Personal Bankruptcy Systems in the EU – Measuring Leniency

Jens Valdemar Krenchel

Department of Finance

Supervisors:

Professor Edina Berlinger, PhD, Habil.

Professor György Walter, PhD, Habil.

Copyright: Jens Valdemar Krenchel 2022

Corvinus University Budapest
Doctoral School of Business and Management

Doctoral dissertation

Personal Bankruptcy Systems in the EU – Measuring Leniency

Jens Valdemar Krenchel

Budapest 2022

Table of contents

1 Introduction 8
2 Background and hypothesis 10
2.1 Context 10
2.2 Hypotheses 18
3 Personal bankruptcy 21
3.1 Consumer over-indebtedness 21
3.2 Definition and history of personal bankruptcy 22
3.3 Personal bankruptcy 25
3.4 Comparative analyses of personal bankruptcy systems 30
4 Leniency and Personal bankruptcy 33
4.1 Impact of leniency 33
4.2 Measuring leniency 39
4.3 Social efficiency of leniency 40
4.4 Economic efficiency - allocation of credit risk 44
5 Personal bankruptcy in the EU 50
5.1 European development of legal regulation of debt reduction and relief 51
5.1.1 Denmark 1984 51
5.1.2 England and Wales 1986 53
5.1.3 France 1989 53
5.1.4 Germany, Sweden, Finland, and Norway 1994 54
5.1.5 Austria 1995 55
5.1.6 Belgium and the Netherlands 1998 56
5.1.7 Luxembourg 2000 58
5.1.8 Portugal and Estonia 2004 58
5.1.9 Slovakia 2006 59
5.1.10 Czech Republic, Latvia and Slovenia 2008 60
5.1.11 Greece 2010 62
5.1.12 Ireland and Italy 2012 62
5.1.13 Lithuania and Spain 2013 63
5.1.14 Hungary, Croatia and Cyprus 2015 64
5.1.15 Romania 2018 66
5.1.16 Bulgaria and Malta 66
5.2 EU regulation and harmonization 67

5.2.1 EU Fresh Start Directive ... 67
5.2.2 The Fresh Start Directives perspectives for this thesis ... 71
5.2.3 Critique ... 73
6 Measuring leniency in the EU – empirical framework ... 74
6.1 Methodology and data – building composite indices ... 74
6.2 Variables for scoring legal frameworks across Europe ... 79
A) Straight bankruptcy option ... 81
B) Eligibility criteria ... 83
C) Cost of procedure ... 85
D) Complexity (activities of the process) ... 86
E) Process of repayment ... 88
F) Conditions for discharge ... 93
G) Stigmas ... 96
6.3 Fault sources or in a way saturation of the topic ... 97
7 Measuring leniency in the EU - Scoring ... 98
7.1 Index scoring results ... 98
7.2 Index analysis ... 102
8 Discussion and conclusions ... 108
9 References ... 112
Annex I – Country scoring sheet of dimensions and categories ... 121
Annex II – EU Country scoring of categories ... 128
Annex III – Correlation matrix of dimensions ... 129

List of tables and figures

Table 1: Leniency dimensions and indicators ... 77
Table 2: Equal resp. BAP Weights ... 78
Table 3. Leniency ranking of countries based on BAP and EW aggregation ... 98
Table 4: Dimension scores- colour grading relative to deviation to mean ... 101

Figure 1: Descriptive BAP ... 79
Figure 2: Leniency map of Europe ... 100
Figure 3: Index scores grouped by region and by law origin ... 102
Figure 4 - K-Mean cluster analysis 3D scatterplot ... 104
Figure 5: Index scores based on age or origin of the legislation – EU ... 105
Figure 6: Index scores based on age or origin of the legislation – WE and NE 106
Figure 7: Index scores based on age or origin of the legislation –SEE and CEE107

Non deficere!

1 Introduction

Since the Second World War, there has been a massive credit expansion to consumers, also in Europe. With increased credit to consumers comes inevitably increased risk of a negative credit event, in many cases due to change of life events, such as loss of job, sickness, divorce, and death of an income earner in a family. This in turn, in Europe, has led to a regulatory wave to introduce personal bankruptcy regimes for consumers and entrepreneurs. Academic research on personal bankruptcy has distinguished between firstly discussions on personal bankruptcy regulations in themselves and are usually focused on the controversial impact thereof on society, economy, financial markets, entrepreneurship, and labour supply. Secondly ad distinctly, limited research has tried to comparatively analyse personal bankruptcy regimes across jurisdictions, in order to access their degree of leniency.

Armour and Cummings (2008) evaluated the systems of various chosen countries (England, US, Germany, France, Canada) and *White (2007)* contrasted the bankruptcy policies based on the trade-off between providing insurance to debtors against punishing default. *Walter, G. (2020)* described key tenets between US and Austrian models, such as Austria and Hungary. The methodology of measuring leniency has been limited to one-time legislative changes or some elements of, in particular, the US personal bankruptcy system. The research carried out here, builds on previous studies, but expands both the number of countries in the study and the number of indicators to create a composite index of personal bankruptcy legislations.

The aim of the research is to construct a composite index, which includes the characteristics and elements of EU personal bankruptcy systems in order to compare their leniency, and to compare and rank the personal bankruptcy

legislative systems of all EU countries from the leniency aspect, to analyse the differences and similarities.[1]

The result is a calculation of the composite index for 25 EU countries and the US as a benchmark, validated results, and a ranking of the countries according to the leniency of their personal bankruptcy systems. The analysis is revolving around four hypothesised explanatory factors by analysing the index scores by: grouping based on leniency characteristics, region, law origin, and the age of the regime.

It is concluded that the systems show high heterogeneity and cannot be clustered by leniency characteristics, region or legal origin assumed based on former studies. However, there is a strong association between leniency and the age of legislation.

Results indicate that personal bankruptcy policies in the EU are usually launched as creditor-friendly and are later shifted to a more lenient direction. The more lenient regulatory frameworks seem in sync with suggestions of looking at personal bankruptcy from the perspective of economic efficiency as suggested by most recently Jan-Ocko Heuer in *(Graciano et al. 2019 paragraph 1.15)*. The research underpins the more modern regulatory regime adopted by the EU in terms of the Fresh Start Directive that is currently being rolled out in member states, but would criticize the EU initiative for being insufficient in as far as it is only obligatory for an entrepreneurial fresh start, and hence insufficient as it only recommends extending the framework to consumers. The research also points to the need to keep revising national regulatory frameworks to account for the maturation of the personal bankruptcy process, in terms of making them more lenient, as seems to be the experience across Europe. Finally, the research underscores the need for further research in the area.

[1] This research was supported by the Higher Education Institutional Excellence Program 2020 of the Ministry of Innovation and Technology in the framework of the ‘Financial and Public Services’ research project (TKP2020-IKA-02) at Corvinus University of Budapest.
Furthermore, the first two years of the research was funded by the Association of Danish Mortgage Banks, now merged to become Finance Denmark.

2 Background and hypothesis

Since the Second World War, there has been a massive credit expansion to consumers, also in Europe. With increased credit to consumers comes inevitably increased risk of a negative credit event, in many cases due to change of life events, such as loss of job, sickness, divorce, and death of an income earner in a family. Even if the US introduced a regulatory regime for personal bankruptcy enabling to deal with consumer over-indebtedness, in Europe there has been an overwhelming regulatory wave, beginning with Denmark in 1984. Adding to this, a more recent political agenda has been a desire to increase entrepreneurial spirit in Europe, in order to increase innovation. It is settled knowledge, that fear of ending in a debt trap may disincentivise entrepreneurial spirits from unleashing their talent - or at least give it a try. This further underpinned the need for regulatory action to enable a fresh start - a dedicated, single route for debt release, that is now the gold standard in Europe with the adoption of EU rules on a fresh start. In this thesis, I will describe the regulatory development in EU countries and the EU, and on that basis analyse the legal regimes by scoring their similarities and dissimilarities. It is possible to categorise the main tenets of the individual jurisdictions' approach to dealing with personal bankruptcy, and this thesis builds expands the analysis carried out in previous research both concerning the number of countries analysed and the number of main tenets analysed and compared.

2.1 Context

Going back in European legal tradition, lack of repayment of debt was a serious economic crime, usually associated with incarceration (debt prison). The oldest printed Danish law, Danske Lov of 1683, explicitly sets forth, that what has been borrowed must be returned identically (5th book, 8th chapter, section 1 on loan)[2]. Those who did not pay their debts had to go to prison, albeit to an honest one, ir. not to be stowed with hard criminals. This stopped in 1872 in Denmark, around the

[2] As a sidefact, the law is actually in effect to this day, save where modernized regulation has replaced it in whole or in parts. Even as democracy replaced the single ruler king, in the transition it was decided that all legislation in place before the transistion of power would remain in effect untill new legislation had been passed. Limited parts of the now very old law still remains in effect today.

same time as in France, Germany, Austria, and England. One wonders how repayment is made easier by incarcerating anyone- but the underlying moral assumptions of the need for general deterrence of the population from not paying is found even to this day in the discussions in countries that are introducing personal bankruptcy regulations.

Compared to the United States (US), Europe is lagging behind in terms of enabling a fresh start for overindebted consumers and unsuccessful entrepreneurs. As *Graue (1939, p. 486)* makes clear for the US: "The laws of bankruptcy display a trend of social liberalization, in that the power of bankruptcy has steadily widened from regulation of traders to a policy of protection and relief, first for creditors, then for debtors, and finally in the interests of the public on a national scale. The Act of 1898 was designed with the latter purpose in view…[3]"

Even if some movement may be tracked and is described in detail in the research carried out during this dissertation coming together, there are layers of moral reasoning still clinging to the European approach. The European Commission acknowledged this already in 2007, just prior to the full financial crisis coming into effect when it assessed that: "*Making a fresh start after bankruptcy can be challenging from a legal standpoint. Still in many countries bankruptcy law treats everyone in the* ***same way irrespective of whether the bankrupt was fraudulent*** *or irresponsible or whether the failure was through no obvious fault of the owner or the manager, i.e.* ***honest*** *and above-board. Also, numerous rules impose restrictions, prohibitions, and disqualifications on bankrupts solely on the basis of the existence of bankruptcy proceedings. This automaticity of approach takes no account of the risks that are an everyday fact of business life and implies a belief that the bankrupt is someone in whom society can have no trust or confidence. A radical shift in the rationale of insolvency laws is needed in the EU"*[4]. [Highlights as per the original text of the EU Commission]

[3] In all fairness the policy choise of the US in 1898 was not to Graues personal liking, as he clearly considered it a shift of risk so as to shift the cost of financial irresponsebility upon society *Graue (1939 at p. 486*).

[4] Brussels, 5.10.2007, COM(2007) 584 final: Overcoming the stigma of business failure – for a second chance policy.

Adjustments apart, no more fundamental legislative changes have occurred in Europe since this call[5]. To enable a transition towards a less morally grounded and a more rationally economically founded approach the EU Commission subsequently asked London Economics to perform an in-depth review of available policy options[6]. Also at the international level, OECD has pointed to the crucial nature of having robust corporate and personal insolvency regimes pointing to market imperfections that lead to hindering tackling failing firms (*McGowan and Andrews 2016*).

In order to provide further information on the current regulatory status in the EU, and not least in order to have a scientific basis for cross border comparison of the available laws in the EU, a detailed and granular investigation of existing legal frameworks across EU countries has been undertaken, and the findings from the legal frameworks have been scored consistently and in-depth – and subsequently an attempt has been made at independently verify the scoring that has been carried out, in order to ensure robustness and validation of the scoring. This task has been called for explicitly by the OECD in 2016: "*The available data sources suggest that using surveys and publicly available legal sources are useful in getting information on the relevant institutional characteristics. Hence, updating and extending the time and country coverage of the Armour and Cumming (2008) data is desirable, given the importance of personal insolvency regimes for entrepreneurship and productivity, and the fact that there have been changes to it in a number of OECD countries in recent years*" (*McGowan and Andrews 2016, p. 31*). This is exactly part of the undertaking here.

5 Except for the introduction of a walkaway option (Datio in Solutem) for mortgage debt in housing, in Romania and with very limited application a few other jurisdictions subsequent to the financial crisis (described below) – but nowhere close to fresh start debt cancellations. As will be set forth below, the adoption of Directive 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt will have to be implemented in EU member states during 2021. As such changes in national legislation across the EU is to be expected in coming time, and it will be interesting to assess what changes occurs, and how it will change the scorings across Europe.

6 London Economics (2011) Study on means to protect consumers in financial difficulty: Personal bankruptcy, datio in solutem of mortgages, and restrictions on debt collection abusive practices, Final Report, Contract № MARKT/2011/023/B2/ST/FC.

Furthermore, the novel, but not yet transposed into national law, Directive 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on the discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency, and discharge of debt is integrated into the analyses [henceforth also referred to as the Fresh Start Directive]. Only once the national transposition of the directive has taken place will it be possible to assess the actual changes.

Consumer overindebtedness has led to a vast expansion of legislative frameworks for managing consumer bankruptcy – or debt restructuring – across Europe. Taking an example from the US where such regime had been in place for years, the European countries starting with Denmark in 1984 has introduced somewhat similar concepts, but all building on different underlying reasoning and moral assumptions, leading to piecemeal and fragmented approaches across jurisdictions *(Blazy et al. 2013)*. I try to provide an overview of the approaches in the literature and to score the legal frameworks in Europe in order to provide a basis for comparing national laws. Scoring models have already been presented in the literature, but primarily with a limited number of parameters for a limited number of countries. Here 35 parameters are established for measuring the leniency of national laws, and 25 countries in Europe are scored building on *Graziano et al. (2009)*. This provides a granular understanding of the European consumer bankruptcy laws and how they relate.

This study challenges the narrative of "leniency" but would rather encourage pursuing an approach building on more economical rational thinking of consumer credit risk allocation from the perspective of the state, as has been the case in the US since 1898 (*Graue 1939*). This is done by a literature review of studies in consumer over-indebtedness and by reviewing and scoring European regulatory frameworks within the area over consumer over-indebtedness. By comparing consumer over-indebtedness regulation in the European Union and scoring the frameworks a basis for cross-country comparison in the EU is provided. The institutional developments in financial services by requiring banks to set specific controls on checking the basis for credit granting to consumers (creditworthiness requirements); to allocate from the outset of the credit process an allocation to absorb credit loss (EL (expected loss) = PD (probability of default) * LGD (loss

given default)) all should underscore the progression from morality based legal instrument to a more scientific and databased economic approach. This development, it is argued, infers a transition from the Roman law historic moral default of returning in whole what has been lent, to a modern approach of construing debt as an economic instrument, where the placement of a loss must be distributed according to what provides an optimal distribution at the level of society, i.e. allocation of consumer credit risk. The US already early (1898) moved to view the allocation of credit risk from the perspective of societal advance (*Graue 1939*). There is an inherent trade-off between on the one hand the obvious risk of the consumer providing insufficient information prior to contracting the debt and for the consumer debtor to behave opportunistically to minimize their repayment and on the other hand the financial institution creditor having advanced modelling and processing capabilities enabling them to set requirements for credit granting respectively controlling the issued credit, to absorb losses from substandard credits issued and to also behave opportunistically by extracting the maximum return from debtors irrespective of its impact on society (*Flint 1991*). From the perspective of society, the balance has to be found on this issue to encourage lending to increase economic activity through maturity transformation on the one hand, and on the other hand ensuring the maximization of productivity in the economy by entrepreneurs, inventors, and not least the workforce at large. Insufficiently calibrated credit risk frameworks encompassing all components from credit assessment requirements (including consumer information provision) over credit loss absorption requirements to consumer over-indebtedness regimes carries with it the risk of systemic banking defaults, excessive lending or insufficient innovation/entrepreneurialism but also, and perhaps not least, to stimulate the shadow economy by disincentivizing overindebted debtors with insufficient tools for reducing over-indebtedness to take part in the regular economy. As for the latter component, if over-indebtedness regulations are not sufficiently granular in distributing the credit risk between the credit and the consumer debtor, the latter might be incentives to go into the shadow economy if that is the most economically viable (rational in that person's sense) in a situation. At the systemic level, such a level of creditor protection leads to an outcome that is inefficient from a tax and state perspective. As little as it may be from a perspective of novelty, the humble suggestion of this study is to modernize the narrative and labelling of consumer over-indebtedness from "leniency" to the plain technical consumer credit-risk

allocation. The flip side of leniency is oppressive. What is suggested here is balancing for a socially efficient outcome – or what is commonly known as Pareto efficiency. The traditional approach to differing the more economically rational approach (US) vs. the morally bound approach (Europe) is described and challenged by *Elqueta (2013)*. The author illustrates the paradoxical nature of the ongoing debate, as he describes that the in-principle more debtor-friendly legal regime in the US but leading to a higher uptake of credit due to increased consumption – in reality, according to the author, is not a debtor-friendly regime but rather a creditor friendly one, as it increases credit. And vice-versa for the European jurisdictions. The author uses the argument to call for the US to come closer to the approach adopted by many European jurisdictions. It is also possible to analyse consumer bankruptcy from the perspective of law and economics using a contractual approach. Using such reasoning one could view consumer credit, default, and bankruptcy through the lens of information asymmetry and insurance (*Hynes and Posner 2002*). Explaining the different nuances of the differing schools of the law and economics approach is provided very well by *Dolfma and McMaster (2007)* A clear opposition to such approach, comparing instead consumer credit through the lens of consumer product regulation, see *Barr-Gill and Warren (2008)*

Over-indebtedness increased in the early 80s, affecting more and more people and sparing no socio-professional category, but perhaps the most significant increase was in the margins of the economy *Lyons (2003*). As the EU Commission noted in 2013, in its Social Investment Package[7], a substantial increase in the number of evictions and homeless since the start of the crisis, and that over-indebtedness was one of the causes of this situation. Situations of over-indebtedness can no longer be seen as the problem of an individual in the influence of their compulsions and passions. Today, they reflect a social and societal crisis. In 2013 the European Central Bank noted that over half the population of the euro area owed debts to financial institutions[8]. According to this survey, over-indebtedness generally arises

---

7 COM(2013) 83 final (OJ C 271, 19.9.2013, p. 91).

8 European Central Bank, 2013. Eurosystem Household Finance and Consumption Survey: Results from the first wave, Statistics Paper Series, April 2013, pp. 57-71.

following an unexpected drop in income, related in particular to job loss, illness, separation, or even overconsumption[9].

Fay et al. (2002), though, find little support for the notion that change of life effects bear the major explanation of consumer bankruptcies. They instead consider that strategic default is a better-suited explanation. This may be contracted to *Zhu (2011)*, who for the state and Delaware finds that credit enabled over-consumption makes families more vulnerable to a change of life events and that both strategic choice and adverse events are parts of the explanation of increased consumer bankruptcies.

After Denmark, which in 1984 adopted a comprehensive facility to address the over-indebtedness of individuals, France was the second EU country to adopt similar measures, with the law of 31 December 1989 on prevention and resolution of difficulties related to over-indebtedness of individuals and households[10].

Over-indebtedness affects all the Member States, to different degrees. It has increased with the financial crisis, which has destabilized numerous countries' economies. It is all the more important to address the issue as all economic operators are suffering the financial consequences of over-indebtedness; businesses, especially SMEs, are also weakened by their bankrupt clients' failure to pay. It is currently giving greater cause for concern, as it is hitting poor workers, the unemployed, who have accumulated unpaid bills for essential services such as energy, water, insurance, and the telephone and late rent payments, middle-class people, often following a twist of fate, and also pensioners whose pensions have fallen because of austerity policies or who give financial support to their family *(McCormack et al. 2016)*[11]. The causes of over-indebtedness have been identified. It is a result of unemployment, job insecurity, and certain family situations. Single-parent households are the worst affected. Over-indebtedness can in certain cases be

---

9 Eurofound (2013), Household over-indebtedness in the EU: The role of informal debts.

10 Senate discussion paper: *Le traitement du surendettement* (Addressing over-indebtedness). European Affairs department. April 1998.

