en financieringseisen

De randvoorwaarden voor effectiviteit zijn onvoldoende vervuld voor de regelgeving op het gebied van kapitaaleisen. De regels voor banken die interne modellen gebruiken om de hoeveelheid kapitaal te bepalen, kunnen niet effectief worden gebruikt om kapitaaleisen te verhogen, vanwege hun onvolledigheid en vage bewoordingen. Voor eisen die worden opgelegd m.b.v. tweede pijler-maatregelen of het nationale flexibiliteitspakket zijn deze gebreken afwezig. Hier is echter reciprociteit niet verplicht, zodat de eisen niet gelden voor banken die grensoverschrijdend of via bijkantoren krediet verstrekken. Bovendien gelden alle eisen enkel voor banken, die hun extra kapitaalbehoefte ook op andere manieren kunnen voldoen dan door het beperken van kredietverlening.

De verschillen tussen lidstaten op het gebied van beschikbare sancties om kapitaaleisen te handhaven, zijn verkleind sinds de invoering van de Richtlijn Kapitaalvereisten.[2118] Niettemin zijn er nog steeds belangrijke verschillen. Opvallend genoeg is de handhavingspyramide in Duitsland incompleet, vergeleken met Nederland en Ierland. Verder is de ECB voor het opleggen van niet-financiële sancties afhankelijk van nationale toezichthouders. De praktijk moet laten zien of dit problemen geeft bij het afschrikwekkend hanteren van sancties.

De doelen van de gecreëerde instrumenten sluiten goed aan bij het mandaat van De Nederlandsche Bank (DNB), de Central Bank of Ireland en de Europese Centrale Bank (ECB), dat expliciet ook macroprudentieel is. Dit kan helpen om gecommitteerd te zijn aan deze doelen. Het mandaat van de Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin), de Duitse federale toezichthouder, omvat macroprudentiële taken, maar dit is niet geëxpliciteerd.

De mate van onafhankelijkheid verschilt significant tussen de toezichthouders. In Nederland kan de minister van Financiën DNB vragen macroprudentiële instrumenten aan te passen, als deze een onredelijke belasting creëren voor de financiële markten. Er is niet gespecificeerd wanneer dit het geval is. Indien DNB weigert, kan de minister vervangende regels instellen. Bij de Ierse centrale bank zijn er bewust buitenstaanders op belangrijke posten benoemd om de feitelijke onafhankelijkheid te vergroten. Het Ministerie van Financiën kan echter nog wel invloed uitoefenen via deelname aan het besluitvormend orgaan van de centrale bank. BaFin, de Duitse toezichthouder staat onder toezicht van het federale Ministerie van Financiën, die controle kan uitoefenen op bepaalde belangrijke aspecten van BaFin's werk. Wel wordt de invloed op individuele toezichtsbeslissingen uitgesloten door vooraf vastgestelde richtlijnen. Wanneer BaFin regulerende taken uitoefent, kan die invloed niet worden uitgesloten.

Ook de mate waarin het institutionele raamwerk bijdraagt aan actieve toepassing, handhaving en aanpassing van instrumenten – onafhankelijk van druk vanuit de politiek en de sector – verschilt sterk per toezichthouder en instrument. Zo zet het systeem van geleide beoordelingsruimte (*guided discretion)* bij de contracyclische kapitaalbuffer toezichthouders aan om tot actie over te gaan. Voor

[2118] Richtlijn 2013/36 van het Europees Parlement en de Raad van 26 juni 2013, OJ 2013, L176/338.

het verhogen van risicogewichten middels art. 124/164 van de verordening kapitaalvereisten is zo'n systeem in ontwikkeling. Dat is echter algemeen verwoord en daardoor onvoldoende sturend. Bij het nationale flexibiliteitspakket werken procedures juist een (pro)actieve toepassing tegen. Mechanismes voor geleide beoordelingsvrijheid kunnen specifieker worden gemaakt om de neiging tot inactiviteit (*inaction* bias) verder te verkleinen. Het 'top-up' mechanisme dat de ECB ter beschikking staat, draagt bij aan het verminderen van de neiging tot inactiviteit.