11 Eurofound 2013, op. cit.

the result of a twist of fate, a divorce, a separation, a death, an illness, or a disability requiring costly care to be provided.

The recent rise in over-indebtedness encompasses another sociological category: middle-class people who have lost their job and are faced with heavy mortgage payments on their homes, with no short-term prospect of finding another job. *Sullivan (1997)* finds for the US, that the middle class is the primary beneficiary of the consumer bankruptcy system – and that evidence of abuse on a systemic level. There are therefore a great variety of causes and effects of over-indebtedness among and within the categories of people concerned (*McCormack et al. 2016*). The risk of over-indebtedness is heightened by the imbalance between the rise of income and the rise in the cost of living, which is linked to changing lifestyles, national austerity policies, rising everyday expenses such as energy, housing, electronic communications, telephone, transport, and financial costs.

A separate, but non less important, group of consumers for who current insolvency frameworks in Europe often fall short are the so-called 'NINA' (No Income, No Assets). As several jurisdictions require at least minimum monthly payments to partake in debt rescheduling and subsequent discharge, it's implicit therein that NINAs are excluded (*Hoyer 2020*).

Taking out loans in an affluent society, encouraged by sometimes aggressive marketing, to make up for the loss of income or obtain goods and services, is also at the root of over-indebtedness in numerous cases (*Lyons 2003*). It is nevertheless in the interest of encouraging employment and tax collection in society to stimulate consumption, and income to debt ratios has a direct impact thereon (*Murphy 1998*). In this regard, it should be noted that vulnerable population groups are worse affected by debt as they do not have access to all forms of credit owing to their poor creditworthiness. Another explanation is offered, that a combination of decreased costs of lending and consumer bankruptcy has led to an uptick in consumer bankruptcy proceedings (in the US), (*Livshits et al. 2010*)

Some over-indebted households that are in arrears with payments or repayments are at greater risk from social exclusion and in danger of being deprived of utilities or evicted from their home, not to mention the difficulties of access to healthcare

caused by this instability. Although they are not the same in each Member State, the consensus is emerging on the main causes of over-indebtedness. Already in 2008, the EESC of the EU noted, that they do not have the means to evaluate the situation at the European level with the necessary accuracy[12]. There are no European records. Moreover, if they are to be established, agreement first needs to be reached on what is meant by "over-indebtedness" and on the criteria and methods for measuring it.

As noted by the EESC of the EU, insolvency law, on which the EESC has issued an opinion, is an interesting example[13]. Many Member States have introduced judicial procedures for containing over-indebtedness. It is acknowledged, that there is an absence of comparative studies on legislation covering all the 28 Member States, and as such, there is a lack of data for showing how to deal with over-indebtedness and that there is a need to find a solution that will enable households to avoid social exclusion and, where possible, to pay off their debts as far as their means allow. Some systems provide for partial or total cancellation of the debts where the situation of over-indebted people is irreparable, in order to give them a second chance. Even if EESC fingerprints on EU legislation might not always be easily attributable, their participation in setting the tone for the EU regulation in this area has been noted (*Kilborn 2016*).

2.2 Hypotheses[14]

The development of personal bankruptcy regulations throughout Europe from the middle of the 1980'ies until today has happened at the national level in the EU member states. Only recently is EU harmonisation in the area beginning, and the first regulatory initiative is only in the shape of a directive, i.e. it needs national

[12] OJ C 44, 16.2.2008, p 74.

[13] OJ C 271, 19.9.2013, p. 55.

[14] The research including the literature review, the elaboration of the index and the empirical research and analysis was part of the Higher Education Institutional Excellence Program 2020 of the Ministry of Innovation and Technology in the framework of the 'Financial and Public Services' research project (TKP2020-IKA-02) at Corvinus University of Budapest. The research and the related papers were carried through and finalised in the personal bankruptcy section lead by Dr. György Walter.

transposition in member states before becoming law binding on the citizens. Usually, as the EU regulation of an area matures, there tends to be a progression from regulation by a directive to full regulatory harmonisation by enacting EU regulations, that are directly binding on citizens, and as such sets forth a full harmonisation of member states laws in an area.

In the following, I will firstly review existing literature on personal bankruptcy, and overindebtedness that leads to the need for personal bankruptcy regulations and then look at the question of leniency. Subsequently, I will shortly present the EU member states' regulation in the area and the EU fresh start directive[15]. As will be seen, the regulation in EU member states is fragmented and diverse.

In order to analyse the regulations of member states, and to compare their development, the question is on what criteria to describe this development. Hence, I will set forth my hypothesis.

The first hypothesis is, that European personal bankruptcy regulations can be grouped based on the main characteristics of their leniency aspects, so as to reflect, perhaps, differing schools of thought thereon. The second hypothesis that comes fast to mind within law is that could perhaps be that grouping of leniency aspects will reflect an association with the law origin of a country. As is well established, Europe can be overarchingly divided between common law and civil law systems, with Scandinavia being a hybrid system of the two. The civil law systems, consisting of the German legal tradition, French legal tradition and Italian legal tradition, in particular, as countries with large civil code regulations that are ultimately founded on Roman-, or Roman-Germanic law. A third hypothesis that needs to be researched, is if it is rather the geographic-regional location of a country that might explain the leniency characteristics of personal bankruptcy laws in Europe. As an example, we have the Visegrad region, The Nordics and Baltics, etc. Finally, the fourth hypothesis is, that the development of personal bankruptcy laws

[15] Directive (EU) 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt, and amending Directive (EU) 2017/1132 -in this text referred to as the fresh start directive.

can be explained by their age from coming into effect in their respective member states' legal system, i.e., a maturation development process.

Summing up, the hypothesis around which this thesis is built is as follows:

1) European personal bankruptcy legislations can be grouped based on their leniency characteristics
2) The leniency level of European personal bankruptcy legislations is associated with the law origin of the country
3) The leniency level of European personal bankruptcy legislations is associated with the regional position of the country
4) The leniency level of European personal bankruptcy legislations is associated with the age of the legislation

3 Personal bankruptcy

Personal bankruptcy, and any subsequent comparison of legislative developments respectively their leniency, starts with debtors ending up with a credit that they cannot service. The question of consumer over-indebtedness looks at the causation of debtors reaching an unserviceable level of debt, which subsequently leads to the need for considering personal bankruptcy.

3.1 Consumer over-indebtedness

The overindebtedness of consumers has developed along the lines of the development and expansion of credit in society. It is not a new phenomenon, as already research in 1974 in the US pointed to a more than fivefold increase in consumer bankruptcies in the aftermath of the second world war. The marked increase in consumer bankruptcies is attributed to the overall credit expansion of households as their significance in the economy has increased, combined with increased leverage looking at a fall in debt-to-income ratios (*Yeager 1974)*. Table 1 in his study already at that time showed that a doubling of the ratio of consumer credit outstanding to disposable personal income "Consumer Debt Burden" lead to e tripling of consumer bankruptcies, i.e., a disproportional, exponential increase (*Yeager 1974, p. 101 with table 1)*.

There is plenty of information as to the causes of Consumer Over-indebtedness experienced by households. Reasons include a drop in income, poor budget management, compulsive buying, and aggressive advertising. Particular credit products, such as credit cards, and high-cost short-term credit, have been attributed to increasing the risk of Consumer Over-indebtedness. Another study observed a combination of decreased lending costs and decreased costs of consumer bankruptcy (*Livshits et al. 2010*)

In the Civic Consulting Report, interviewed stakeholders identified high-interest rate credit, home loans, and other forms of consumer credit as a cause of the household financial difficulty. However, one thing on which the research seems to

agree is that such over-indebtedness normally results from an unexpected event or from life-changing situations and maybe a combination of any or all of the above.

A connection has also been made between consumer over-indebtedness, poverty, and exclusion, both social and financial. As a result of a drive to combat poverty and social exclusion, EU Member States adopted National Action Plans for social inclusion—the basic aim being to promote more effective policy in this regard. These plans were reviewed by the Commission in 2003, where again the importance of fighting social exclusion and poverty was reiterated. This is continued in the Europe 2020 strategy, where tackling poverty and social exclusion was integral to the Flagship Initiative "European Platform against Poverty". All of these issues are directly linked to the welfare of consumers and also touch on consumer spending and purchasing power. The Civic Consulting Report refers to reported reduced standards of living and a decline in health, particularly mental health (evidenced by depression and feelings of stress) (*Civic Consulting: "The over-indebtedness of European households: updated mapping of the situation, nature and causes, effects and initiatives for alleviating its impact" Final Report (2014))*. The impact of interest rates and lending practices on borrowers (particularly the more vulnerable) and the effect of unpaid debt on the economy are also relevant. consumer over-indebtedness procedures, however, are only one aspect of tackling these questions. Other controls, such as ensuring fair and responsible lending practices, are used, together with 'softer' options such as financial education. Interest rate caps are also utilized sporadically across the EU, in some countries, this is more controversial than others.

3.2 Definition and history of personal bankruptcy

Historically, the consumer bankruptcy systems of different jurisdictions have varied - if, at all, a given country had such a system at all. Going back to the 19th century, the solution was much simpler. Not honouring one's obligation to return what had been lent was a punishable crime, and as such debt-imprisonment was the norm (*Ware 2014*). In much of the world, indeed, the phrase "consumer bankruptcy" would have been an oxymoron: by definition and conception, "bankruptcy" is (or was) a legal mechanism to be used for business failures only. The quaint and moralistic notion was that only business people would need or be able to justify

incurring debt. This limited usage was common also in Anglo-American jurisprudence until the middle of the 19th century, but then England and the United States expanded their conceptions of "bankruptcy" to embrace debt relief for non-business individual consumer debtors. (*Tabb 1991, 1995, 1997*) Some considerations have, though, also been given to attribute a liberal attitude towards consumer bankruptcy to moral values (*Flint 1991*) who goes on to illustrate the Christian moral underpinnings of the original US consumer bankruptcy legislation – where original commentators compared consumer overindebtedness to a kind of slave-like bond between the creditor and debtor (*Flint 1991, with references, note 53*).

In modern terminology, personal bankruptcy law *"is the legal process for resolving the debts of insolvent individuals, married couples, /…/ entrepreneurs, and small business owners*" (*White 2015, p.5*).

But the original usage persists to a greater or lesser degree in the civil law tradition in continental Europe and the Middle East (*Efrat 2002*). Lopes observes that "*according ...most Roman law derived systems - it applies exclusively to "comerciantes", either as individuals or incorporated legal entities*" (*Lopes 2003*). Even if civil law countries have offered some form of legal debt relief to consumers, the scope of that relief has been modest. Much is required of debtors, and little is given. *Niemi-Kiesiläinen et al. (2003*) described that the Anglo-Saxon and the European civil law systems are so fundamentally different in basic conception and operation that it would be misleading to even use the same name to describe them, and thus prefered to denominate the European model as "consumer debt adjustment" rather than "consumer bankruptcy" (*Niemi-Kiesiläinen et al. 2003*). The United States has been the most notable liberal "fresh start" policy for individual consumer debtors in effect since 1898. Until recently, most individual consumer debtors in the United States enjoyed broad access to an immediate and unconditional discharge of debts, unhampered even by a corresponding requirement of future income contribution. Since 1984, major bankruptcy or insolvency laws have been passed in numerous countries as will be further explored below.

What has been the trend of these changes? The answer depends in large part on the starting point. Countries where it was not a good thing to be a financially

embarrassed consumer debtor - that is, those countries that had never had a consumer bankruptcy law at all, or whose law was at best rudimentary, or whose law was creditor friendly - have been adopting more debtor-friendly consumer bankruptcy legislation. Examples abound. In Europe, a number of new consumer bankruptcy laws have been adopted since Denmark opened the door in 1984 *(Tabb 1991, 1995, 1999)*.

As such, the US bankruptcy legislation is regarded as the first and benchmark regime in modern societies. The Chandler act of 1938 in the US enacted the first entry of consumers into bankruptcy law. The approach chosen was quite similar to the development path that seems to be trodden by new jurisdictions entering into this territory in Europe: The Chandler act enabled consumers to engage in a repayment plan, at the end of which they would be released of debt. The law saw little use, and the consumer credit expansion necessitated the development of US law (*Flint 1991*). The fundamental philosophy supporting American bankruptcy laws was persuasively and eloquently laid down by the Bankruptcy Laws Commission in 1973 (*Niemi-Kiesiläinen 1999)*. Essentially, it is a moral regime with an emphasis on a second chance and a fresh start policy. *Sommer (1998*) underscored the same point when addressing the US clawback on access to consumer bankruptcy, by pointing out that it was sound for the overall economy and for human dignity. At the same time, the Bankruptcy Laws Commission's starting point was acceptance of, and adherence to, the notion of an open credit economy. The Bankruptcy Laws Commission saw credit as a beneficial social institution, both from the individual's and from society's point of view. Some attributed human value notions to the enactment of the law (*Flint 1991*) According to the Bankruptcy Laws Commission, credit furthers economic growth and increases individuals' well-being, and both goals are better served if consumers are inclined to take risks. A basic function of bankruptcy is therefore to serve the credit markets (*Niemi-Kiesiläinen 1999*).

In particular, Europeans seem to take a socio-legal view of consumer bankruptcy. *Ware (2014)* found, that in Europe not much has changed since the first discussion in the English parliament on abolishing debt imprisonment. The arguments used then, as now, are comparable. They maintain that what is needed is comprehensive empirical information about consumer debtors, their debt problems and reasons for

filing for bankruptcy, and the operation of consumer credit markets; decisions on bankruptcy law and policy, they believe, should be based on that information. Both European and US scholars base their approaches on the notion of consumer bankruptcy as an institution for the regulation of the consumer credit market. One could argue that the law-and-economics discipline is optimistic about the ability of bankruptcy law to modify debtors' behaviour, whereas the socio-legal school tends to be pessimistic about the remedial powers of bankruptcy law. Instead, the socio-legal school emphasizes the impact of larger economic forces, economic fluctuations, and unemployment, which cause debtors and their families financial distress and lead them to file for bankruptcy. The diverse approaches, structures, and legislative solutions lead to different focuses in politics and scientific papers.

Discussions about personal bankruptcy can be generally categorized as:
1) moral hazard and the question of discharge and relief of debt, the question of "*fresh start*" and its potential abuse;
2) bankruptcy as a type of *social insurance*; the role, and the relation of welfare states to personal bankruptcy; and
3) the relation of bankruptcy regulation and the *incentives for entrepreneurship, effect on labour supply*; and
4) *stigmatization* of the participants.

3.3 Personal bankruptcy

At the outset, the question of consumer over-indebtedness was looked at from the perspective of, whether it could threaten financial stability. Even if *Yeager (1974)* at that time found a non-threatening equilibrium for financial stability had been reached, only a decade later the 1980'ies savings and loan crisis in the US was a marked demonstration of the bank-consumer-government instability that has since haunted western economies. It was followed by the 1990' Scandinavian banking crisis and above all of them, the subprime crisis (*Balatti and López-Quiles 2021)* and the subsequent global financial crisis of the 2010's eventually leading to the collapse of several European economies and the European sovereign debt crisis, that has to see final resolve for some countries[16].

[16] One needs only view the financial stability report of the ECB, the may 2021 financial stability report even ackowledges it as a headline, that: „Euro area

What then, is the cause of rising consumer bankruptcies? *Sullivan et al. (2006)* presented their third study over 20 years on consumer bankruptcies, their causes, and stigma. They attributed the increase in consumer bankruptcies mainly to increased debt to income ratios, which has more than doubled between 1981 and 2001 that they have undertaken three analyses. And that is even as NINA's was omitted due to the mathematical impossibility of dividing with zero for debt-to-income ratio calculation. As the authors noted, that omission made bankrupt families appear more payable than they actually were. Whilst they showed the (biased) more than doubling in debt-to-income ratio, they at the same time noted a more than five-doubling of the number of consumer bankruptcy filings in the same timespan – up from around 300.000 in 1981 to around 1.500.000 in 2004 (*Sullivan et al. (2006 pp. 230 and 236*). *Zinman (2015)* provided an updated review of the consumer over-indebtedness and consumer debt to income developments in the US and its theoretical and empirical underpinnings, noting not least the massive expansion of credit card debts, mortgages, student loans, and car debts. Others, though, still uphold that consumer bankruptcy regulation, and in particular lenient ones, leads to a misallocation of risk in society and to a subsequent decline in credit and increase in interest (*Friesner et al. 2011 p. 781)*, building on (*Graue 1939); (Krebs et al. 2015); (Gropp et al. 1997).* One study points to a possible institutional (co-)explanatory factor, namely banking deregulation. *Dick and Lehnert (2010)* attributed at least 10% of the rise in consumer bankruptcy rates was due to the deregulation of banks. Most interestingly, even if leading to increased consumer bankruptcies, they found that overall, the banking deregulation leads to an increase in credit, also benefitting less well of families, whilst giving decreasing loss rates on overall loan portfolio level and also higher lending productivity. I take it, the intuition must be, that the increase in lending activity more than outweighs the offset of increased consumer bankruptcies.

A key point in the comparative analyses of the systems is the attitude of the legislator towards leniency. Furthermore, in papers about social insurance and

---

recovery has been delayed, https://www.ecb.europa.eu/pub/financial-stability/fsr/html/ecb.fsr202105~757f727fe4.en.html [accessed 21 may 2021] So even by 2021 the ECB language is about (some) Eurozone countries still being in recovery territory more than 14 years past the onset of the great recession.

moral hazards, the centre of the discussion is typically the trade-off between leniency and its potential abuse and negative effects on the financial markets. The complex question of leniency versus abuse is always centred in discussions among policymakers as well.

Thorne and Anderson (2006) undertook a sociological study into the actual stigma felt by households who had undergone consumer bankruptcy proceedings. Contrary to some other theoretical approaches, their empirical data suggest that experiences social stigma is pervasive throughout the study participants, who show many signs of undergoing a traumatic or stigmatized, social event. Further to this, *Bishop (2017)* for the UK and Wales found, that stigma from undergoing a process of consumer bankruptcy has a more negative impact on social capital than informal voluntary arrangements, even if the latter give a suboptimal outcome for the consumer debtor. *Bishop (2017, p. 3752)* attributed the deepfelt stigma from undergoing the consumer bankruptcy process to historical notions of wrongdoing, social condemnation, and public shaming. Having regard to the studies from other social disciplines than economics (*Thorne and Anderson 2006, and Bishop 2017*) it becomes a tad hollow, when (*White 1998)* considered it begged a question why more households didn’t file for consumer bankruptcy in the US, given that she found a considerable number of households would actually gain an economical benefit from doing so. She considered two explanations; either that creditors simply do not ask and secondly an options value explanation.

In contrast, in the United States, much consumer bankruptcy research has relied on the law-and-economics paradigm, which views bankruptcy mainly as an institution for risk allocation. Since the typical risks in the consumer credit market (i.e., loss of income because of lay-offs, divorce, and illness) are unforeseeable, they should, according to the theory, be allocated to the party who is in a better position to bear the risk - the commercial lender. Even where the consumer has better information about the risk (such as the borrower’s over-commitment), some theorists would impose the loss on the institutional lender because of the lender’s superior ability to diversify and calculate the risks (*Niemi-Kiesiläinen 1999 incl. note 13*).

The terms describing leniency in the literature are related to the conditions of debt relief, possible discharges, and the opportunity for a fresh start. Debt relief refers to

general measures taken to make it easier for a debtor to repay debts through deferral payments, easing debt service payments, or discharge. The discharge could be partial or full, and the borrower is relieved fully or partly from its obligations to a lender. The definition of a fresh start is connected to both debt relief and discharge. According to the Supreme Court Decision of 1934 by the US Courts, a fresh start "*gives to the honest but unfortunate debtor a new opportunity in life and a clear field for future effort, unhampered by the pressure and discouragement of pre-existing debt. /…/ This goal is accomplished through the bankruptcy discharge, which releases debtors from personal liability from specific debts and prohibits creditors from ever taking any action against the debtor to collect those debts.*" (US. Courts)

Bankruptcy procedures last until the borrowers get a fresh start. In this complex process, we can define three phases and three milestones. The first phase lasts until the milestone of signing the first agreement/settlement between the creditors and borrower (either based on an out-of-court or juridical decision). The second phase lasts until the date when the specific agreement or decision is fulfilled in either of the promoted regimes and results in the second milestone of a discharge – which at the same time, defines the beginning of the third phase. Finally, due to possible legislative steps, there could be further restrictions (called stigmas) for the borrower even after being officially relieved from the obligations. These stigmas typically start in the first and second phases and can continue after the official discharge in the third phase to the third milestone. Based on the general definition, if the borrower passes the second milestone, they receive a fresh start. A fresh start being both discharge and being relieved of stigma would then be the final third milestone.

Leniency as a common term has a broader meaning than just discharge or a fresh start. The degree of the leniency of a personal bankruptcy system indicated how the system treats the levants of the entrepreneurs and private individuals with infinite responsibility, how easy or difficult it is for borrowers to achieve a fresh start, and, additionally, how harsh or lenient various possible stigmas are after receiving a fresh start. Although leniency is a key factor for policymakers and researchers to compare systems and analyse the effects, the measure of leniency was always limited to one-time events of legislative changes or some selective elements (such as homestead exemptions, judicial customs) of the US federal system. With this

approach, the comparison and ranking of different legislations, as well as cross-country analysis of leniency as a factor affecting the economy and society, were not possible.

Does a fresh start work? There is little research available on what happens to consumers post-bankruptcy and a, presumably, fresh start. *Han and Li (2011)* looked into this issue using US data and found a significant detrimental effect of consumer bankruptcy after completion of the process. The detrimental effect was in particular more limited access to credit, and at a higher cost compared to consumers that had not undergone a bankruptcy process[17]. As an example, their comparison with other families in comparable socio-economic circumstances showed that those that are post-consumer-bankruptcy have 40% fewer credit cards. Similarly, they found that those that have not undergone a consumer bankruptcy process was more than 30% more likely to have a car loan. In the US credit agencies are allowed to have a "flag" on a person that has previously had a consumer bankruptcy for up to 10 years after the bankruptcy. Even if they can find a difference in the depth of the stigmatizing effect of the flag between 0-9 years while the flag is there, and 10+ years when the flag is removed, the overall lifecycle detrimental impact is significant according to the authors. This goes to underscore, that measuring stigma is an intrinsic component of vetting the quality of a consumer bankruptcy scheme, and for that matter, leniency. *Garmaise and Natividad (2019)*, using Peruvian data looks at the impact on credit scores and lending subsequent to consumers defaulting on their credits. This is not a bankruptcy procedure, but as for stigmatizing effect and its repercussions (due to credit scoring impact), it seems useable. They conclude that in a systemic depression of the economy, the stigma effect from credit score downgrades may prolong the severity of a downturn.

[17] My understanding of the applied methodology is, that based on a questionaire if people had to undergoe personal bankruptcy or not their situations was compared. Knowing the widespread use of creditscores in the US I would suppose a more granular comparrison could have been achieved, had the data been linked to credit scores so that comparrisson was between families with fairly similar scores was performed. It would also have enabled to analyse the impact on credit scores isolated.

3.4 Comparative analyses of personal bankruptcy systems

Personal bankruptcy regimes are of great variety in the world, including the European countries. In comparative analyses, there is a characterizing opportunity formed on the general approach and whose needs – the debtors or the creditors – are better represented in the process. It is a widely accepted view that the debtors' rights and interests are favoured in the US, where the legislation has been more forgiving than in European countries, where creditor-favourable personal bankruptcy legislations are traditional, at least until the EU Fresh Start directive is implemented in member states. One grouped the countries around the world based on the "availability, certainty, and promptness of debt forgiveness as follows: conservatives have no discharge or fresh starts available, and liberals are those countries where a quick and automatic fresh start is available either via straight bankruptcy or through repayment settlements (*Efrat 2002).* Ramsey discussed comparative consumer bankruptcy and described the main features of regulation, such as the influence of the US in introducing a fresh start in the legislations of European countries. He explained the differences based on the path-dependence of legal institutions, cultural differences, law origin or political interests, and the influence of different groups in society (*Ramsay 2007). Heuer (2014)* classified consumer bankruptcy regimes into 15 advanced economies of the world. He identified a "common core" of bankruptcies and defined four clusters of models (market, restriction, liability, and mercy model), based on fresh-start opportunities and restrictions.

In an extensive study of the legislations of 30 European countries were presented and compared by country experts based on the same characteristics and dimensions of the systems (access, discharge, processes, competent courts, debtors' and creditor's position, costs, etc) (*Graziano et al. 2019).* As such, *Graziano et al. (2019)* provide the most recent and very extensive research into comparative personal bankruptcy. The mammoth monograph (1162 p.) in particular uses the comparative-legal model on "länderbericht" developed by *Zweigert and Kötz (1996).* This approach entails functional comparative analysis, whereby only law that has the same function can be compared. This approach has earlier been considered the gold standard for comparative legal research, albeit it is coming more under scrutiny today. Not least in terms of law and economics, and to enable an economic analysis of the function of law, the method of "länderberich" is only

useable as e data collection method in terms of providing information on the legal systems at hand, whereas the method does not in itself enable mathematically measurable data[18]. *Graziano et al. (2019)* contain "länderbericthe" written by national, mainly academic, experts from all EU countries and also from geographic Europe. The country reports cover a quite full description of national personal bankruptcy systems, including the possibility of pre-process action or negotiations, description of the access to proceedings, and the different types of procedures, payment plan, discharge and costs. It also covers more procedural aspects in terms of a competent court and their possible assistance from external parties or insolvency officeholders, and finally describes the rights and obligations of the parties to the process, ie. the debtor and the creditor. *Graziano et al. (2019)* pointed to development throughout Europe towards access to personal bankruptcy procedures, and that not only for entrepreneurs but also for consumers. Furthermore, they described a trend towards reducing discharge periods, and the 3-year discharge in the EU Fresh Start directive, albeit only binding in regard to entrepreneurs and recommended for consumers, is an indication of the same trend at the EU level *(Graziano et al. 2019 p. 88)*

In order to bridge the legal information of individual countries and numerical measuring, we use the system of composite indicators, as further elaborated in chapter 5 below. By setting indicators, we examine each country's regime in parallel with the comparative research done in this field (*Armour and Cumming 2008); (Graziano et al. 2019).* Composite indicators gained great popularity in research during the last decades, resulting in a large amount of literature describing the methodology and ways of building composite indicators and indices. (*Greco et al. 2019)* gave a complex review of the literature describing the methodological framework of constructing composite indices. For the development of composite indices, (*OECD 2008)* described the methodology as a 10-step process that serves as a checklist.

When comparing the legislation of different countries, we considered the methodology used by (*La Porta et al. 1998)* for similar purposes. These dimensions

[18] Further criticism se *Kischel, U. Comparative law (2019 p. 80-200)*

partly correspond to the categories defined by *White (2007) and Armour and Cummings (2008*), see also below chapter 5.

4 Leniency and Personal bankruptcy

4.1 Impact of leniency

The relationship between leniency, a fresh start, the intensity of the insurance effect, the appearance of labour incentives, the entrepreneurial incentives, the existence of credit rationale, and their net effect on society was heavily discussed in the literature, with mixed results. We can group these studies based on their focus. The first group focused on the effect of fresh start and leniency on entrepreneurial activity – whether more lenient personal bankruptcy systems made a positive effect on entrepreneurial activity; the second group analysed the appearance of credit rational due to a fresh start and leniency – whether more lenient personal bankruptcy systems created a negative phenomenon of credit rationing; the third group of papers focused on the net effect of entrepreneurial activity (social insurance) and credit rational – if the positive effect of entrepreneurial activity or credit rationing impacts dominated in the economy and society or no significant/clear net effect could be detected.

Although a relatively large number of studies have examined the relationship between leniency systems, a fresh start, credit rational, and entrepreneurship, only a few papers have analysed the relationship between fresh start and credit rational to labour supply (*Chen and Zao 2017; Li et al. 2017*) or labour incentives (*Han and Li 2007; Dobbie and Song 2015; Chatterjee and Gordon 2012*). *Zywicki (2005)* rejected all hitherto theories and attributed the increased use of consumer bankruptcy in the US to changes in consumer perception of the (lack of) stigma from undergoing a process labelled bankruptcy.

Literature has dominantly focused on the US market and federal legislation, while fewer papers have dealt with European countries. *Davydenko and Franks (2008)* examined the bankruptcy law and its effect on the credit market in some European countries (France, Germany, and the UK) based on firm data. *Fossen and König (2015); Fossen (2014)* focused on the effect of the reform of the Insolvency Code

of Germany in 1999; the change led to a more lenient direction. *Jia (2015)* analysed the diverse welfare impact on workers and entrepreneurs in Europe.

Besides one-time events and differences in exemptions, there were no complex indicators of leniency applied in the literature. We found one research that built a composite indicator to describe the fresh start and bankruptcy characteristics of personal bankruptcy systems. *Armour and Cumming (2008)* used aggregated data from 15 countries in North America and Europe in 1990–2005, to analyse the conditions of discharge on entrepreneurship. They created a bankruptcy index as a composite of five indicators to evaluate the effect (*Armour and Cumming 2008)*. They found that the lenient bankruptcy laws measured by the conditions of discharge significantly increased self-employment rates. We incorporate some of these indicators into our model, but we also introduce new dimensions and substantially broaden the number of indicators, as detailed in the next chapter.

Agarwal and Chomsisengphet (2009) looked at the effect of US homestead exemption laws across US states as regards the availability of credit for home loans. They used a bank-specific approach, and according to the authors, unlike the previous studies, they also collected further variables that could be critical in evaluating mortgage applications at banks. They empirically tested whether homestead exemptions play any part in the underwriting process for mortgages originated at a large financial institution. The results indicated that the dummies for homestead exemptions are statistically insignificant. The findings were robust according to the authors, as they withstood a variety of robustness tests. The findings also showed that individual borrowers' financial capacity and creditworthiness are the only determinants of being rejected or accepted for a home mortgage. In addition, they studied the impact of state exemption laws on the availability of credit for second mortgages (home loans). Here as well, their results showed that homestead exemption laws are statistically insignificant in credit availability decisions. It must be noted that the article, focused only on the availability of credit and not on the pricing of credit. As the authors specifically put forward, it was possible that exemption laws affected the pricing of credit. From the point of view of intuition though, to the extent supply was not measurably impacted, it would be odd if there was a significant pricing impact, as in competitive markets one would expect a correlation between pricing and supply (and demand).

In a previous article, *Agarwal et al. (2005)* looked at opportunistic behaviour by small business lenders. They looked at the correlation between increased leniency in terms of protection of the homes of the small business owners under US law. They found that their empirical results suggest that an increase of $10,000 in the homestead exemptions will increase the likelihood of small business owners declaring bankruptcy by 8%. Further, their results indicate that there is a 4% rise in the risk of small business bankruptcy with a $1000 increase in personal property exemption levels. The data they looked at related to very small businesses, where part of the credit base was credit card credit lines. In this respect, one must assume the protection of the home of the small business owners as their expected main and most important personal asset must have a high preference for their decision making once their chance on their personal business starts becoming a liability for their family-livelihood. I would expect a clear difference had the dataset been based on bank lending and not credit card lending, as the credit granting process will be different (and more granular) in a bank. In this respect, the later results of (*Agarwal and Chomsisengphet 2009)* take preference over (*Agarwal et al. 2005).*

Balatti and López-Quiles (2021) looked at the function of limited liability on mortgages. Known in the US a non-recourse, and in Europe as datio in solutem, and in popular terminology as giving back the keys to the house, the ability under classic US mortgages to return a house to the creditor without personal liability for uncovered debts under the mortgage in effects works similarly to limited liability. For housing price volatility this places the housing market risk with the creditor to be priced into the credit, respectively to influence the size of the credit. The implicit effect is shielding the consumer from over-indebtedness due to housing price fluctuations as well as severe changes in life circumstances leading to the illiquidity of the consumer. In this respect, one would expect that those mortgages would be prized with a higher interest rate due to the increased risk, compared to non-tradition US mortgages not carrying this risk. Using US data from Fanny May their analysis (*Balatti and López-Quiles 2021, with table 3 on page 35 et. sec.)* also to their own surprise showed 0 (zero) pricing difference neither at origination nor at subsequent mortgage sale between investors (creditors) when comparing recourse and non-recourse loans.

Berkowitz and White (2004) took another approach to access credit and looked at how personal bankruptcy law affected small firms' access to credit. It is well known that the United States has separate bankruptcy procedures for individuals versus corporations. What is less well known is that personal bankruptcy procedures also apply to small firms. In the US, a company (i.e. a business, a firm), can choose between being incorporated as a legal entity – a corporation. It can also be pursued by an individual person. In the latter instance, the liability of the personal company becomes the personal debt of the person running the small business. In that sense, lending to the small, personally run, company (that is not incorporated) is equal to lending to its owner. This would be equally so in many EU jurisdictions. But in many EU jurisdictions the choice of bankruptcy procedure will depend on whether it is pursuing a business or not – if it is a company, a firm – whereas, in the US, the separator for a type of procedure is whether there is a corporation (a limited liability entity) or a physical person. As such, in the US, a person can file for bankruptcy as a personal business owner, and their debts will be released for a fresh start under the procedure. When a firm is a corporation, limited liability implies that the owner is not legally responsible for the firm’s debts. However, lenders to small corporations often require that the owner guarantee the loan and may also require that the owner give the lender a second mortgage on her house. This wipes out the owner's limited liability for purposes of the loan and makes small firms into corporate/noncorporate hybrids. Thus, the authors made the point that personal bankruptcy law applies to noncorporate and may also apply to small corporate firms. They tested whether variation in personal bankruptcy exemptions across affects small firms' access to credit, using the 1993 National Survey of Small Business (NSSBF). They found that smaller businesses were more likely to be declined credit in the cases where they were domiciled in states with high rather than low homestead exemptions and that, if they received credit, the credits were smaller and interest rates were higher. They also found that bankruptcy exemption levels affected both non-corporate and corporate firms, suggesting that lenders often ignore a small business's legal organizational status when making their credit decision.

Cerqueiro and Penas (2017) found that entrepreneurs who were left without pledgeable assets (what the authors termed as the mid-wealth group); an increase in exemptions under personal bankruptcy regimes had a strong negative impact on

the financing, employment, and performance of their firms. They found that those entrepreneurs permanently reduced the inflow of personal credit they obtain to finance their firm by about 6% for every $10,000 increase in the exemption limit under state personal bankruptcy law. That effect is economically important since the median increase in exemptions during their sample period is $21,400. According to the authors, the reduction in personal credit was driven by a reduction in both credit card financing and other bank loans. This finding being so, the authors still found any effects of the exemptions on the inflow of business credit (i.e., loans obtained in the name of the firm). This seems counterintuitive to the fact that for credit scoring purposes the creditworthiness of the business owner should be the relevant credit parameter – hence there should not be a difference in credit availability. I would argue this goes against their results, as it points to a higher belief in the company than the individual behind it. The authors accorded it to being an important falsification test, that in their view ruled out the possibility that their finding for personal credit might have been driven by contemporaneous local economic shocks rather than by the exemption laws. With respect to employment, they found that following an increase in exemptions, firms owned by mid-wealth entrepreneurs become less likely to be employers. In addition, these firms generated fewer revenues, had lower operating efficiency (which they measured as average revenue per employee), and became more likely to fail. These findings indicated that tighter credit constraints forced those firms to operate at a suboptimal scale, making them more vulnerable to failure.

Chatterjee et al. (2007) looked at the implications of changes in the US bankruptcy law that limits the Chapter 7 bankruptcy option to households with below-median earnings by defining equilibria of rational credit decisions, including bankruptcy and interest rate setting. They concluded that the likely outcome of the change would be a decrease in interest rates charged on unsecured loans and an increase in both the volume of debt and the number of borrowers without necessarily having an increase in the number of bankruptcies. Furthermore, the authors suggested that the changes would be big; for instance, the volume of net unsecured debt may almost double. From the point of view of average consumption, their calculations indicated that the benefits of the change are on the order of 1.5 per cent of average consumption.

Estrin et al. (2017) reviewed previous findings of the impact on the supply and pricing of credit depending on debtor or creditors biases of individual countries' personal bankruptcy systems under the perspective of prospect theory (Kahneman-Tversky). The authors reminded us of the development from expected utility models through the application of behavioural economics as suggested by prospect theory that one might be advised to apply a more granular approach to the study of the effects of personal bankruptcy on credit supply and pricing. The authors identified three core tenets of personal bankruptcy systems to allow for more detailed study; namely "fresh start" (debt wipe out), "exemptions" (of personal assets), and thirdly "compromise" whereby they suggested the ability to reach out of court settlements. Their research led them to conclude that prospect theory can be a useable explanation for variances in personal bankruptcy systems. Their main conclusion, apart from encouraging further research, was pointing to the fact that entrepreneurs and creditors will not have similar tenets of the calibration of a personal bankruptcy system as determinant factors for their preferred system. That is quite intuitive.

Using particularly US data on people above 55 years, *Greenhalgh-Stanley and Rohlin (2013)* found a positive effect of strong protection of debtor's residential property on homeownership. Moreover, they found that homestead exemptions (residential property) in general had a positive effect on entrepreneurship, but it turned negative in credit-constrained states with unlimited asset exemptions. Overall, they found that having an unlimited exemption is highly detrimental. They found overall that policymakers can use changes in state homestead exemptions to promote entrepreneurship among the elderly and/or to improve their financial well-being. They also suggested that making the homestead exemption unlimited is too much for financial institutions to bear and will substantially raise borrowing costs.

Flint (1991) in a literature study on the (moral) reasonings behind, in particular US consumer bankruptcy law, pointed to the lack of evidence of a negative impact on credit availability under the US consumer bankruptcy regulations and implied that the interests of the credit suppliers to be able to expand lending supersedes the detriment caused by the (US) consumer bankruptcy regulation.

4.2 Measuring leniency

Armour and Cumming (2008) looked at 15 European countries' over-indebtedness regulation from the perspective of a fresh start, i.e., the ability of entrepreneurs to have debt wipeout. They used a limited (5) set of variables to analyse differences in the institutional frameworks (legislation). Their findings were prevalently focused on incentivizing entrepreneurialism, but the choice of variables will be highlighted in later chapters on the methodology. The authors found that controlling for a range of other legal, economic, and social factors that may affect national levels of entrepreneurship, personal bankruptcy law has a pronounced effect on levels of entrepreneurship. They considered that bankruptcy laws have the most statistically and economically significant effect on levels of self-employment across countries, and matter more than economic determinants such as real GDP growth and stock market returns. It is shown that changes in bankruptcy laws that are more entrepreneur-friendly give rise to statistically and economically significant increases in self-employment per population. In relation to the availability of a fresh start, the authors discovered, that going from the littlest generous to uttermost generous jurisdictions (that is, from not permitting a fresh start at all to granting one immediately) is associated with an increase of around 3.9 per cent in the average rate of self-employment (self-employment/population) in the countries in their study for the period of the study. The authors also looked at the links between restrictions on access to limited liability and self-employment. Consistently with their literature review, they found restrictions (as measured by minimum capital requirements) was negatively associated with self-employment, and they found them to interact with the effect of personal bankruptcy laws: By combining stringent bankruptcy law with high requirements for the equity to be present at the time of the establishment of a company. The authors discovered that the effects of the policy were immediate: by applying leniency as regards access to personal bankruptcy in combination with access to formation of companies with limited liability at an insignificant capital charge (equity requirement) it became an efficient policy instrument for increased activity of entrepreneurs. Yet they recognized outlier countries (in particular, Greece, Italy, and Spain). Their analysis of bankruptcy laws did not explain those outliers.