Hoofdstuk 4: DSTI, LTI en LTV limieten

Hoofdstuk 4 analyseert de DSTI, LTI, DTI en LTV limieten, die in elk van de onderzochte landen recent zijn geïntroduceerd, of in ontwikkeling zijn. Het verfijnde Nederlandse systeem is compleet en is niet alleen van toepassing op hypothecair, maar ook op consumptief krediet. Hierdoor is het moeilijker regels te omzeilen. Niettemin maken de verschillen tussen de normen voor consumptief en hypothecair krediet het moeilijker te voorkomen dat er mazen in de regels ontstaan. Doordat de normen voor consumptief krediet bovendien gebaseerd zijn op zelfregulering, is het niet uit te sluiten dat ze worden vastgesteld met een lager beschermingsniveau. Voor de normen voor hypothecair krediet is het grootste probleem dat de onafhankelijke toezichthouders er weinig invloed op hebben. Dientengevolge mist DNB, als macroprudentiële autoriteit, een belangrijk instrument.

In Ierland zijn de regels simpeler van opzet, doordat de LTI limieten niet zijn gedifferentieerd naar inkomen. Dit brengt het risico met zich mee dat het beschermingsniveau voor huishoudens met lage inkomens onvoldoende is. In Ierland is flexibiliteit geïntroduceerd, doordat een bepaald percentage van de leningen de limieten mag overschrijden. Het voornaamste probleem van de Ierse regels is dat consumptief bijlenen niet wordt uitgesloten. Ondanks politieke druk om de LTV en LTI limieten te versoepelen, heeft de Ierse centrale bank deze instrumenten in stand weten te houden.

Daarentegen is het Duitse wetsvoorstel om de juridische basis te creëren voor DSTI, DTI en LTV limieten behoorlijk uitgekleed door de *Bundestag.* Doordat BaFin slechts een LTV limiet kan instellen, kan consumptief bijlenen niet worden voorkomen. Bovendien heeft de LTV limiet wel een breed toepassingsbereik, maar tevens veel uitzonderingen. Door BaFin's beperkte onafhankelijkheid is het de vraag of de toezichthouder in staat is een strenge LTV limiet in te stellen bij politiek druk.

Hoofdstuk 5: Kredietrestricties in het consumentenrecht

De EU heeft ook in het consumentenrecht regels geïntroduceerd om overkreditering te voorkomen. De Richtlijn Consumentenkrediet uit 2008 gaat nog grotendeels uit van de geïnformeerde en rationele consument.[2119] Ook verbindt de richtlijn geen consequenties aan het niet naleven van de kredietwaardigheidstoets. Bovendien is deze toets onbepaald door het gebrek aan specifieke regels, waardoor hij onvoldoende bescherming kan bieden. Omdat de richtlijn voornamelijk maximumharmonisatie voorschrijft, worden lidstaten beperkt in hun mogelijkheden om consumenten beter te beschermen. In de Richtlijn Hypothecair Krediet is de kredietwaardigheidstoets wel uitgewerkt en moet krediet worden geweigerd als een consument aan de kredietovereenkomst kan voldoen.[2120] Dit reflecteert een post-crisis trend naar een beeld van de kwetsbare consument die bescherming nodig heeft. Toch zijn ook hier de bevindingen uit de academische literatuur niet volledig meegenomen als het gaat om de informatie die een kredietverstrekker dient in te winnen. Zo hoeft geen rekening gehouden te worden met de algemene economische omstandigheden. Evenmin is het verplicht bestaande schulden mee te nemen. Bovendien zorgt het gebrek aan consumentenbescherming in het geval van consumptief krediet ervoor dat consumptief bijlenen om een huis te financieren niet wordt uitgesloten.

Lidstaten hebben de regels om consumenten te beschermen deels in het publiekrecht en deels in het privaatrecht opgenomen, wat invloed heeft op de randvoorwaarden voor effectiviteit. In Nederland zijn de regels geïmplementeerd in het bestaande publiekrechtelijke systeem van LTV en LTI ratio's. In Ierland gelden er naast deze regels voor hypothecair krediet tevens door de centrale bank ingestelde richtsnoeren uit de Consumer Protection Code 2012.[2121] Die bieden meer bescherming dan de Richtlijn Hypothecair Krediet. In Duitsland zijn de richtlijnen getransponeerd in zowel privaat- als publiekrecht. Hierdoor kan ook de handhaving zowel via het privaat- als publiekrecht plaatsvinden, hoewel die laatste mogelijkheid waarschijnlijk ineffectief is, gezien het gebrek aan sancties en mandaat van BaFin om individuele consumenten te beschermen. In Ierland is het palet aan beschikbare sancties het breedst, met zowel privaat-, publiek- en strafrechtelijke sancties. Bovendien kan de centrale bank kredietverstrekkers verplichten een schadevergoeding te betalen aan consumenten die zijn benadeeld. Dit maakt sancties afschrikwekkender. Het probleem van puur privaatrechtelijke sancties is immers dat de drempel om te gaan procederen hoog is en consumenten een informatieachterstand hebben ten opzichte van de kredietverstrekker en de toezichthouder. In Nederland is de handhaving