Blazy et al. (2013) explored how French judges decided whether or not debts are discharged, and non-exempt assets are liquidated. They found that in the period 2004-2005, more than one-third of borrowers who filed for a fresh start were denied debt discharge. This was surprising to the authors, as all these debtors were previously identified as financially distressed by an administrative authority (meaning that there was no chance of arranging a rescheduled debt payment). A great majority of debtors who filed for discharge had no or very few assets (real estate or other) to liquidate. They showed that a debtor's reimbursement capacity is the judge's major consideration in the decision to discharge debts. More interestingly, they found that judges refuse debt discharge when debtors are indebted to multiple creditors. This leads the authors to suggest that judges may consider that some borrowers are responsible for their financial distress or overborrowing. In that case, the lower the probability of discharging the debt, the more the creditors (financial or not) are protected from default. The authors found that this could give financial creditors some incentive to increase access to credit, at the risk of increasing the probability of overborrowing when an adverse event occurs. Finally, they showed that it is necessary to control their estimate of the probability of debt discharge with some indicators of the macroeconomic context in which judges view the case. It is considered that there is great statistical support for the hypothesis that French judges' decision-making is influenced by the unemployment rate and the growth rate of disposable income per head in their locality. This implied a subjective measure on the side of the judge in adjudicating files. As such, the authors concluded, that their observations on the French bankruptcy liquidation system showed that even if all counties appear to be acting similarly in their treatment of personal bankruptcy law, there is a need to conduct more realistic studies to better assess the work of courts in each county in order to fill the gap between bankruptcy rules and judicial practice. The conclusions are not more steadfast though, than that the authors underline: “To conclude, there remains a large set of questions yet unanswered.”

4.3 Social efficiency of leniency

Zywicki (2005) criticized the so-called traditional model of explaining the increased need for consumer bankruptcy with increasing consumer debt to income ratios. The author found that the asset value increases have been insufficiently taken into

account in the analysis. He found that the traditional models have offered fair descriptions, but that they have been flawed by insufficient analysis, e.g. “poor choice of proxy variables” (*Zywicki 2005, page 1525 et sec., 1539*). The author complained that critique of current theories is scientifically insufficient if one can not come up with a better explanation. (*Zywicki (2005, page 1538*). Even if space limitations are cited as reasons for not giving a fully developed model, the author pointed to three explanatory variables for increased consumer bankruptcy, namely that costs have decreased of the process and benefit for the debtor has increased; that social norms have changed and finally that consumer attitude or behaviours towards the stigma of undergoing consumer bankruptcy have changed. I cannot resist the urge of adding the obvious as regards the observation on increase in asset values – that two years after the publication of the article, the great recession materialized.

Ayotte (2007) suggested that analysis of bankruptcy must look at all costs that are particularly relevant for owner-managed, entrepreneurial firms. Preserving the value of creditors' claims may weaken the prospects of a reorganized firm by reducing an owner-manager's incentive to succeed after bankruptcy. While this post-bankruptcy incentive effect of debt is not often recognized in business bankruptcy contexts, it figures prominently in the justification for the "fresh-start" emphasis in personal bankruptcy law, which allows debtors to obtain relief from debt despite less-than-full creditor repayment. (*Ayotte 2007)* quoted the U.S. Supreme Court for expressing its motivation for bankruptcy law in the Local Loan v. Hunt case, 292 U.S. 234, 244 (1934): "[*The bankruptcy law] gives to the honest but unfortunate debtor ... a new opportunity in life and a clear field for future effort, unhampered by the pressure and discouragement of pre-existing debt.*" (*Ayotte 2007, p. 162)* He argued, that when such incentive is important, a natural trade-off exists between the post-bankruptcy benefits (greater effort) and the prebankruptcy costs (credit rationing, greater likelihood of failure) of debt relief, which has not yet been analysed formally. He considered the effects of bankruptcy laws in an environment that is specific to entrepreneurial firms. Those firms are defined by ongoing dependence on a liquidity-constrained owner-manager, whose effort is essential to the firm’s value. The entrepreneur’s effort choice, in turn, depends on the stake in the firm’s future output. Under realistic and general conditions characterizing entrepreneurs and their lenders, (*Ayotte 2007)* found that bankruptcy

law that enables a fresh start (debt wipe-out) is the optimum over mere debt restructuring. While lenders might provide some debt relief voluntarily, the model suggested that bankruptcy bargaining backed by debt restructuring produces less debt relief than is socially efficient. Instead, the results of the model confirmed the benefits of a policy that provides entrepreneurs with a fresh start, defined as a lower level of debt (and, hence, a greater stake for the entrepreneur in his/her future output) than banks would voluntarily accept in bankruptcy negotiations. Moreover, entrepreneurs and banks would not have reached this outcome through private contracting alone. (*Ayotte 2007)* underlined, that this implies that the law must be mandatory to be effective.

Lee et al. (2007) also took the starting point in the overall societal impact of policy choices and use options modelling for their study. They reached three conclusions. Firstly, by extending real options methodology from a firm-level to a societal level they explored how entrepreneur-friendly bankruptcy law can promote entrepreneurship development. From the perspective of society, thinking of options as a bundle of firms, instead of single firms, was their approach. They considered that a bankruptcy law that curtails the downside losses of entrepreneurial failures is likely to facilitate upside gains, enhance the variance and value of the bundle of productive assets within an economy, and lead to stronger and more sustained economic growth. The author's second finding was, that while bankruptcy traditionally has often been viewed negatively, they advocated that an entrepreneur-friendly bankruptcy law, informed by a real options logic, may encourage entrepreneurship development. Thirdly, they stated that "*Similar to the saying "No pain, no gain," we believe that an economy unwilling to shoulder the costs of certain entrepreneurial failures is not likely to reap the benefits of a vibrant entrepreneurial sector and the growth it may bring*." *(Lee et al. 2007, p. 267*)

Norberg (2009) looked at possible abuse of the US chapter 13 bankruptcy system. It first found that there was an overrepresentation of participants in the process who has previously filed for consumer bankruptcy. But that apart, it found that the clear majority of applicants for consumer bankruptcy were unquestionably in need of discharge.

Jia (2015) looked at the impact on credit pricing respective entrepreneurialism and describes the credit risk from personal bankruptcy as an insurance effect. (*Jia 2015)* found firstly, in line with most literature, that a more lenient bankruptcy regime leads to a drop in average firm size and average productivity in the entrepreneurial sector. Nevertheless, and most interestingly, the total output of the economy is higher under a more lenient regime. The author explained that this was because risk-averse households choose to pursue entrepreneurship only if the expected business return is a lot higher than the sum of expected wage income and the opportunity costs of the investment, such that the difference between the two is large enough to compensate for the risk that the household was undertaking. Consequently, entrepreneurial households will prefer more lenient regimes because they bear more financial risks, so the insurance value provided by personal bankruptcy was more important to them.

As regards changes in consumer attitude, one recent study found a correlation between consumer bankruptcy for women, and a negative impact on their health, most notably depressions, but also relatively poorer physical health (*Fenaba 2017*). On the other hand, (*Buckley and Brinig 1998)* found, that changes in social norms may have explained increased bankruptcy filings in the US. They attributed the possible social norm change to either a decline in what they call social sanctions for deal-breaking, or they found the explanation in increased acceptance of higher risk-taking. Finally, (*Sullivan et al. 2006)* reported the findings of their third study over 20 years of consumer bankruptcy in the US. They make it very clear, that their data did not support that the increase in consumer bankruptcies in the US could be attributed to a change in consumer stigma declining in relation to undergoing consumer bankruptcy proceedings. On the contrary, they found that their data may indicate a rise in the stigma from consumer bankruptcy proceedings, and not least that the increase in consumer bankruptcy proceedings in the US was caused by increased financial distress *Sullivan et al., (2006, p. 215*).

One study, that has offered a quite differing approach, suggested a linkage between the average income of a jurisdiction and the leniency (Gala et al. 2013). That study suggested that a higher income of a jurisdiction reflects the inverse, i.e., a more strict approach to leniency. Notional on intuition only, I would at least argue that that is not a valid observation for Europe, as it should be common knowledge that

Denmark belongs to the upper bracket of average incomes in the EU[19], whilst at the same time obtaining the most lenient score in our study below.

4.4 Economic efficiency - allocation of credit risk

Another string of recent theoretical and empirical studies has looked more into the overall societal effect of debt cancellations and restructurings. My takeaway from these contributions is, that using the concept "leniency" to describe the granting of debt relief is biased in the sense that it lends itself to an act of grace towards the debtor, whereas it seems from more recent research that an approach looking at (professional) creditors risk management policies and the societal impact of debt wipe-outs suggests that it is a societal benefit.

Adler et al. (2000) used an agent/principal model to analyse consumer bankruptcy. They constructed the consumer bankruptcy in a contract model as insurance for the risk-averse against bad income in the future, whilst at the same time reducing the incentive for avoiding becoming insolvent altogether. Quite in line with the intuition of their approach chosen, they found that more lenient calibration of a consumer bankruptcy system increased the insurance component whilst reducing consumer incentive for bankruptcy avoidance. For my own part, I would counter that the approach is theoretically decoupled from encompassing a useable analysis for real-world application. For starters the analysis is resting upon zero transaction cost assumptions – and albeit transactions costs are all and around, in particular as regards illiquid scenarios, reconstruction, and bankruptcies the propensity for opportunistic behaviour on both sides of the equation (debtor/creditor) is high due to the possible risk/benefit of the situation, and as such transaction's costs will probably have a measurable influence.

Fossen (2014) looked at debt reduction and elimination from the terminology of insurance. His research suggested that the value of the insurance approach of personal bankruptcy is in excess of any effect on interest levels, and as such those parts of the population above middle class will be disincentivized from entrepreneurship. The authors suggested a difference in the effect of personal

19 As confirmed by Eurostat data: Living conditions in Europe - income distribution and income inequality - Statistics Explained (europa.eu) [Accessed 22.03.2021]

bankruptcy law depending upon wealth level is tested empirically using German data. In 1999, Germany introduced its Insolvency Code, which provided a "fresh start" policy for the first time in Germany. Using a representative household panel, the author used that reform and suggested its effects on entry into and exit out of self-employment as well as on the probability of being self-employed by wealth level. The results indicated that the introduction of a "fresh start" made entrepreneurship, on balance, more attractive, especially for less wealthy entrepreneurs. Most interestingly, the authors went on to suggest, that the model demonstrated that the insurance effect of the more forgiving personal bankruptcy law outweighed the effects of an increasing interest rate. This again goes to illustrate the overall beneficial effect for society through what is labelled insurance-effect, rather than focusing on the advantage obtained by the individual debtor.

Block-Lieb (2015) looked at the implications of the narrative of debt restructuring processes for the analysis carried out in relation thereto. I found the approach quite inspirational. The research pertains to the development of an international framework for defaulting nations' debt, in particular in light of the financial crisis and its ramification for e.g. Greece and Cyprus. The author narrowed in on the metaphor comparing sovereign debt to household debt and draws conclusions about renewed proposals for resolving sovereign debt problems. The author realized that the metaphor of sovereign debt to consumer debt may seem even more strained than the comparison of sovereign debt restructuring to a corporate reorganization but goes on to argue that the shift in perspective explains much about sovereign debt and sovereign debt restructuring practices.

The author pointed to the fact, that reframing sovereign debt problems as akin to consumer debt problems could renew interest in developing a framework for responsible sovereign lending and a fresh perspective on the goals and means for sovereign debt restructuring. Sovereign lenders make essentially the same calculus as consumer lenders, although sovereign "income" comes from an entire economy of workers and their tax commitments. Like consumer lenders, sovereign lenders know that they are unlikely to be repaid out of the borrower's assets. Sovereign lenders also know that repayment from sources other than forced asset recoveries will be difficult. Although neither sovereign nor consumer lenders can force repayment from their debtors' "income" without restrictions of some sort, both sorts

of lenders extend credit based on ex ante assessment of historical accounts of the debtor's payment and default practices.

Both sovereign and consumer borrowing are, from that perspective, better viewed as "income-based lending." This is an underlying similarity with consumer lending. Income-based lending generally is profitable because, by and large, debtors repay their debts, if not on time, then at least eventually. Sophisticated mathematical models assist both sorts of lenders in making ex-ante assessments about borrowers' likelihood of repayment. That modelling allows them to predict default rates, and thus also allows them to set pricing at levels that ensure healthy profits. Securitization of both household and sovereign debt allows for further sorting according to taste for risk, with the most risk-averse lenders buying related asset-backed securities with AAA ratings, and the most risk preferring of these lenders buying "junk bond" rated securities that promise far higher returns in exchange for heightened risks. And supplementing these securities with credit default swaps or other derivatives also shifts some of the heightened risks associated with this debt.

The biggest problem that both sovereign and consumer lenders face in trying to restructure debts premised on their borrowers' ability to pay is that restructuring—that is, a negotiated reduction in the effective interest rate or outstanding principal amounts of these loans—is only rational for "income-based" lenders when lenders are convinced that the debtor cannot pay, not just unwilling to pay. And that takes a lot of convincing, especially in the case of sovereign debt. Measurements of ex-ante ability to pay and ex-post sustainability are fraught with difficulty in both consumer and sovereign debt contexts. Moreover, these assessments become even more difficult as the term over which these debts are repaid increases. In theory (and absent a discharge in bankruptcy), consumers can apply the income to the repayment of their debts as long as they can work, and possibly longer if other sources of income can be applied to debt repayment (or if debts are inherited by other members of the debtor's family); in theory, sovereign debt is owed "forever," unless lenders agree to forgive or restructure the outstanding amount, or it is repaid in full. Given the potential for such long horizons, even where lenders are convinced that the borrower's debt is currently unsustainable, lenders may refuse to forgive the debt if they think that the debtor's circumstances are subject to change. This is why debtor opportunistic behaviour was taken into consideration when designing

personal bankruptcy regulations, and not least it is one of the reasons it is necessary to have personal bankruptcy regulation in place at all.

But there is an even greater reason for concern about the ex-post incentives associated with "income-based" lending because the comparison of the consumer to sovereign debt also explains pathologies in ex-ante incentives in this context according to *Block-Lieb (2015)*. Consumer borrowers may overborrow because they do not act like the rational decision-makers that economic models would posit: behavioural decision research suggests that individuals make errors in comparing short- and long-term costs and that framing of the costs can distort consumers' perceptions; it also suggests that consumers can be overoptimistic about their prospects for income growth and whether shocks to their earnings capacity will disrupt income. Like consumer borrowers, sovereign borrowers face incentives to overborrow, although for different reasons. Sovereign debtors' pathologies arise more from agency problems than from cognitive limitations. A sovereign's self-interested politicians have every incentive to borrow to provide short-term benefits in the next election, but this borrowing imposes costs further down the road for their successors. Compounding incentives to overborrow, consumer lenders and sovereign lenders also face market incentives to over lend. As with overborrowing, the causes for over-lending differ depending on the nature of the lenders' borrower. The result is the same in both cases, however: too much debt. Some consumer lenders structure their businesses on the backs of debtors in default. More than simply collecting the additional fees and higher interest in a default context, payday lenders, for example, lend on a very short-term basis, although a majority of their borrowers extend this loan for additional periods. Payday lending may exceed welfare-optimizing levels and yet remain profitable for payday lenders. Moreover, payday lenders are not the only consumer lenders suspected of lending in excess of socially optimal levels. The foreclosure crisis in the United States has been attributed, in large part, to the securitization of high-risk subprime residential mortgage loans. The tranching of pools of subprime mortgages and issuance of Residential Mortgage-Backed Securities (RMBS) to the capital markets allowed the risk-averse to purchase market-grade RMBS, which they demanded at unprecedented levels. Many argue that the high demand for RMBS created excessive supplies of subprime mortgages. Finally, these incentives can accumulate. When consumers' ex-ante tendencies to overborrow and lenders' ex-

ante incentives to over lend are combined with inherent difficulties in assessing the sustainability of these debts ex-post and in restructuring these obligations in times of financial crisis ex-post, the situation can turn toxic. The author ended without firm conclusions but underlines that The World Bank Report on the Insolvency Treatment of Natural Persons noted an emerging global consensus that an individual's access to a discharge from over-indebtedness should be conditioned on court-supervised repayment of such debts over some period. Increasingly, nations look carefully and require their consumer lenders to look carefully at whether consumer borrowers have an "ability to repay" their debts. This scrutiny is required to take place ex-ante, well before the loan is entered into default.

Dobbie and Song (2015) used a US dataset linking 500,000 bankruptcy filings to administrative tax records from the Social Security Administration (SSA) and administrative foreclosure records to estimate the causal effect of Chapter 13 bankruptcy protection on subsequent earnings, mortality, and home foreclosure. Their empirical research looked at the fact that most US bankruptcy courts use a blind rotation system to assign cases to judges, effectively randomizing filers to judges within each court. Moreover, while there are uniform criteria by which a judge may dismiss a bankruptcy filing, there is significant variation in the interpretation of these criteria between judges. As a result, otherwise, identical filers were assigned to judges with substantially different rates of granting bankruptcy. Their empirical analysis suggested bankruptcy protection delivered a societal benefit. Over a 5-year period after bankruptcy, the income of those granted debt reduction increased by more than 25% compared to before bankruptcy. The mortality rate decreased overall in the group, and the decrease was significant (more than 30%) compared to those not granted debt reduction. Those indicators all point to societal benefits from debt reduction or wipe-out by personal bankruptcy regimes and in my view should rather be seen from that perspective than using the narrative of leniency.

Following the line of *Block-Lieb (2015)* Jan-Occo Heuer in *Graziano et al. (2019 paragraph 1.15-1.20)* also noted, that from an economic perspective, the implicit addition of debt discharge into credit contracts was a form of mandatory debt insurance, that transfers default risk from borrowers to lenders. He went on to point to the underpinning theory being, that market efficiency suggests, that ex-ante

commercial creditors are the best at assessing the risk of the credit, and ex-post the best – the professional – bearer of the risk, but of course also pointing to the limitations of this approach that has to be mitigated in designing a personal bankruptcy framework, namely effect of discharge on credit supply and borrowing levels; the intrusion on the rights and obligations of the parties. I would add, in particular where the value of the debt is measured at the face and not market value. Finally, he pointed to the importance of tailoring frameworks to the legal tradition and cultural norms of the society in which they are to function.

5 Personal bankruptcy in the EU

Over-indebtedness legal procedures or personal bankruptcy - it attracts a varied terminology that is used interchangeably, and indeed this is the case more generally in relation to the terms used to denote consumer insolvency or consumer inability to meet debt commitment.

EU Member States' approaches have been variously grouped by commentators. For example, a recent study conducted by Viavoice Research Institute classifies EU insolvency procedures into 'model' systems (*Viavoice "Introductory Report towards a 'Second Chance' legislation in Europe" (Feb 2015)*): "the Market Model, Rehabilitation Model and Liability Model". However, at a general level, they can be broadly identified as bankruptcy, debt settlement procedures, or informal arrangements. Debtors subject to bankruptcy will necessarily have their assets sold with payment of proceeds split between creditors according to a preordained list. In debt settlement procedures, liquidation of assets is not inevitable, and debtors will be expected to carry out regular payments to reassure creditors either in full or in part, under a payment scheme. Both categories of legal proceedings will normally culminate in discharge sometime in the future, with a moratorium in place during the payment plan or other period whilst the legal proceedings are extant. The contrast ultimately lies in how fast a discharge can be reached. The conventional aim of a debt settlement procedure is to enable the debtor to avoid the stigma of bankruptcy and allow a manageable scheme for meeting his/her obligations, from future income. However, the payment plan presents problems if monthly or weekly payments by the consumer debtor are set at too high a level or the payment plan endures for many years. It should also be re-iterated here that whilst some assets may be excluded from a liquidation process, and a basic level of income is allowed to the debtor so that he/she and any dependants can enjoy a basic standard of living, the family home is often only subject to a temporary reprieve from the sale. Losing the home inevitably has a detrimental impact on the debtor and his/her family, both practically and psychologically.

5.1 European development of legal regulation of debt reduction and relief

After the acceptance of the US Bankruptcy Code in 1979, personal bankruptcy regimes have expanded all over the world. Focusing on Europe (*Graziano et al., 2019*), legislations were first passed in the Western European countries as follows:

1984 Denmark
1986 England and Wales (non-EU)
1989 France
1994 Germany, Sweden, Finland, and Norway
1995 Austria
1998 Belgium and the Netherlands
2000 Luxembourg
2004 Portugal and Estonia
2006 Slovakia
2008 Czech Republic, Latvia and Slovenia
2009 Poland
2010 Greece
2012 Ireland and Italy
2013 Lithuania and Spain
2015 Hungary, Croatia and Cyprus
2018 Romania
Bulgaria and Malta still have not enacted legislation on personal bankruptcy.

5.1.1 Denmark 1984

The first European country to introduce a specific procedure for consumer debt adjustments and debt discharge was Denmark, in 1984. The Danish law was an important example for the other Scandinavian countries when they drafted their laws and started the whole European move towards regulating this field. It is of interest then, what thinking as behind the Danish legislative initiative. Denmark belongs to the Nordic legal tradition, which is a hybrid of common law and civil law.

The Danish legislative preparatory committee discussed the meagre prospects of an overindebted debtor and examined the collection efforts by the creditors. Its conclusion was that the discharge of "hopeless" debts would cause no remarkable loss to any party. In the committee's view, society would benefit from a discharge in various ways. In addition to the advantages to the debtor and his or her family, the debtor's economic recovery and increased motivation to work could benefit society through savings in social security and an increase in tax flow. Even creditors might save futile enforcement costs and would benefit from their share of the payment plan (*Danish government Cmt. report (Betænkning) 957/1982* at page 73-74 and *Niemi-Kiesiläinen 1999*). This reasoning is less morally grounded than some European thinking otherwise seme to imply, and rather looks at overall societal impact.

Under the current Danish system, straight bankruptcy is *not* an option, save for a simplified procedure for entrepreneurs under court approval requirements. For consumers, it is required to go through the personal bankruptcy procedure first. Eligible consumers are those, for who the courts agree upon their application for personal bankruptcy, that are unable at current and in the midterm future to meet their debt, and where it is assumed that the procedure will lead to a permanent improvement of the consumers' economic situation. The costs of the procedure are free for the consumer who only needs to address their local court, who will then assist and guide the consumer on the process. Even if the consumer needs only to address the local court, this does not apply to entrepreneurs, for who other differentiated routes are necessary. It is a fairly complex process both for consumers and entrepreneurs. Repayment will usually be maximised at 5 years and consists of 60 months repayment of a fixed sum set as the surplus amount their budget leaves after subtraction of a government set minimum allowance and necessary household spending (rent, etc). After following the payment schedule the court will discharge the remaining debt. There are certain stigmas associated with the process, as the individual entering into the procedure will have their name published in the public legal gazette of the courts, and as such it will be picked up by credit rating agencies where it will remain for 5 years.

5.1.2 England and Wales 1986

The British followed Denmark in 1986 by adopting the second European regulation on personal bankruptcy through the 1986 Insolvency Act, which has since been updated (Harrisson, R. and Grant, D. in *Graziano et al. 2019*). England is the very origination and definition of the common law legal system and is regionally separate from the Nordic countries and continental Europe. Under the British system, there is no straight bankruptcy option, and the eligibility criteria are, that it must be a person resident in Britain for the past three years or an entrepreneur. The costs of the procedure are borne at least in part by the debtor but must not exceed 10% of the overall debt. There are a number of procedures ranging from voluntary arrangements, over administrative and debt relief orders to bankruptcy, and as such it is a complex system. Normally repayment will last 3-5 years, and discharge will be granted at the end of the process. As Britain is not an EU member state, it is not part of this study's scope but is mentioned in this overview of the European historical development for the purposes of completion.

5.1.3 France 1989

In France rules of personal bankruptcy were entered into French law by the "Nierts Law" (named by the sponsor of the proposal) in December 1989. France is a civil law country, and has its long regulated civil code, building on the Code Napoleon. The French procedure is unquestionably simple for the consumer (entrepreneur excluded): he need only to submit a request to the Commission of the Bank of France. It is the only route, and the Commission undertakes the procedure for applicants. Straight bankruptcy is not an option, neither for the entrepreneur who has to undertake a bankruptcy procedure. In order to be eligible, the consumer debtor's debts must be clearly impossible for any well-intentioned debtor to meet all of his personal debts due now and in the future. Proceeds are free for the debtor. It is to my knowledge preparing for this thesis the least complex procedure in the EU for consumers. In principle, the duration of repayment is maximised at 7 years, at the end of which the debt will be discharged. There is a certain level of stigma, as the Bank of France will register the credit event for 5 years on their register which is available for creditors to search.

5.1.4 Germany, Sweden, Finland, and Norway 1994

By 1994 further three countries followed and amended their legislation to allow for personal bankruptcy, in Germany, Sweden and Finland.

5.1.4.1 Germany

In Germany, the personal bankruptcy statutes for consumers was adopted by the Insolvenzordnung (InsO) of 5. October 1994, which entered into force on 1. January 1999 and forms part of the BGB, the civil codebook). As is clear from this, Germany is a civil law country. There is no straight bankruptcy option in Germany, eligibility criteria are narrow and the procedure is highly complex with many stages and differences whether the applicant is a consumer or entrepreneur. Court fees depend on the size of the debt and may range from less than 100 to several thousand euros. The repayment process and discharge conditions are also complex, and range from voluntary arrangements under court approval, over court-approved plans subject to at least simple majority creditor approval to fully court adjudicated arrangements. For the latter, the debtor must transfer all earnings for a period of 6 years to a trustee, and by the end of the period may then apply for discharge. Persons undergoing personal bankruptcy in Germany are published in a public system and as such there will be stigmas relating to this publicity and as such probably inability to obtain credit for the duration of the registration.

5.1.4.2 Sweden

Sweden enacted the Debt Clearance act of 1994 as the start of personal bankruptcy proceeds in Sweden, and it entails differing procedures for full bankruptcy, respectively debt clearance for consumers and debt clearance for entrepreneurs. Even if Sweden is a Scandinavian Legal tradition country, it only adopted its regulation 10 years after Denmark, which is in the same region. Straight bankruptcy is not an option in Sweden. Eligible for bankruptcy is insolvent business (personal business), whereas debt clearance procedure is available for consumers conditional on insolvency and that the circumstances suggest entering the procedure. Circumstances that the court will take into account are the reasons for obtaining the debt, attempts at servicing the debt and the circumstances of the debtor’s situation).

The entrepreneurial debt clearance route is for entrepreneurs whose business is simple to investigate, which rules out automatically where the debtor is a sole trader. In this respect, the entrepreneurial route seems rather directed at situations where an entrepreneur and his family have taken financial obligations towards providing security for bank lending to a company (belonging to the entrepreneur). Bankruptcy proceedings are subject to a 300 euro court fee, but for pure consumers and entrepreneurs under the debt clearance route is free. In terms of complexity, the Swedish system is characterised by three different routes and as such is fairly complex. The repayments under debt clearance are maximized at 5 years, and discharge will be granted at the end of the procedure. All procedures will be published in the public gazette of the courts, and a certain amount of stigma is associated with the process as such.

5.1.4.3 Finland

Finland joined the ranks of more advanced bankruptcy laws by the enactment of the Act on the Adjustment of Debts. Finland belongs to the Scandinavian legal tradition. There is no straight bankruptcy option in Finland, and their system differentiates between the procedure for private consumers (debt adjustment) and on the other hand bankruptcy for business, be it companies or in an individual capacity. Insolvent consumers or entrepreneurs are eligible under the respective routes under the Finnish system, subject to exclusion on certain criteria, eg. debt arisen from criminal offences, etc. Debt adjustment procedures are free for the consumer in the sense that the consumer only bears its own costs (if any). Bankruptcy incurs a 300 Euro court fee on application. Under court supervision, the Finnish system is fairly simple to apply. Under debt reduction plans the normal duration in Finland is three years at the end of which, subject to the fulfilment of the instalments under the plan, the debtor's debt is wiped out.

5.1.5 Austria 1995

Austria introduced a revision of their insolvency laws in 1993, coming into effect by January first, 1995, whereby debt relief for natural persons was introduced. Austria belongs to the civil law countries. From the outset, it was rather limited, but it was thoroughly revised in 2010, whereby, amongst others, straight bankruptcy

was introduced along other distinct routes. A) Straight bankruptcy option. There is a number of routes for managing illiquidity and personal bankruptcy in Austria, thereby making the system more complicated in nature. Personal bankruptcy proceedings requiring professional assistance is rather costly for the debtor. Even if applying for the proceedings is free, the debtor has to bear 7,5% of the costs, with a minimum amount of 222 Euro. As regards the repayment process, there is a differentiation between entrepreneurs and consumers. Entrepreneurs have to repay a minimum of 20% of the debts outstanding, whereas for consumers there is no minimum charge. For consumers, the repayment is calculated as 5 years repayment of whatever is left after subtracting accepted living expenses from the expected income. At the end of the repayment, the debt is discharged- with the exception, that within two years after the granting of discharge, a creditor may ask the court to reassess the case, if the discover irregularities by the debtor during the repayment period, such as hiding assets etc. There is a publication of insolvency proceedings and personal bankruptcies in the Austrian public insolvency register, which stays until one year after discharge. As such, there is a certain amount of stigma related to the process in Austria.

5.1.6 Belgium and the Netherlands 1998

5.1.6.1 Belgium

The Belgian personal bankruptcy system was enacted in 1998. Belgium is a civil law country. Prior to the 1998 regulation, there was no access to bankruptcy for natural persons, unless they were carrying out a business activity. Entrepreneurs are eligible for a straight bankruptcy through the use of the ordinary insolvency proceedings available for professionals. For consumers, the route is through the collective debt resolution scheme, which is exclusively for consumers. Due to the differentiation between natural personas acting as a consumer respectively as entrepreneurs the procedure is somewhat complex. Cost-wise, though, for the consumer process there a no costs associated for the consumer in question neither as regards filing for the process, nor for completion of the process, as costs are in principle borne by the creditors, to the extent that they will receive less as the costs are subtracted from the assets in the estate. The procedure is fairly complex, not least in relation to the steps during the process and the different tasks attributed to

the courts respectively an administrator. Repayment is the primary goal of the process, and as such repayment plans may be set at 5 or 7 years, but also longer depending on the process at hand. Discharge is difficult to obtain, but importantly, persons that have no means at all may exactly obtain a full discharge. In terms of publicity, persons under personal bankruptcy is registered in a court administered system that albeit is only semi-public. This entails that only professions like banks, lawyers etc. has access to the register. As such stigmas are associated with the register, as it will curtail the lending capacity ex-post of the registered persons, but less intrusive than fully public registers.

5.1.6.2 Netherlands

The Netherlands enacted a debt rescheduling law in 1998, that encompasses rules for personal bankruptcy for natural persons in the Netherlands. The Netherlands are a civil law country, inspired by the French Code Napoleon originally. The law is not applicable to entrepreneurs insofar as regards the business activity, which is separately subject to the business bankruptcy procedure. As such, there is no straight bankruptcy option. Natural persons are eligible for the personal bankruptcy procedure and are eligible if they have acted in good faith as regards the nature of the debt and their ability to repay it. It is for the consumer to prove their eligibility to the court. Cost-wise it is free to apply for the opening of the procedure, but depending on the economy of the applicant, the applicant may have to pay some of the costs of the personal bankruptcy. The access to the procedure is one unified procedure, as such fairly simple, even if the process itself is complex. Repayment has to be scheduled primarily for 3 years but may be prolonged to 5 years by the court. Discharge requires judicial approval at the end of the repayment plan, and eg. insufficient activity in seeking employment during the repayment period may render the applicant disqualified from discharge. It should be noted that discharge is not full, but only disables the creditors from seeking legal remedy for the debt, whereas the debt is still considered valid as a natural claim[20]. As such I will not

[20] I would argue that the conversion into a natural claim me be by law in the Netherlands, but to my knowledge would occur anyhow in most jurisdictions building on Roman law (Obligatio Naturalis). As such where a claim seize to be executable in court, it may still have effect eg if the debtor happens to make a payment to the creditor, in which case the payment may not be clawed back (Condictio Indebiti). The latter makes a difference where the creditor is a bank, in case the debtor has future transaktions with it.

consider this an abnormality, but rather as expected for most EU jurisdictions. The Netherlands is pretty hard as regards stigmatization, as a participant in the personal bankruptcy procedure will have their name made public for 10 years in a central insolvency register.

5.1.7 Luxembourg 2000

Luxembourg adopted legislation on insolvency for natural persons in 2000 and amended these to include discharge in 2013 in the excessive debt law, that went into force in 2014. Luxembourg belongs to the group of civil law countries. In Luxembourg there are three types of proceedings, presupposing that the required pre-process stage has been completed. There is no one unified process for a fresh start. Cost wise, procedural costs are borne by the state. Debt restructuring may take until 7 years, and subsequently may be reversed for a period of 5 years in case of fraud. There is no discharge at the end of a repayment proceeding in Luxembourg.

5.1.8 Portugal and Estonia 2004

5.1.8.1 Portugal

Portugal adopted rules on personal bankruptcy in 2004 but has since revised them in order to expand the ability for persons to achieve discharge, not least after the financial crisis. Portugal is a civil law country and belongs to the southern Europe region. There is no straight bankruptcy option, but natural personas – be it entrepreneurs or consumers, are eligible for separate procedures. The Portuguese system is procedurally complicated, as several requirements to establish a payment plan and obtain majority creditor approval is required. Discharge is available only subject to court approval ex-post, after hearing the creditors etc at the end of the repayment period. There is apparently no court fee for the procedure, but the trustee overseeing the process is paid of the assets. There is a certain stigmatization with the Portuguese system, as the court registers insolvency both at their own website and with the credit register of the central bank.

5.1.8.2 Estonia

Estonia introduced regulation on bankruptcy for natural persons and debt relief in 2004, as the first country in the Baltic region. There is no straight bankruptcy option in Estonia. A natural person can choose between four routes when they are financially distressed. Apart from reaching a compromise with creditors, there is debt restructuring- which can take place without bankruptcy as there is only restructuring of payment and hence no debt reduction. Otherwise, the two remaining options are bankruptcy and debt reduction, with debt reduction being an add on stage for debts remaining after the bankruptcy procedure. There is, though, a shortcut for the severely over-indebted. If it is obvious to the court, that the estate can not cover the costs of a bankruptcy procedure, the court may decide that abatement is at hand a terminate the bankruptcy procedure in order to begin the debt relief procedure (Sajadova V. and Viirsalu P. in *Graziano et al. 2019*). The bankruptcy procedure, which relies on external assistance to the court, is expensive, and with compromise, the parties bear own costs. Under the debt relief process, the duration of the repayment is ordinarily 5 years but may be extended to 7 years at the discretion of the court. During the process, the debtor maintains 25% of income, or a higher level if deemed necessary. Subject to the repayment period being fulfilled, the debtor receives a discharge. Participation in the process is published in the legal gazette, and as such, there is a certain stigma associated with the process.

5.1.9 Slovakia 2006

The Slovakian legislation enabling personal bankruptcy also for consumers was adopted in 2005 and came into force in 2006. Slovakia belongs to the central European region. The Slovakian legislation specifically mentions access to a fresh start from bankruptcy, and otherwise a recovery plan. The costs are borne in part by the applicant, with 500 Euro. There is a unified, complex process for personal bankruptcy as the applicant can apply to the court, and at the end of the personal bankruptcy proceeding, their debt will be discharged to enable a fresh start. The repayment is set at 5 years, with a supplemental minimum repayment requirement of 20-50 % of the debt. If this is not possible, the process converts from debt restructuring to personal bankruptcy – the process choice has implications for the applicant to have access to their assets during the proceeding. There is, in principle,

a unified, complex process for personal bankruptcy, even if the procedure haw to types, and they may convert during the process. The applicant pays 500 Euro of the process, and it is registered with the central bank – as such a certain amount of stigma is part of the process.

5.1.10 Czech Republic, Latvia and Slovenia 2008

5.1.10.1 Czech Republic

The Czech enacted their legislation on personal bankruptcy in 2006, entering into force by January 2008. The Czech Republic belongs to the central European region. There is no straight bankruptcy option in Czech, but either personal bankruptcy or debt relief – in the case of consumers the two proceedings are combined. Eligibility is insolvency or over-indebtedness. the applicant has to pay a small fee to apply for personal bankruptcy, and the costs of the procedure are borne by the applicant and the credits in combination, except in cases of pure consumer debt relief. As such there as at least three processes and they are fairly complex in operation. Apart from the bankruptcy procedure, a repayment plan will be scheduled with a length of five years. At the end of the repayment plan, the court will decide on the discharge of the remaining debts. Personal bankruptcy and debt restructuring procedures are published, and as such, there is a certain stigma associated with the procedure.

5.1.10.2 Latvia

Latvia was the second country in the Baltic region to introduce legislation on personal bankruptcy in 2008, following after Estonia introduced its first regulation in 2004. The law has been amended on several occasions, each time giving more leeway for the debtor (Sajadova, V. in *Graziano et al. 2019*). There is no straight bankruptcy option, but a two-step approach whereby natural persons with debts superseding a threshold, the lowest of which is of 5.000 Euro debt are firstly subject to a personal bankruptcy process that liquidates their assets, and secondly they undergo a debt relief procedure for the remaining debt, with a purpose of becoming debt-free after 5 years. Natural persons with debts superseding the thresholds are eligible for the procedure, which comes at a cost of 70Euro on filing, and subsequently, a fee for managing the case, maximized at two minimum wage month wages, or around 1.000 Euro, that has to be deposited at the outset. I would argue

this is a very restrictive condition. The two-step process is somewhat complicated and leads to a five year repayment period, during which there is also limitations on the debtors' right to dispose of their income without court approval. Debt and participation in the procedure are registered in a central register, and as such, there is a certain stigma associated with the process.

5.1.10.3 Slovenia

Slovenia adopted personal bankruptcy regulation in 2007, which came into effect in January 2008 as part of their legal assimilation during the accession to the European Union. Slovenia belongs to the central European region. There is no straight bankruptcy option in Slovenia, but there are separate routes for insolvency proceedings for personal bankruptcy depending on whether the applicant is seeking personal bankruptcy as a consumer or entrepreneur or seeking debt relief as a consumer. The debt relief procedure is available after the commencement of personal bankruptcy. The parties to a process in Slovenia bear their own costs in the rather complex system. At present, there is no repayment plan system in place, and as such discharge is only available after the bankruptcy procedure has been ended.

5.1.10.4 Poland 2009

Poland introduced legislation covering also personal bankruptcy in 2008, entering into force by 2009. Poland belongs to the central European region. The polish legislation provides for five types of insolvency proceedings differentiating between bankruptcy proceedings, also personal bankruptcy, and restructuring proceedings. Straight bankruptcy is not an option in Poland. To be eligible for the procedure, a consumer needs to be insolvent, as is the case universally in Europe. The costs of the procedure is shared between the debtor and creditors, except in the case of consumer personal bankruptcy, where low asset debtors may have the costs relieved by the state. As is clear this is a highly complex set of procedures in Poland. Repayment is maximized at three years, after which discharge is granted if the applicant has paid according to the plan. Personal bankruptcies are published in the national register of indebted persons, and as such, there is a certain stigmatization with undergoing the procedure.