[2119] Richtlijn 2008/48 van het Europees Parlement en de Raad van 23 april 2008, OJ 2008, L 133/66.
[2120] Richtlijn 2014/17 van het Europees Parlement en de Raad van 4 februari 2014, OJ 2014, L60/34.
[2121] De Consumer Protection Code 2012 is beschikbaar via https://www.centralbank.ie/regulation/consumer-protection/other-codes-of-conduct.

in principe publiekrechtelijk, door de Autoriteit Financiële Markten (AFM). Doordat de normen echter doorwerken in de zorgplicht, kunnen consumenten ook zelf een procedure starten bij een overtreding van de normen. De jurisprudentie op dit gebied is echter nog niet eenduidig, wat het voor consumenten moeilijker maakt van te voren in te schatten wat hun kansen zijn.

Hoofdstuk 6: De fiscale behandeling van schulden

In veel Europese landen is de mogelijkheid hypotheekrenteaftrek te claimen afgeschaft of beperkt in de afgelopen decennia. In Duitsland zijn belastingvoordelen voor huizenbezitters volledig afgeschaft; in Ierland wordt de belastingkorting op de hypotheekrente uitgefaseerd. Ook in Nederland zijn hervormingen doorgevoerd, waaronder de beperking dat renteaftrek enkel mogelijk is voor hypotheken waarop minimaal annuïtair wordt afgelost. Het Nederlandse systeem van regels is veel complexer dan het Ierse systeem, vooral om misbruik van de genereuze mogelijkheden voor aftrek te voorkomen. Nederlandse regels met betrekking tot de aflossingsstand en eigenwoningreserve zijn zodanig vormgegeven dat renteaftrek niet mogelijk is, als huiseigenaren winst van de verkoop van een eerdere woning of al afgeloste schuld niet gebruiken voor de aankoop van een nieuwe woning, maar daarvoor opnieuw geleend geld gebruiken. De gedetailleerde vormgeving van de regels minimaliseert het risico op misbruik van mazen in de wet. Dit risico wordt verder beperkt door de bewijslast dat kosten zijn gemaakt voor de verbouwing van het huis bij de belastingbetaler te leggen. Verder checkt de bank de facturen al. Ook in Ierland worden de kredietverstrekkers ingeschakeld bij de controle van de informatie waarop het belastingvoordeel berust. Dit beperkt de mogelijkheden voor fraude en faciliteert de handhaving. In zowel Nederland als Ierland is proportionele en afschrikwikkende handhaving mogelijk. In Ierland is het echter eenvoudiger om (grove) nalatigheid of (voorwaardelijk) opzet te bewijzen, waardoor het opleggen van sancties eenvoudiger is.

De nationale vrijheid om de hypotheekrenteaftrek vorm te geven wordt begrensd door de bevoegdheden die de Europese Commissie en de Raad hebben ontvangen in het systeem voor economisch bestuur in de EU. Deze EU instituties kunnen invloed uitoefenen op het beleid van lidstaten, maar kunnen dat niet bepalen, omdat het systeem gebaseerd blijft op *peer pressure* en er geen wil lijkt te zijn om binnen de procedures te escaleren. Toch zijn de land-specifieke aanbevelingen de afgelopen jaren concreter geworden. Na de hervormingen in 2011 wijzen ze vaak naar specifieke beleidsterreinen. *De facto* is de druk op lidstaten hierdoor toegenomen.