5.1.11 Greece 2010

Greece introduced legislation on personal bankruptcy in 2010 during the financial crisis. Greece belongs to the southern European region. The Greek system has three routes for personal bankruptcy, and applicants are eligible if they are insolvent, and it is not due to fraudulent behaviour. There is a legal requirement of trying to obtain an out-of-court settlement prior to the commencement of the court adjudicated process. The procedure is paid by the debtor with a fee on the application and a fee for the procedure. Due to the number of routes, it is a fairly complex system. The starting point is trying to reach an agreement between the creditors and the debtor, but in case of failure thereof for a payment plan, the court will set the conditions maximized at three years of payment of an amount set by the court. The amount will be calculated by subtracting living costs from available income. For low- or zero-income individuals, the court may set monthly instalments at zero, thereby eliminating the debt in all. At the end of the repayment period, the debt is discharged, conditional on the monthly instalments having been met. Under Greek law, there is no publicity of the personal bankruptcy proceedings. The courts maintain a list of individuals undergoing the procedure for one year, and only persons with a legitimate interest may have access to the list. Banks and other creditors are required to delete information on debtors within three years of the personal bankruptcy procedure. As such, there is uniquely little stigma associated with the Greek procedure.

5.1.12 Ireland and Italy 2012

5.1.12.1 Ireland

Also in Ireland, the impact of the financial crisis led to a rethink of how to deal with consumer over-indebtedness. The law came into force in 2012 in part due to country recommendations for Ireland from the IMF, ECB and EU programmes for financial support for Ireland. Ireland belongs to the British region. There is no straight bankruptcy option, but whereas before the 2012 reform bankruptcy proceedings could last 12 years, and subsequent overindebtedness run without expiring – i.e. for life, they are now capped at 3 years for the bankruptcy itself. There are four processes in Ireland, as such is rather complex in structure. The Irish system is

highly complex also procedurally, and debt settlement and repayment is limited to lower debt persons.

5.1.12.2 Italy

Italy too enacted rules on overindebtedness and personal bankruptcy in 2012 during the financial crisis, where Italy was severely impacted, as was Ireland, among others. Italy is a civil law country and belongs to southern Europe. Italy has no straight bankruptcy option but has at least four routes with one for business, be it incorporated or personal (bankruptcy) respectively three differing routes for consumer personal bankruptcy. Overindebtedness respectively illiquid are the two different options for personal bankruptcy eligibility. There is no fee for filing for the process, but fees may be incurred during the process. The process of repayment and discharge is conditional upon agreement between the debtor and the majority of creditors, albeit it seems that it is within the courts' discretion to grant discharge to a creditor. There seems to be a wide discretion left to the judges of the Italian courts. It is also at the courts' discretion, to publish the personal bankruptcy decision in the manner the court finds appropriate.

5.1.13 Lithuania and Spain 2013

5.1.13.1 Lithuania

Lithuania regulated personal bankruptcy in 2012, becoming the last Baltic country to introduce this type of regulation. In Lithuania, there is a prescriptive pre-action stage, whereby debtors who foresee entering into personal bankruptcy has to notify their creditors with at least one months' notice. Lithuania is a German law inspired Baltic region legal system. There is not a unified straight bankruptcy option, but if the agreement is reached with a majority of the creditors measured by outstanding debt and in a class-tiered system (secured debts, simple debts). The broader route is personal bankruptcy for natural persons. There is a minimum debt limit to enter into the proceeding of at least 25 months minimum-wage corresponding debt. Opening of the procedure is cost-free, but upon access to the process being granted by the court, the debtor has to post a deposit for participation in cost, maximized at two months minimum wage. Repayment under a repayment plan, which has to be filed by the debtor, has a maximum length of three years. Subsequent to fulfilling

the repayment plan the debtor is granted discharge by the court. Participation in the process is registered with a public registry on their homepage and is maintained for 10 years, which is a substantial stigma.

5.1.13.2 Spain

Spain started revising their bankruptcy legislation by introducing personal bankruptcy in 2013 and subsequently revising and thereby expanding the framework. Spain is a civil law country and belongs to southern Europe. There is no straight bankruptcy option, but the Spanish legislation differs its routes for entrepreneurs and consumers. In order to be eligible, the debtor must be insolvent, or imminently expect to be insolvent. Depending on their situation, they may undergo full bankruptcy, or apply an out-of-court mediation procedure. This entails a fairly complex system. For repayment plans, the maximum period is set at five years, after which discharge is granted. Discharge is also possible to obtain faster under bankruptcy, provided that at least 25% of the debt outstanding has been paid, as well as other requirements. not least the secured debt is paid in full. Having regard to the latter requirement, it is quite unlikely to be a real option in consumer bankruptcy involving real estate. If the asset wasn't underwater probably there was no default as it could be sold with a surplus, and if it's underwater then by assumption the secured debtor will not have been covered, hence the need for the personal bankruptcy with the repayment plan. Personal bankruptcy and out-of-court settlements are published in the Spanish Public Insolvency Register, and as such a publication stigma is associated with the process.

5.1.14 Hungary, Croatia and Cyprus 2015

5.1.14.1 Hungary

Hungary introduced regulation on personal bankruptcy in 2015 *(Walter, G. 2020)*. Hungary belongs to the Austrian group of central Europa and to the Visegrad region, albeit the latter has no specific legal tradition bearing to my knowledge. The law was intended for individuals that had problems with foreign currency loans as a result of the financial crisis and were brought around with inspiration from Germany, Austria, Ireland, Spain. There is no straight bankruptcy option in Hungary, and eligibility requirements for the process set limits to the amount of

debt to enter into the procedure. The process and its steps and procedures seem highly complicated. There is more than one route, with a government agency (Family Insolvency Service) as the first step, and subsequently the possibility of having the court as an arbitrator for a restructuring. There is limited, if any, scope for legal remedies if the creditors (majority) do not accept a settlement. It seems to me that the Hungarian rules do not mitigate creditor opportunistic behaviour, and as such further calibration of the rules seems in place.

5.1.14.2 Croatia

Croatia introduced their consumer bankruptcy act in 2015 and simultaneously revised its bankruptcy law to accommodate entrepreneurs and companies. There is no straight bankruptcy option in Croatia. For consumers, it is mandatory to first try to achieve an out-of-court agreement with their creditors. If this fails, they may apply for bankruptcy at the court. As such, there is not one unified procedure. It is a requirement to be eligible that the consumer or entrepreneur is insolvent. If ultimately, it is not possible with the intervention of the court either, to achieve a settlement with the creditors, the court may open a personal bankruptcy. Under this system, all assets, including salary, is managed by a trustee for a period set by the court between 1 to 5 years. At the end of the proceeding, the consumer or entrepreneur receives a discharge for the remaining debt. The costs of the proceeding is in principle distributed between the debtor and creditor, but it is possible to have the costs eliminated in case of debtors with very limited or no assets. The decision on entering into personal bankruptcy is published on the homepage of the Croatian Financial Agency. As such, there is a certain stigma associated with participation in the Croatian process.

5.1.14.3 Cyprus

In 2015, by the end of the financial crisis, which hit Cyprus very hard, they enacted a regulation on the insolvency of natural persons including the possibility of debt relief. Even if Cyprus belongs to the southern Europe region, for historical reasons it is a common law country. There is no straight bankruptcy option. There are notably two options in Cyprus for personal bankruptcy, repayment plans and debt relief orders. Finally, there is a full bankruptcy option. Eligibility for the debt relief

process is marginal as is available only to persons whose income is less than 200 Euro / Month and assets under 1.000 Euro. This scope is extremely narrow. Otherwise, the options are a repayment plan, that only changes the payment structure, and the bankruptcy route. For the bankruptcy route, though, the threshold is a minimum debt of 15.000 euros. This leaves the debtor with a debt of more than 1.000 Euro but less than 15.000 Euro, and who are unable to service their debt, only with the option of restructuring their debt. As is clear, the process in Cyprus is complicated, even at the level of finding the route into the system. For the few who are able to be eligible for the debt settlement procedure, they will not receive as discharge per se at the end of the procedure, but rather the court system will not be available for the debt collection of the creditors. This is a rather peculiar approach, but it does of course mean that any notion of expropriation of the creditors is avoided. Participation in any of the processes is registered with the Insolvency Authority in Cyprus, and are publicly available As such there is a certain stigma associated with the process.

5.1.15 Romania 2018

Romania, too, was hard hit by foreign exchange mortgages to consumers, and as such enacted personal bankruptcy legislation by 2015, albeit it first entered into force by 2018. There is no straight bankruptcy option in Romania. These three procedures are available for personal bankruptcy, and as such the law is structurally complex as there is no single unified procedure. Equally so, the content of the procedures is highly complex. There are limitations in eligibility in excess of the insolvency requirement found in most EU countries. These limitations set minimum debt requirements and good faith requirements. It is free to launch an application for personal bankruptcy in Romania. Discharge is not obtained automatically but is subject to another court application. Decisions of the court are published, and as such, there is certain stigma associated with the process.

5.1.16 Bulgaria and Malta

Bulgaria and Malta have not enacted a regulation on personal bankruptcy. As the EU fresh start directive has entered into force, legislation as a minimum for

entrepreneurs must be enacted as a matter of constitutionality with the EU Treaty for these two countries.

5.2 EU regulation and harmonization

With a backdrop in increasing consumer over-indebtedness, as described above, and with increasing institutional pressure for a more systemic (harmonized) dealing with the matter[21], the EU Commission in 2016 proposed to the European Parliament and the Council to regulate the latter through a directive (*Kilborn 2016*)[22]. Pending negotiations, the final directive was adopted in 2019 and comes into effect with member states' implementation into national law, as foreseen to be by 2021. Final EU Directive 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on the discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt [Henceforth: Fresh Start Directive]

Below, firstly the fresh start directive and its content are outlined. Subsequently, the fresh start directives' relation to the seven dimensions of this thesis is explained as well as limitations are highlighted.

5.2.1 EU Fresh Start Directive

The fresh start directive of the EU applies to entrepreneurial activity. It is empirically suggested that legal clarity on a fresh start increases the attractiveness for families of becoming entrepreneurs and that they when the leniency of a framework is sufficient, prefer to incorporate as a personal business over legal entities (*Fan and White 2000*). I.e. business activities carried out by an individual physical person, as contracted by the consumer debts that the same person incurs during private life. As in practice, the separation of the same individuals' private

---

21 See EESC call in OJ C 271, 19.9.2013, p. 55

22 Proposal for a directive on preventive restructuring frameworks, second chance and measures to increase the efficiency of restructuring, insolvency and discharge procedures (COM/2016/0723 final - 2016/0359 (COD))

and entrepreneurial activities might become fairly blurred, it seems like an illusion to try to separate entrepreneurial estates from the consumer component[23].

The fresh start directive is divided into 5 main parts (the sixth only relating to institutional matters).

The first part (articles 1 - 3) covers the subject, scope, and definitions. Of particular interest is the fact, that the directive explicitly in art. 1, no. 5, specifically makes it optional for member states to decide on exempting certain claims from the bankruptcy proceeding, namely: "(b) maintenance claims arising from a family relationship, parentage, marriage or affinity; or (c) claims that arise from tortious liability of the debtor"[24].

The second part (articles 4 – 19) relates to preventive restructuring resp. restructuring. The main component of the preventive part is a desire to be able to restructure the otherwise viable business as contained in the entrepreneurial activity. In order to be able to capture the possibility of preventive restructuring, art. 3 already contains a provision of triggering early warnings in case of e.g., missed payments of certain debts, etc. The triggering event according to article 4 is the likelihood of insolvency. This is not really a hard, nor a defined, criteria and one would suppose it will give cause to not only legal dispute but might actually be used for political means if a country so wishes.

As *Hurst (2012)* analyse, a similar vague criterion for consumer bankruptcy procedures in the US to be applicable to student debt depending on hardship or beyond your means of living, she finds that the application of the criterion in courts is not uniform, but heterogeny as it encompasses stereotypes of social classes prudence, and passes judgment accordingly differentiated.

---

[23] The directive, in the preamble, contains a quite clear recomandation to member states to extend their fresh start frameworks to consumer overindebtedness, see no. 21 of EU Directive 2019/1023 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt.

[24] Art. 1, section 5 of EU Directive 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt.

As regards credit counselling, it is highly contested to what extent and requiring what legal safeguards so that it may lead to a positive outcome (*Hoffman 1999*) As article 5 goes on to, in principle set forth the proposition of debtor in control as the guiding principle – it gives much leaway to national regulators, as it particular sets forth, that the principle of the debtor in possession can be reduced to "at least partially"[25]. In essence, if taken at its word, a country can strip a person of control of their assets if considered 'likely' they will default. Article 6 relates to the stay of enforcement actions and overarchingly aims at providing a grace period for the restructuring in relation to any proceedings relating to the debtor that might be ongoing. Article 7 sets out the consequences of the stay of actions. The actual restructuring part contains provisions on the restructuring plan (art. 8 content, art. 9 adoptions, and art. 10 confirmation) and on the treatment of specific types and classes of claims (art. 11 cross-class cramdowns, art. 12 equity holders, art. 13 workers and art. 14 on the valuation of assets). Articles 15-19 contain procedural guarantees and obligations.

The third part (articles 20 - 24) relates to debt discharge and stigmas in the form of disqualification from a profession. Art. 20 sets forth, that entrepreneurs must have the possibility of obtaining a full discharge, and in connection with article 21 sets forth that the discharge period should be 3 years as the norm, and that at the end of the discharge period any disqualifications from profession should seize.

The choice of 3 years as discharge period in the EU directive is on the lenient side of European jurisdictional choices, as per the analysis below. But in relation to the perspective of a fresh start and stimulating entrepreneurial risk-taking, it seems like a convincing choice to reduce the stigma measured as time span to restart (and not taking into account any credit scoring implications subsequent to undergoing the process). Shortening the repayment period does not necessarily come to the detriment of creditors (*Eraslan et al. 2017*).

---

[25] Art. 5, section 1 of EU Directive 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt.

Article 22 sets forth numerous exceptions to the norms on length for discharge and re-acquiring profession qualification. Article 23 states the obvious of the practical choice of adding consumer debts to the estate as they may be difficult to separate[26].

The fourth part (articles 25-28) contains procedural requirements on the institutional participants in the process and on communications.

Finally, the fifth part (articles 29 and 30) contains provisions on articles of particular interest to the academic community, namely a detailed data-collection requirement in article 29. The required data are in relation to length and costs of procedures, the number thereof, but also, preferably, recovery and success rates and data pertaining to jobs affected and more. It is quite granular data that must, respective should (pertaining to parts that are under national discretion to implement) be reported under the directive. Once the data collection takes place, presumably from 2022 presupposing that jurisdictions deliver on their obligation to transpose the directive into national law by 2021 – and that they build the necessary IT infrastructure to accumulate and facilitate the data collection required.

The directive contains a review clause, and the EU Commission must by summer 2026, at the latest, submit at least an evaluation of the current directive and its effects. This, though, does not leave much time for accumulating sufficient data from the above-mentioned data collection requirement, to facilitate analysis cross border in the EU in due time for the revision. The analysis will surely have to be undertaken in 2025 at the latest, and as such probably only data up until the end of 2024 will be useable. This might leave fragmented data available, but can of course be a conclusion in itself in a study. It will probably first be able to take into account if, and how, national transposition has taken place.

[26] As for why consumer debts are not clearly within the scope of the directive, this may boil down to institutional limitations in the form of what is within the regulatory scope of the European Union under the EU treaties.

5.2.2 The Fresh Start Directives perspectives for this thesis

First and foremost, the scope of the fresh start directive is limited to *only* entrepreneurs who are natural persons (and, in addition off course, companies)[27]. This limitation of scope is the most noticeable drawback, in my view, of the directive – but, it is noteworthy that the directive itself, encourages member states to voluntarily extend the application of the rules on the discharge of debt to consumers overindebtedness in general[28]. Most encouraging, in my view, is the fact that there is *no* mention of legal obstacles for extending the debt discharge rules or other personal insolvency measures in the fresh start directive. Some may perhaps consider that EU regulation of overindebtedness would be inclined to have a social component, and as such be excluded from the ordinary legislative procedure of the EU (in essence requiring supermajority and hence, politically less attractive for any bureaucracy to attempt). But, others – myself included – would be inclined to extrapolate the reasoning pertaining to the fresh start directive and entrepreneurs to be equally valid mutatis mutandis for consumers[29]. Most notably, in my view, expanding the scope of the fresh start directive to all natural persons would further underpin the functioning of the internal market for financing, as it would further enhance the legal certainty necessary for professional cross-border credit flows. It should be noted, that the private debts of entrepreneurs take part in their debt cancellation under the fresh start directive, as a starting point (art. 24).

One of the high points of the fresh start directive is the novelty of early warning systems and access to a straight bankruptcy option. The structure of the fresh start directive is, that it entails members system to establish early warning systems, that

---

[27] Art. 1, subsection 2, litra h) of EU Directive 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt.

[28] Recital 21 of EU Directive 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt.

[29] Cfr. recital 1-22 of EU Directive 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt.

alerts debtors that they may be running into trouble and assist them with tools on how to deal with economic trouble. Adding on to this is setting up systems of preventive restructuring, during which the debtor must remain in possession of their assets to enhance the chance of a positive outcome of keeping an entrepreneurial business alive. Furthermore, individual enforcements are stayed during the preventive restructuring phase.

If restructuring is not an option, the fresh directive makes it clear that entrepreneurs should have access to a straight bankruptcy option, which we too have considered the gold standard. As such, art. 20 sets forth, that member states shall ensure, that entrepreneurs have access to at least one route, that leads to full discharge of their debts, and that the full discharge should happen at the latest three years from the insolvency proceeding started (art. 21).

In terms of the costs of the procedure, this is left at national discretion. In this context it should be noted, that member states are explicitly allowed to place the burden of costs of the procedure with the entrepreneur. As such art 23 allows to exempt from full discharge cases where the costs of the procedure have not been covered[30]. The fresh start directive does not regulate the legal-technical approach of member states, and as such, the complexity of the process is not regulated, except importantly for the straight bankruptcy option that is regulated as a requirement, and the fact that debt cancellation must happen at the latest three years after the start of the procedure. The directive does not stipulate a specific system for repayment but is open to systems building on a repayment plan resp. those that do have this – but for full discharge must occur after three years at the latest. In terms of the stigma, the directive does not regulate the question of legal publicity of the process, but it does explicitly regulate, that formal stigma hindering the uptake of business for an entrepreneur must cease at the latest three years after the start of the procedure – i.e.. same time limit as for the debt cancellation to occur.

30 Art. 23, subsection2, litra e) of EU Directive 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt.

5.2.3 Critique

My main criticism of the fresh start directive is that it limits itself to natural persons who are entrepreneurs. Even if it opens for adjudicating both the private and business claims of entrepreneurial natural persons in the same process, it would have expanded the legal certainty for credit across Europe if it had harmonized the rules to the full extent, ie. for all natural persons. This would also have been in line with the findings of the best practice in the most recent study covering Europe by *Graziano et al. (2019 p. 88)*

Adding to the above, it seems to me that the directive does not define the value of debts, whereas there is a regulation of valuations of the assets of the debtor. When assessing the claims against a debtor, these should be valued at their value before the start of the procedure, at which time the real value of debts are decreasing rapidly towards zero from a market price perspective. It should be avoided to allow formal claims based on the face value of claims, as these are rarely representative of the market value of the claims. The net present value of a future of an income stream that is disappearing is fairly diminutive, and as such, it should be the real and not formal (face) value of the debt that is calculated for the purposes of a debt settlement procedure.

6 Measuring leniency in the EU – empirical framework

6.1 Methodology and data – building composite indices

Composite indicators gained great popularity in research during the last decades, resulting in a large amount of literature describing the methodology and ways of building composite indicators and indices. (*Greco et al. 2019)* gave a complex review of the literature describing the methodological framework of constructing composite indices. For the development of composite indices, (*OECD 2008)* described the methodology as a 10-step process that serves as a checklist. In comparing the legislation of different countries, we considered the methodology used by (*La Porta et al. 1998)* for similar purposes.

The level of the leniency of a personal bankruptcy system describes how the system handles the defaults of private persons and entrepreneurs with unlimited liabilities, how easy or difficult it is for borrowers to achieve a fresh start, and how stigmatic the life of the borrower is after receiving the fresh start. More lenient systems enable a fresh start more easily, and the stigmas afterwards are less severe; in a less lenient system, a fresh start is either not offered at all or only after a restrictive, long, stigmatic, uncomfortable, expensive, and complex process with additional stigmas.

Leniency is, thus, an aggregative term that can be characterized by *seven main dimensions* of personal bankruptcy legislation (*Walter 2020*):

1) accessibility, i.e. the existence of straight bankruptcy[31];

2) eligibility;

3) costs;

4) complexity;

5) process;

[31] Straight bankruptcy is a process like Chapter 7 in the US Bankruptcy code, where after a relatively rapid liquidation, asset sale process, the debtor receives a discharge at the end.

6) conditions for discharge at debt restructuring;

7) stigmas of filing.

These dimensions partly correspond to the categories defined by *White (2007) and Armour and Cummings (2008)*, who evaluated the systems of various chosen countries (England, US, Germany, France, Canada). *White (2007)* contrasted the bankruptcy policies based on the trade-off between providing insurance to debtors against punishing default. She used seven categories for the selection which were as seen: the amount of debt discharged, asset exemptions, income exemptions, a fraction of income above the exemption that debtors must use to repay, length of the repayment obligations, bankruptcy costs, and bankruptcy punishments. These categories correspond to our dimensions of “process”, “conditions of discharge”, “costs”, and “stigmas”, but we completed them with several other dimensions and indicators.

The study breaks down the seven main dimensions into *35 specific indicators*. The seven groups of indicators altogether describe the dimensions and phenomena. Our dimensions and categories also follow the structure of the comparative analysis and country report of 30 European consumer bankruptcy legislations of *Graziano et al. (2019)*, who described regimes based on the possible processes, costs, discharge conditions, status of debtors, and creditors, supervision, and officeholders' roles.

By data selection, it examines and analyses the regime of 25 EU countries and the US as a benchmark. Two countries (Bulgaria and Malta) currently have no personal bankruptcy regulations. We create indicators based on questions that are formulated for each subdimension. We obtain the data from complex legislation, which sometimes include different laws and judicial customs. By setting the indicators, we examine each country’s regime in parallel with the comparative research done in this field (*Armour and Cumming 2008); (Graziano et al. 2019).*

Legislative solutions in Europe are highly diverse (fragmented). We searched for data that, first, unequivocally characterize the selected phenomenon and, secondly, could be detected in all the legislations. Data and indicators must also be comparable in different countries, and potential answers must be separative, covering all or most of the possible alternatives included in the legislation. Answers

based on metric indicators (like the cost of filing, the volume of deposit, length of repayments, number of regimes, or number of years for restrictions, etc.) are typically unambiguous. However, non-metric indicators reflect various potential activities (events, constraints, income types, credit types, benchmarks, types of punishment, etc.), which are listed in different ways for each regime, and where legal concepts are fragmented in their definition or scope across EU jurisdictions. The formulation of these indicators must cover all the main possibilities in different local legislations. In some cases, indicators refer to a phenomenon that can be answered unambiguously (like who drafts the repayment plan first, who bears the cost, whether the pre-action stage exists or not). In a few cases, however, subjective expert opinions need to be obtained regarding the complexity. Missing or doubtful data are completed based on consultations with the country's legal experts.

The data collection is then improved by indicator definitions and data quality parallel to the analysis of laws and by discussing preliminary results with experts from 19 countries. These experts, specialized in their local regime, validated the indicator scores of their countries. The created dimensions and indicators are detailed in Table 1.

Being aware that these indicators might not fully cover the complex phenomenon of each dimension; nevertheless, it is offered that they characterize the phenomena well and can form a basis for distinctions among countries.

Like former studies, it is chosen a categorical scale assigning a score to each indicator (*Armour and Cumming 2008); (Graziano et al. 2019)*. Categories are numerical: zero, one, or two. For the formulation and scoring of the categories, see below in detail. The higher the score, the more lenient the given phenomenon to the borrower. In the case of metric indicators, we determine thresholds based on the frequency and ranking of the data collected from the legislations to obtain the final scores. These thresholds appear based on the length of the payment period, the benchmark of necessary repayment, length of stigma for a new discharge, court fee, and deposit level.

Table 1: Leniency dimensions and indicators

Dimensions	Indicators
1. *Straight bankruptcy* (accessibility, existence)	– Straight bankruptcy, as a separate regime, is part of the legislation – Walk-away opportunity
2. *Eligibility*:	– Entitled persons to participate, to file for in the process (natural person, private entrepreneurs, special conditions, limitation due to former procedures) – Preconditions, constraints in wealth, income, collaterals, status to start – Preconditions in debt (the art of debt, minimum, maximum volume) – Stigmas that impede filing
3. *Cost, expensiveness* (transaction costs):	– The magnitude of starting administrative costs – Distribution of costs among stakeholders – Deposit requirements
4. *Complexity*	– Variety of types of creditors – Variety of officers who conduct, and variety of regimes – Complexity to start a procedure – Complexity to overview the process for professionals – Availability of a debt counselling service and its conditions
5. *Process*	– Any pre-action stage, amicable settlement incorporated in the process flow – Entitled persons to initiate a procedure (creditor, debtor, or legislation) – The initiator of the first draft of the repayment plan – Creditors included in the process – The degree of disability of the debtor during the process – Decision mechanism during the process (the majority of creditors, court, etc.) – Asset sale – who is entitled to sell the assets, properties – Possible consequences of commencement of the procedure – Exemptions (based on threshold, property and income types, future incomes/properties) – Possible easing measures, decision during the repayment, debt settlement processes – Possible penalties, consequences due to violation of the duties (the debtor)

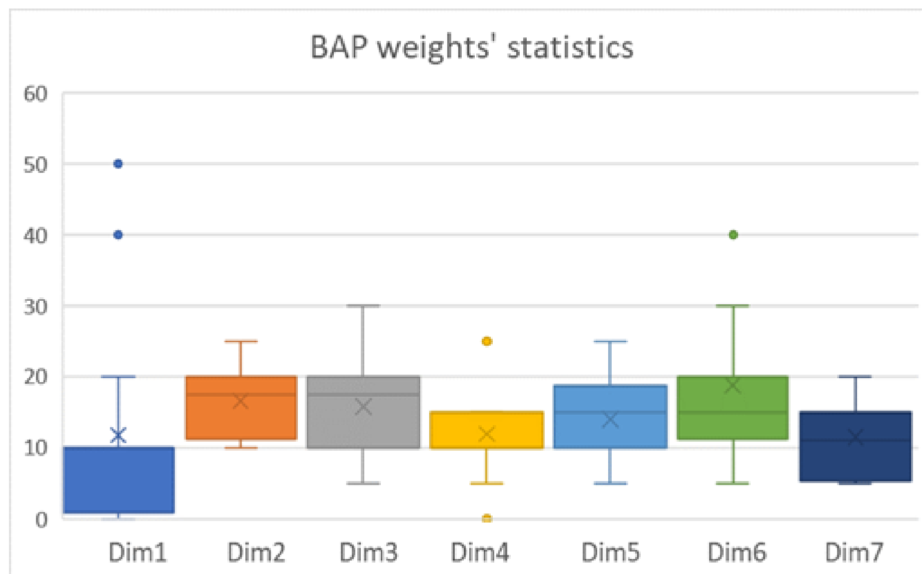
The indicators are then cumulated at two levels. We use equal weights (EW) with linear aggregation for different numbers of indicators within one dimension; we consider all the selected indicators of a dimension, as it is equally important to characterize each specific dimension. However, it is disputable as to which dimension is more important to characterize the overall leniency. Therefore, we apply a budget allocation process (BAP) with experts and use linear aggregation to calculate the composite index from seven main dimensions. The prerequisites of applying the method referred to in the literature – less than 10 dimensions and a diversified expert panel of more than 10 members – are met (*Greco et al. 2019); (Zhou et al.2012)*. We select a panel of 16 experts (insolvency lawyers, academic experts) from 15 different EU countries.

We ask about their judgments of the relative importance of the respective indicator groups (dimensions). Finally, we calculate the average of the weights given by the experts. These average weights of the main dimensions are used for the calculation of the final composite indices for all the countries. The weights (and how they differ from a potential EW aggregation) and the main descriptive statistics of the BAP are given in Table 2 and Figure 1.

Table 2: Equal resp. BAP Weights

	Equal Weights	BAP Weights
Dim1 Straight bankruptcy	14,3%	12%
Dim2 Eligibility criteria	14,3%	16%
Dim3 Expensiveness	14,3%	16%
Dim4 Complexity	14,3%	12%
Dim5 Process	14,3%	14%
Dim6 Conditions for discharge	14,3%	19%
Dim7 Stigmas	14,3%	11%

Figure 1: Descriptive BAP



Based on the expert opinions, three dimensions were found to be dominant in the evaluation: eligibility, costs, and the condition of discharge. It is worth mentioning that the opinions on whether straight bankruptcy is an important element of leniency were very heterogenous, while eligibility to straight bankruptcy was in the focus of the well-known conservative BAPCPA reform.

6.2 Variables for scoring legal frameworks across Europe

Over time scoring models to enable cross-jurisdictional comparison have developed. We build on scoring models developed in the literature and expand it into a more granular approach measuring 8 main groups of totally 35 variables across 25 jurisdictions32. These will be detailed further below.

The fundamental framework was starting development with *Armour and Cumming (2008)* who developed a scoring of 5 dimensions of legal frameworks, namely

[32] The scorings was carried out by analysing legal frameworks of the jurisdictions and verified by interview with recognized legal peers in 19 jurdisdictions (attempting all 25, but 6 jurisdictions were non-responsive). The peers was elected based on their contribution to the monumental (*Graziano et al. 2019)*

1) **Is discharge available**, which they use as a simple dummy variable, taking the value 0 if a discharge is available, and 1 if it is not available.

2) **Time to discharge** Where no discharge is available, they substitute a number based on average life expectancy, to capture the notion that the individual can expect to spend the rest of her life paying creditors. They consider that such measure has the merit of providing a scale of "severity" that can be used as an independent variable in regression analyses, with larger numbers indicating a less forgiving bankruptcy regime.

3) **Exemptions** relate to assets owned by the debtor at the commencement of bankruptcy, which may be withheld from creditors. The greater the level of exemptions, the more "forgiving" the bankruptcy law. There is considerable homogeneity of treatment of this issue across the countries in our sample: most permit the debtor to retain only modest personal items, along with work tools and equipment. In such circumstances, exemptions take a value of 1. Where more generous exemptions are permitted, the variable takes a value of 0. For example, in the USA, a portion of the value of the debtor's home is exempt, which they then code as "0" to reflect this more generous treatment. Some jurisdictions impose "negative" exemptions - that is, drawing assets into the bankrupt estate, which under marital property regimes belong in part to the debtor's spouse. Where assets not originally in the debtor's beneficial ownership may be made available to his creditors, exemptions takes the value of 2

4) **Disabilities** connect to limitations forced on by the debtor's economic and civil rights during the time of bankruptcy. It takes a value of 0 if a bankrupt debtor experience no disabilities other than deprivation of power to deal with their assets; 1 if a bankrupt suffers civic disabilities (like the deprivation of the right to vote, or hold elected office); 2 if a debtor experience economic disabilities (e.g., limitations to acquire credit, or participating in the management of a company); 3 if a bankrupt experience interference with privacy and/or freedom (for example, limitations on travel, interception of mail); and a value of 4 if a debtor may be detained for non-payment of debts.

5) **Composition** represents the level of difficulty a debtor will face in achieving a discharge by agreement with creditors. This might be sought either if a non-

consensual "fresh start" is not available, or if the debtor wishes to exit bankruptcy sooner than a fresh start will be permitted. All their jurisdictions permit debtors to enter into compromises with creditors (often called "compositions") to this effect, and most facilitate this by providing a legal mechanism whereby a majority of creditors wishing to make such an agreement can bind a dissenting minority. These are typically conditional on a specified majority by value of the creditors voting in favour, and sometimes on a specified minimum proportion of the creditors' claims being paid. Their scoring of variables captures these differences in the majority voting requirements, both as regards a number of creditors and the value of claims.

As can be seen, **our scoring variables below** built much on the same overarching architecture on groupings A)-G), but with considerable added granularity. The parameters are detailed below.

A) Straight bankruptcy option

1) Straight bankruptcy option

If straight bankruptcy, i.e. complete liquidation of all existing debts is a legal option directly from the beginning of the process exits, then a yes confers a score of 2, whereas a no confers a score of 0. For some jurisdictions, a middle ground exists, and as such, where any simplified bankruptcy (and discharge) exists albeit only for persons approved by a court based on their status, wealth, poverty, and similar criteria that will infer the score of 1.

The differing point is if it is a legal right to obtain a bankruptcy or quick liquidation that ends with relief, even if some special debt remained, or mortgage is separately sold. In all these instances, the process is considered that then it is straight. The picture-perfect sample is Chapter 7 of the US. If after a liquidation some remaining debts must be paid with a plan afterwards, or if it starts right with a repayment plan, or debt adjustment, then it is not.

2) Secured asset and walk away option

Also known as datio in solutem, this is commonly known as returning the key to the house to be relieved of mortgage debt (*Macovei 2019)*. Datio in solutem is most frequently associated with mortgage credit, where it is used to settle the remaining debts of a mortgage after realising the house/property in the market. Where datio in

solutem is applicable, as in the US with traditional mortgages, the debtor is free of any obligations under the mortgage once the house/property has been returned to the creditor.

The use of walk away is highly contested, and theoretically, the risk of strategic default has been highlighted. In the pure option-theoretic literature, ruthless or strategic default occurs when the value of a property falls below the cost of the mortgage and the borrower exercises an implicit put option to "sell" the house back to the lender (i.e., default) in order to maximize their financial wealth) (*Bhutta et al. 2017)*. Following the financial crisis, *Bhutta et al. (2017)* has conducted intensive research on what occurred, and their findings are relevant to mention. They found, that while purely ruthless defaults have occurred, their results suggest that a widespread inability to pay, combined with low or negative equity that makes selling one's house in the face of financial problems difficult (so-called "double-trigger" defaults), is the more important explanatory factor.

Such widespread inability to pay stems from two sources. First, the severe recession beginning in 2007 led to substantial income losses across a large number of households. They reference, that recent research finds a strong connection between job loss and default *Bhutta et al. (2017, with references*). Second, they found that the sharp rise in nonprime lending during the mid-2000s, which included loans without income verification or any down payment, likely meant that a substantial fraction of borrowers were financially unstable even at the time of origination of the loan. Their findings have important implications. Mortgage default can be viewed as a social insurance program as many states in the US enforce various laws protecting borrowers (e.g., creditors must go through a lengthy process to repossess a house), thus passing on some of the costs of default to others. As with any social insurance program, moral hazard poses potential costs, and policymakers are clearly concerned about such costs. For example, US lawmakers passed the Bankruptcy Abuse Prevention and Consumer Protection Act BAPCPA) in 2005 to "make bankruptcy more embarrassing and more difficult." *Bhutta et al. (2017, p. 2437)* note, that “the recent spike in mortgage defaults along with numerous anecdotes about ruthless default reinforce the view that the stigma of default has waned and may encourage lawmakers to make mortgage default more difficult. But if in fact consumers strongly prefer to avoid default, perhaps for moral or social

reasons, then the moral hazard cost of the default option as a form of social insurance is already.”

If there is such a walk-away possibility (giving the asset but no further claims) it confers a score of 2. If there is no such walk-away possibility it confers a score of 0.

B) Eligibility criteria

3) Entitled to participate (natural person, entrepreneurs)

If there is a unified, albeit perhaps complex, legal process for physical persons encompassing both entrepreneurial (commercial operations/business) and also eligible for consumer debts and obligations it is attributed a scoring of 2. This entails a smooth unified process for the entrepreneur or small business even if the combination of business and private obligations will lead to a more complex number of issues having to be ironed out under the insolvency process. Some processes, though, are open for a private person (consumer) and others for entrepreneurial obligations, business activity, but not in one unified form - these are attributed a score of 1. Where the process is solely for managing personal (i.e.. credits obtained in the capacity of acting as a consumer), they are attributed a score of 0 as these processes are of the least relevance for being as available for physical persons irrespective of the nature of the debt.

4) Income, wealth (income) constraint on the minimum amount of debt to file

Who is eligible for filing is a core tenet of a consumer bankruptcy system. Some systems operate a requirement of the consumer being able to settle at least I minimum ratio of their debt or have requirements on income to be able to be eligible for a process to be started. In these cases, if a debt-wealth/income criterion as a restriction is defined to be eligible to scoring will be attributed so that in case of an income or wealth requirement for all processes it scores a 0 as that is the most restrictive. If it is a yes for some processes only, that scores a 1 as being the more available. And finally, if there is no requirement of a minimum income or wealth that scored a 2, as it is the most widely available system.

5) Exclusion criteria of criminal record

In some systems, it is apparently a requirement for being eligible for consumer bankruptcy that the applicant is considered a good citizen as measured by whether one has a criminal record or not. As this limits the accessibility to consumer bankruptcy, it has been scored accordingly. As such, where a criminal offence conviction is not an obstacle for eligibility, it is rendered a score of 2, which is the most widely available. Where only particular the criminal offences or conviction e.g., of financial/bankruptcy type crimes in connection with taking up/handling debt, bankruptcy, etc. is an obstacle this render the applications more widely available and as such is scored by 1. If, finally, any criminal offences and non-criminal acts (not just financial but other civic / or just suspicion; being unemployed and not accepting job/ or high negligence is an obstacle for being eligible then that is the least available system and accordingly conferred a 0.

6) Minimum amount of debt

In some systems, there is a limitation on opening consumer bankruptcy procedures requiring a certain minimum amount of debt. The most widely available system would be where the required minimum debt is zero. In order to no restrict systems with low thresholds, those with the threshold being is equal to or less than 1000 euro, or even better with no formal minimum, as they are the most widely available, they have been scored 2. Where the threshold is between 100-5000 euro, or there are thresholds in existence for separating different processes then the scoring has been graded 1. Finally, as for the most restrictive access, where the required minimum debt exceeds more than 5000 euro, and hence under these criteria is the least available option, consequently the score has been set at 0.

7) Stigmas relevant for filing

Stigmas are used conceptually in two different ways in this scoring model. If there are stigmas for the consumer pertaining to having used the option of consumer bankruptcy these are measured under grouping G). As this part of the scoring pertains the being admitted to the process at all, when considering the availability of the system for consumers, a separate measurement is made on the eligibility under the system here. as such, if a consumer has been filing for a similar process in the past, and this is an excluding condition for filing again then scoring is

allocated so henceforth: If having previously filed for consumer bankruptcy less than 5 years ago, or if there is no such condition, as this is the most available option it is rendered a score of 2. Where having been in a process up until five years ago is a hindering, and the requirement excludes those having been processed less than 10 years (but more/equal 5), then the score is set as 1 as it is a in-between available system. If one is ineligible of a filing that has occurred more than or equal to 10 years that is a very unavailable system, and consequently is scored 0.

C) Cost of procedure

Any costs associated with entering a consumer bankruptcy procedure as well as the attribution of costs of the process can be an obstacle for access to justice. As such the thresholds must be low, if any, and costs should as a majority be borne by society or in other ways be allocated in a way that it does not unduly hinder access to the relevant legal remedy for those in need thereof.

8) Court fee

The most widely available way of configuring access is there the amount of court fee, as a precondition for entering into the process at all, if any, is paid by the creditor, the state, or there is the possibility to get it for free. These circumstances are scored as a 2. Where the is a marginal processing fee, say, the fees are equal to or less than 100 euro, then as to it being somewhat less available, it is attributed a score of 1. Where a fee is more than 100 euro, hence the least available option, the score is set at 0.

9) Who bears the costs of the procedure

The allocation of the total cost of a consumer bankruptcy procedure is important, as the fees associated therewith may be sizeable and as such – if they are allocated to the consumer, that in itself may act as intimidating the consumer from applying as well. In many ways, it would seem contra-intuitive. What makes the system most available is where the cost is not borne by the consumer, but dominantly born by the creditor or state, these instances are scored by a 2. As the medium option, where the cost is born together by the creditor and debtor, it is attributed a score of 1. Where the cost is dominantly born by the debtor, this renders access to a procedure least attractive and hence is scored by a 0.