Hoofdstuk 7: De regulering van huishoudelijke schulden vanuit een systematisch perspectief

Ten slotte wordt de interactie tussen de verschillende instrumenten onderzocht in hoofdstuk 7. Ook worden enkele trends met betrekking tot de regulering van kredietverstrekking aan huishoudens besproken. Opvallend is dat op Europees niveau en in elke onderzochte lidstaat het verstrekken van hypothecair krediet strikter wordt gereguleerd dan consumptief krediet. Het is nodig om de regels voor consumptief krediet te verbeteren. De interactie tussen verschillende soorten instrumenten is divers.

De verschillende prudentiële instrumenten zijn veelal complementair aan elkaar, omdat ze een ander doel dienen. Ze kunnen echter tevens als imperfecte substituten fungeren. De regels voor consumentenbescherming en de prudentiële eisen zijn deels overlappend, maar het perspectief verschilt. Lidstaten combineren dit type regels op verschillende manieren. In Nederland zijn ze geïntegreerd in één gedetailleerde set aan regels, die als uitwerking dient voor een overkoepelende open norm. Dit zorgt ervoor dat de regels bepaald en ook compleet zijn, en moeilijker te omzeilen zijn. In Ierland en Duitsland hebben de regels op het gebied van consumentenbescherming kenmerken van principes, terwijl de macroprudentiële LTV en LTI limieten relatief eenvoudig zijn. Dit combineert de voordelen van principes en eenvoudige regels. De grove opzet van de regels creëert ook het risico op mazen. Het naast elkaar bestaan van macroprudentiële maatregelen en regels voor consumentenbescherming zorgt ervoor dat LTV limieten aangepast kunnen worden door de macroprudentiële autoriteit en contra-cyclisch gebruikt kunnen worden. Gezien de reikwijdte van LTI en LTV limieten die worden gecreëerd op nationaal niveau en relevante institutionele verschillen tussen lidstaten, moeten bevoegdheden om deze instrumenten te gebruiken nationaal blijven om hun effectiviteit te garanderen.

De mogelijkheden om regels op het gebied van financieel toezicht en consumentenbescherming te handhaven zijn in toenemende mate versterkt en geharmoniseerd. Ook de daadwerkelijke handhaving van prudentiële instrumenten zal waarschijnlijk uniformer worden, doordat de ECB bevoegd is dit te doen voor significante instellingen. In Nederland en Ierland is er een toenemende interactie zichtbaar tussen publieke en private handhaving. De Central Bank of Ireland heeft de bevoegdheid ontvangen om schadevergoeding toe te kennen aan benadeelde consumenten, wat het afschrikwekkende karakter van de beschikbare handhavingsmaatregelen vergroot.

De taken van financiële toezichthouders zijn sterk uitgebreid sinds de crisis, doordat macroprudentiële bevoegdheden zijn gecreëerd. Ook hebben sommige toezichthouders – zoals Bafin en de Ierse centrale bank – extra taken op het gebied van consumentenbescherming ontvangen. Hun mandaat is echter niet altijd aangepast. Ook laten zowel de onafhankelijkheid als de verantwoordingsplichten van toezichthouders veelal te wensen over, onder meer door de politieke betrokkenheid bij de besluitvorming. In dit kader is het aanpassen van eenzijdige mechanismes om besluiten van toezichthouders te annuleren of te wijzingen aanbevelingswaardig. Zulke mechanismes in Nederland en Duitsland zijn er nu op gericht om streng handelen van toezichthouders te beperken; niet om hun slagvaardigheid te bevorderen. Zulke aanpassingen zouden de onafhankelijkheid van de toezichthouders vergroten. De verantwoordingsplicht van toezichthouders kan tevens worden versterkt door hen te verplichten bij consultaties gedetailleerd te reageren op inzendingen van bepaalde partijen, zoals de minister van Financiën. Ook kan de minister de bevoegdheid ontvangen om de toezichthouder een publieke aanbeveling te doen om een instrument in te zetten, mocht de toezichthouder afwijken van de vooraf ingestelde richtlijnen. Een dergelijk mechanisme, vergezeld van een pas-toe-of-leg uit principe, kan de neiging tot inactiviteit verkleinen. Verder kan bij de toepassing van instrumenten als art. 124 en 164 Verordening Kapitaalvereisten[2122] en LTV en LTI kan sterker gebruikt worden gemaakt van geleide beoordelingsvrijheid. Dat zou moeten bestaan uit *early-warning* indicatoren met drempelwaarden, (2) een pas-toe-of-leg-uit principe en (3) transparantie over (1) en (2). Hiermee wordt de neiging tot inactiviteit verkleind, en wordt het afleggen van verantwoording gefaciliteerd.

Ten slotte is het aanbevelenswaardig om het Europees Comité voor Systeemrisico's (ESRB) gelimiteerde bindende bevoegdheden te geven, namelijk om in noodgevallen nationale toezichthouders op te dragen om op te treden. Deze bevoegdheid kan worden gebruikt als onderzoek aantoont dat uitstel van handelen ernstige negatieve gevolgen heeft voor de financiële stabiliteit. Deze bevoegdheid, die moet worden vormgegeven binnen de *Meroni* doctrine, maakt het tevens mogelijk dat de ESRB het macroprudentiële beleid binnen de EU coördineert, wanneer dat nodig is. Het beleid van lidstaten kan verder worden beïnvloed via de aanbevelingen binnen de procedures voor economisch bestuur in de EU. De *governance* van deze procedures kan worden verbeterd om de effectiviteit ervan te versterken. Een mogelijkheid is om onafhankelijke adviesorganen een grotere rol toe te kennen. Ook kan het Europees Parlement vroeger in het proces van de Economische Dialoog worden betrokken, zodat de Commissie en de Raad van minister meer verantwoording moeten afleggen over het al dan niet doen van aanbevelingen aan lidstaten.

[2122] Verordening 575/2013 van het Europees Parlement en de Raad van 26 juni 2013, OJ 2013, L176/1

About the author

Arien van ‘t Hof was born on 24 January 1987 in Maartensdijk, the Netherlands. He graduated from the Van Lodenstein College in Amersfoort with an 8 on average (comparable to an A on average). Subsequently, he started with the mr.drs.-programme, a double degree programme in Economics & Law at the Erasmus University of Rotterdam. In 2012 he obtained his M.Sc. degree in International Economics, and his LL.M. degree in International and European Public Law, both from the Erasmus University of Rotterdam with an 8 on average. In 2012 he started his doctoral thesis at the department of International and European Union law at the Erasmus School of Law, Rotterdam. In 2016, he started working at the Financial Stability division of the Dutch central bank.

PhD Portfolio

PhD Training	
Academic Writing in English	2012
Writing Clinic	2013
Introduction to Legal Methods	2012
Reflections on Social Science Research	2013
Research Lab	2012-2013
The Transformation of the European Welfare State(s)	2013
Seminar Money	2013
Seminar Bureaucracy	2014
Seminar Migration	2015

Attended conferences (without presenting)	
ECFIS Conference 'Mapping European Economic Governance- Rules, Processes and Behaviors'	2012
Tilburg Law School Conference 'The Constitutionalization of European Budgetary Constraints: Comparative and Interdisciplinary Perspectives'	2013
LLX Roundtable *Pringle*	2013
EURO-CEFG Workshop 'The European Sovereign Debt Crisis: Any Lessons from Federalism Theory?'	2014
Brussels EURO-CEFG Expert Dialogue 'Past, Present and Future of EU Economic Governance'	2015
Brussels EURO-CEFG Expert Dialogue 'Monetary Policy after the 'OMT judgment': More economics and less law?'	2015
EURO-CEFG Workshop 'EU Financial Regulation: Fragmentation, Cooperation, Competition?'	2015
EURO-CEFG Conference 'The European Banking Union and the Promise of Financial Stability'	2015
Renforce Workshop 'Public Supervision'	2015
FIDE XXVIIth Congress	2016

Presentations	
Erasmus School of Law (poster presentation)	2014
PhD Lunch lectures	2014, 2015
King's College London, International Graduate Legal Research Conference	2014
Euro-CEFG Hanns Martin Schleyer-Stiftung Seminar, Bad Homburg	2014
SGEU-ECPR 7th Pan-European Conference on the EU, The Hague	2014
NIAS EURO-CEFG Seminar, Wassenaar	2014
Forschungskolleg Humanwissenschaften of the Goethe University, Bad Homburg, International PhD Workshop	2015

Publication	
Journal of Banking Regulation: Designing Macroprudential Regulation and Supervision Outside the Scope of the Banking Union: Lessons from the Netherlands and Ireland	2016

Teaching	
Bachelor course 'Europees recht', several lectures	2013, 2015
Master course 'Economic governance in the EU', several lectures	2013