A particular difficulty is where the cost of trustee is born. It had to be taken into account what to do if the cost is covered by the sale/wind-up of assets in an estate, sale of properties, etc. Whose cost is that? In some cases, it would make a difference in the way, that if there is a discharge, then it is the cost of the creditor, if no discharge decision, then it is the cost of the debtor. In these cases, too, the prospect of potential costs may intimidate applicant debtors away from the process, and hence only clear-cut cost-free process' has been allocated a 0. As for the in-betweens, as described above, those have been attributed a 1.

10) Deposit for the costs

Non-withstanding the allocation of costs associated with a process, some jurisdictions have a requirement of upfront depositing an amount that may be used for expenses, pending decision thereon. As with court fees and total cost allocation, such deposit setting may act as a deterrent for consumers considering entering into the process, be it just out of lack of the necessary liquidity to post a deposit requirement. Again, as for the most available option, which is obviously where no such deposit is required or where it can be exempted this is scored as a 2. Where a requirement of a deposit exists does exist but is likely to be less than 500 euro it is scored as a 1. For jurisdictions where a requirement of deposit exists and is likely to be more than 500 euro, it is the least available option and consequently scores a 0.

D) Complexity (activities of the process)

Preconceptions in the general public of consumer bankruptcy process being highly complex or lengthy for that matter may also act so as to make it less attractive as an option for consumers. As such a number of parameters that are used in some jurisdictions have been taken on board here in order to make the scoring more granular, considering data availability.

11) Who, how many officeholders conducts the process

The number of institutions that exercise the authority of consumer bankruptcy may influence the perception of transparency or easiness of the procedure. A one-stop shop, such as in France, is obviously the most accessible of any (*Rubellin and Booth 2019)*. As such, where there is only one office or officeholder that conducts all

processes (courts included) this renders a score of 2. Where there are two types of offices or officeholders who could or will be associated with, the conduct of the different types of procedures, this is more complicated and as such is attributed a score of 1. Where there are more than two types of offices/officeholders who conduct the different types of procedures this is the least transparent or comprehensible system, and as such is scored 0.

12) Number of regimes (routes like liquidation (US chapter 7 similarity), debt settlement, restructuring proceeding (US chapter 11 or chapter 13 type)

The number of routes to choose for a consumer may make a system more precisely designed from a technocrat or specialist perspective, but in terms of consumer accessibility, it surely decreases the perceived transparency and availability of any consumer bankruptcy system. As such, when scoring for this study, where there were more than 3 different procedure types are named in the legislation, it was perceived as least available from a complexity perspective, and as such received a score of 0. Where there are exactly 3 types of named procedure (as an example chapters 7, 11, and 13 for the US), this is still most complex for any consumer perspective, and hence, even from a technical point not unusual perhaps, it still is scored by only the middle assessment for the availability of 1. As is then clear, for being perceivably the least complex route, where there are less than 3 named routes the score is set at 2

13) Complexity of the procedure for professionals

In order to obtain some control on the assessment of the complexity of the procedure, it was decided to add an assessment of the complexity of the procedure from a professional point. This is difficult to score, as for many an expert the difficult will seem simple enough. as such, when assessing this scoring the seeming complexity of descriptions in country reports in (*Graziano et al, 2009)* was the reference. In order to lessen the subjectivity, albeit it will fundamentally always be a subjective judgment call, a verification of this score was carried out in the subsequent validations by interview of al scorings, except from 6 on-respondent countries. Again, using the widest accessibility as the reference point, the scoring was attributed as follows. Where the procedure in view of professionals was seemingly highly complex, or with a general lack of knowledge from the

professionals (economists, lawyers) side it was given a score of 0, as it was least widely available. If it was "just" complex, a score of – 1 was attributed. Where a procedure is considered less complex and relatively known it is scored 2.

14) Complexity (the workflow to start, to apply, consider eligibility criteria) for applicants

A second consumer-related measure as to complexity apart from procedures etc. is the ease of the workflow. An increase in workflows and paperwork easily is perceived as less transparent or as more complex by both consumers and professionals. As such, where the procedure workflows are seemingly of high complexity and where there is to be expected a lack of knowledge from the debtor side on the exact whereabouts of such workflows, a score of 0 is allocated. If it is seemingly "just" a complex procedure, a score of 1 is given. Finally, where the process is easy in the process both with regard to how to apply and the workflow, a score of 2 is given.

15) Debt counselling service

The availability of debt counselling services may certainly render access to consumer bankruptcy more available and act as a neutral advisor. This increases trust and transparency and lessens complexity for the consumer. Where counselling service does not exist or just exists in the private and/or non-profit (not financed by the state) area and where the state provides only a homepage, the score has been given of 0. Where counselling service is part of the official, state system (even if officially financed or where a non-profit institution is not Free of charge it has been scored by a 1. Where finally debt counselling service is part of an official state system (even if officially financed and the services are rendered by a non-profit institution) and where it is free of charge, the score of 2 is given. *Hoffman, (1999)* points to the importance of having the debt counselling service profession regulated, disregarding whether it is obligatory or not as part of (or preferably in order to avoid the need for) a consumer bankruptcy procedure.

E) Process of repayment

Another layer in a consumer bankruptcy system is the repayment process, if any, or where full cancellation of any debts is the outcome. Increasing focus on repayment options at least increases the complexity of a system but is a necessary option in

any system so as to calibrate the creditor and debtor interests in a manner proportional to their abilities and in some jurisdictions, also according to moral or fairness notions.

16) Pre-action stage, amicable settlement

A compulsory requirement of pre-action or pre-consumer bankruptcy proceedings access of having first to try to achieve an amicable settlement between creditors and consumer debtor as a first go to before going directly to debt settlement is the least available option, and hence, is scored 0. Where such an option is voluntary, but nevertheless takes part of the formalized or legal system it is scored by 1. Where no requirement of a voluntary option of out of court process is named in the official process the system is scored as a 2, being most available (least complex).

17) Initiator (who is entitled to initiate the procedure, creditor, debtor, public entity, combinations, etc)

Access to justice also is dependent on who can initiate a procedure. The higher control the consumer debtor has of the process, the more confidence it should install in the consumer – hence, making it more attractive, As such, where only the debtor can initiate all the processes it is scored as 2, the most attractive for the consumer debtor. Where both the creditor and the debtor can initiate the processes, or creditors some of the processes, it is scored as a 1, as it is less in control of the consumer. If finally, only the creditor can initiate the process, it is scored as 0, as it is the most outside the control of the consumer, and, hence, assumingly the least trusted option by the consumer.

18) Are all creditors included

It differs from jurisdiction to jurisdiction what type of claims are subject to a consumer bankruptcy proceeding. US research points towards the importance of the debt restricting process being as comprehensive as possible if it is to achieve the goal of a fresh start. (*Parish, 2016)* looks at voluntary debt restructuring through debt counselling services using US data. The overall finding is, that at least 2/3 of the consumers' total debt must be settled for the process to have the necessary impact (*Parish, 2016*). To the extent some claims are outside the scope of the process, the consumer debtor will not be freed of all claims. Nevertheless, it is horizontally a commonality throughout jurisdictions that a particular group of

claims is excluded, namely criminal monetary penalties, tort payments, child alimony. These are hence not considered for the purpose of the scoring here. Where, apart from just mentioned exclusion, all other credit/obligation types (not just bank credits) are included a score of 2 is given, as it is the most extensive coverage. Where only some loan types (like utility obligations, un and child alimony and to some extent secured loans (where any subsequent personal liability though is neutralized by a consumer bankruptcy process) are not included, a score of 1 I was given. If only secured claims are included in a process it is attributed a score of 0.

19) Repayment/debt relief plan

If the pen is indeed a mighty sword, as it is said, then whoever holds the pen has such mighty power. This is the intuition between this score, where the question of who formulates a debt restructuring or elimination (in whole or in part). The process that yields the most power to the consumer is scored the highest in terms of consumer empowerment – or intuitively, creating the most trust in the system from a consumer perspective. Where the repayment plan is drafted by the debtor first, it is scored by a 2. Where the repayment plan is drafted by an official authority or other mandated it scores a 1. If the repayment plan is drafted by the creditor in the first instance, it scores a 0 as it yields the least inclusion of the consumer.

20) Degree of disability of the debtor during the process (restrictions imposed on the debtor)

General possible deprivation of entry to, or manage over, assets pending legal actions under consumer bankruptcy procedures could make the procedure less transparent or appear like a deterrent from utilizing the procedure, not least depending on the anticipated length of any procedure. This connects to limitations on the debtor's economic and civil rights during a bankruptcy. Where the total amount of interferences normally applied in corporate bankruptcy procedures are similarly applied to consumer bankruptcies, they score the value 0. This goes for limitations of the personal freedom in the area of (snail)mail interference, travel bans and or giving of one's passport, mail re-routing to the court or administrator, ore even more intrusive limitations, such as on the right to vote, hold a profession or be elected to public office, etc. The score will be set at value 1 for only some less restrictive economic disabilities (such as reducing the availability of credit or

restrictions on taking part in company management etc.) Finally, the least invasive procedures have been attributed the value 2 when there are no restrictions related (other than disposal of disproportional property or revenue).

21) Violating the duties (the debtor) - possible penalties

The possibility of incurring criminal charges for violations of duties during a consumer bankruptcy procedure may also function as a deterrent to access the procedure altogether. Even if designed as a deterrent for duty violations, for less-resourced people the outlook of incurring charges for actions that may not be clear to them, will in reality act as lowering the transparency of the proceedings (at least perceived) or a general deterrent. As such, where there are no such penalties (maximum prohibition from doing business in case of term violations) the score is given at 2 being the most consumer-friendly. Where fines are possible to be applied for duty violations the score is set at 1. Finally, where not only fines are a risk, but also other penalties (detention, other prohibition) the score is set at 0.

22) Possible measures, decisions during the repayment, debt settlement processes.

Where any initial measure may be adjudicated as a repayment plan or debt adjustment, life-changing events may occur for the consumer debtor. The question then arises if the procedure can be reassumed or changed, or if it is final. Flexibility to change the process pending new circumstances might increase consumer perception of the process being less burdensome. As such, where there is a possible measure in the restructuring process where partial debt reduction or release is subsequently available it is scored as 2. Where no partial reduction is possible, but a measure to ease the payment burden (suspending payment, suspending the sale of assets, aid, or any other measures) is available it is scored as 1. Where no such measure is possible the score is set at 0

23) Decision mechanism (majority of creditors, court, etc)

Once a debt adjustment or release (partial) plan is in place, the question of who has the power to authorize comes to the forefront. As the power of the pen is important, so is the question of who yields the power of decision. As such court adjudication is seen as the gold standard, not least having requirements of impartibility and independence for judges in mind. The EU directive on a new start, which is binding only for entrepreneurial activity and applies to consumers only by national

implementing decision, outlines that creditors' participation is necessary, albeit judicial approval is a necessity on top[33]. From a consumer perspective, this adds complexity, which can be explained for more complex mixed entrepreneur/private cases, whilst shouldn't be the case for bure consumer cases. As such, where the court alone can make an obligatory decision of approving the plan or at the end authorize debt relief the score is set at 2. Where a majority of creditors and/or amount of claims is necessary for approval the score is set at 1. Where the majority of creditors or amount of claims is not enough and/or decision making is more complex or not binding for everybody the score has been set at 0

24) Exempted income (value, magnitude, the strictness of exemptions during the process; properties or future income a debtor can prevent creditors from recovering))

This relates to pre-bankruptcy assets which are exempted from the bankruptcy estate and so retained by the debtor. In essence, this is a question of assets being protected from creditors, and as such is normally limited for obvious reasons. Normally trade tools and similar objects necessary for ensuring a continued professional income stream and personal modest assets (clothes are obvious etc.) are generally exempted. For scoring purposes here, it takes value 0 if exemptions are 'negative', i.e., spousal assets are considered common property and as such can be pulled into the estate. This is the most extreme disinterest in having the debtor consumer on board in the process[34]. It takes the value 1 if exemptions of assets from the bankruptcy estate cover what is regularly available in most jurisdictions, namely only personal items, tools of the trade, etc. It takes the value of 2 if exemptions are more generous, such as in jurisdictions where an allowance is made for consumer bankruptcies to accumulate (modest) savings under the procedure.

[33] Se recitals, no. 48 et sec., EU Directive 2019/1023 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt

[34] In most jurisdictions there will usualy be other legal means for creditors to acertain (and remedy) if fraudulent behavior has taken place pre-bankruptcy in the sence that opportunistic asset transfers has taken place, eg. within a 2 year time limit prior to bankruptcy.

25) Asset sale

Another dimension of the process is the question of the sale of assets belonging to the debtor. Here again, assuming that conferring control with the consumer increases transparency and empowerment and hence increases consumer trust in the process is considered beneficial from a scoring perspective. As such, where an asset could be sold only with the consent of the debtor, or the debtor can sell it with the approval of the authorized officer / the court, the score is set at 2. Where in at least one process, finally the asset could be realized only by the officer/court alone the score is set at 1. Where the process puts the creditors in control, such as where the asset (in all types of processes) could be sold by the officer (trustee, court) only with the approval of the creditors the score is set at 0.

26) Consequences of commencement of the procedure

What happens with any outstanding disagreements or new claims being brought during consumer bankruptcy proceedings are pending? If some cut-off is not set and/or some mechanism is not in place, claims may arise which have not been adjudicated by the process, and will these then continue post-process? These issues need to be dealt with in order to have a coherent system. This is also noted in the EU directive on a second chance, which calls for a stay of enforcement actions[35]. When scoring the systems, those where all actions (collection, another insolvency) against the debtor are suspended pending process are given the value of 2 as the most covering. Where only some actions are stayed (whereas others, such as some auctions commenced prior bankruptcy, secured obligations, accrual of interest, penalties go on) go on are attributed the value of 1. Where nothing is suspended concerning collection the value of 0 is attributed to the system in question.

F) Conditions for discharge

Is discharge of (all) debts an option at all under national systems, and if so, what are the qualification and conditions for obtaining these are all issues that are both

[35] Recital no. 32 of EU Directive 2019/1023 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt.

of the utmost importance when characterizing (scoring) a national legal system in this area,

27) Discharge is possible (in at least one type of the processes)

First and foremost, the question must be addressed if full or partial discharge of debts is possible, and if so, if the decision thereon is final or not. The most consumer debtor-friendly option is where this can be confirmed, without any revoking possibility, and hence such systems are assigned the score of 2. Where discharge is available but could be altered, revoked for a while (e.g., in case of hiding assets, did against pari passu, etc.) is attributed the value when scoring of 1. Finally, where no, discharge is not possible, all obligations must be paid the value is set at 0[36].

28) Length of the necessary repayment period, the settlement period

The length of consumer bankruptcy procedures obviously has a bearing on their feasibility from a consumer perspective. Here it is not the procedural time aspect per se that is looked at, but the repayment plan time (if any). Presupposing consumers cannot use liquidity that they do not earn, shortening the length of the repayment period implies capping total repayment, and hence increases the discharge component. Balancing consumer vs creditor interests when calibrating this measure is in the political domain pending research that might shed light on how different calibrations influence the availability of labour, entrepreneurialism, credit availability, and cost, and not least incentivizing shifts of income to the shadow economy.

As for scoring of this component, where in debt repayment/relief plans (so there is a potential process for low income) the length of the repayment period could be maximum or less than 3 years is scored as 2, the most consumer debtor-friendly[37]. Where a repayment plan is scheduled for repayment over more than 3 years, but totalling less than 7 years, the score is set at 1. Finally for indefinite or at least where

---

36 NB: If no, and hence value to question 27 is set at 0, then everything is value 0 in segment F (questions 27 through 31) for obvious logic coherence reasons.

37 In line with this also EU directive on a fresh start, which requires a 3 year discharge period, except in cases of dishonesty. See recital 78 of EU Directive 2019/1023 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt.

processes could last more than or equal to 7 years the score is attributed at the value of 0, marking the most creditor friendly / least consumer debtor-friendly as is essentially indebtedness for life.

29) Level of repayment benchmark, a minimum quota for closing (as a percentage of debt)

Some jurisdictions operate with thresholds for closing/discharge instead of time constraints. As such a certain quote or threshold of debt/credit ratio must be met. For the purposes of scoring here, the definition has been set so that where no minimum quota relative to debt is prescribed in the law the score is set at 2. That is the most consumer debtor-friendly. Where there is indeed a minimum quota, but it is set at under or equal to 25% of the debt, and this requirement appears in at least one of the process types in a legal framework, it is scored at value 1. Where minimum quotas are set above 25% the value is set at 0.

30) Automatic discharge conditional of a court decision

There is a difference between jurisdictions as regards how discharge is carried out once any repayment plan or repayment quota/threshold has been met. For these systems where discharge occurs conditionally, it has to be assessed if the debt release is procedurally conditional on court adjudication or if it happens automatically. When scoring national jurisdictions, the most consumer-friendly option is where discharge is automatic if conditions are fulfilled (the maximum formal decision is needed) and consequently, these systems are scored with the value of 2. Where discharge is always based on court decisions the value is set at 1. Where no discharge is possible the value is set at 0.

31) Discharge is valid for all credits or extent of claims being dependent having been lodged in the process.

The most consumer debtor-friendly option is where discharge is valid for all claims even if they were not lodged in the course of proceeding, and hence these are set at the value 2. Where discharge is only available for claims lodged in the course of proceedings the value is set at 1. And obviously, where there is no discharge, the value is set at 0

G) Stigmas

The final category of scoring relates to the perceived stigma attributed or perceived by the consumer debtor to partaking in consumer bankruptcy proceedings. These stigmas may be perceived as deterrents or outright punitive for having taken part in a consumer bankruptcy proceeding, and as such may lessen the incentive for consumer debtors to engage in consumer bankruptcy proceedings, even if they would otherwise fulfil the criteria for obtaining debt relief if some shape or form. These stigmas are described both in terms of the labelling of the procedure as to publicity or participation (naming and shaming) or restrictions on credits subsequently (*McCormack et al. 2016*).

32) Other provisions against the debtor on the financial market (loan, banking, etc)

Firstly, national regimes are vetted for the extent to which they set a formal limitation of access to credit (blacklist) after the process is closed. This is not unusual, and as such the outlier jurisdictions would be those where credit limits reach for more than 5 years. These are, hence, set at value 0, being the most detrimental to the consumer debtor. For jurisdictions where there are such credit limitations, but they are for less than or equal to 5 years the value is set at 1. Finally, for the most consumer-friendly jurisdictions where no such formal limitations in accessing the debt market are in place, the value for scoring is set at 2.

33) Publicity stigmas (appearance in public registries, announcements, etc)

Apart from outright formal exclusion from credits, perhaps a more common phenomenon is allowing credit registers to access data on individuals that have been granted personal bankruptcy proceedings. This may limit or set conditions for access to credit, including restrictions on access to data and telephone companies, renting including residential renting, etc. Where information about the procedure is publicly available (in registration, etc) the score is set at 0. Where information about the procedure is not publicly available / or access thereto is limited, difficult access, the score is set at 1. Where no such registration exists apart from solely internally in the legal system, the score is set at 2, being the most consumer debtor-friendly.

34) Limit on further access to similar discharge later on

Does access to a consumer bankruptcy procedure preclude the consumer from having access to it again? Where no such limit is set in law the value is set at 2. Where there is a limit - for less or equal to 5 years – the value is set at 1. Finally, where there is a limit - for more than 5 years (or one-shot only) – the value is set as 0, the least consumer-friendly.

35) Names, calling of the procedures, laws

The naming of a procedure in itself can be highly stigmatizing if generally perceived with negative connotations associated with failure etc. As such, in a jurisdiction where the procedure is labelled as settlement/Restructuring or euphemistic phrase the value is set at 2. Where it is labelled insolvency, the value is set at 1. And finally, for the most negatively laden and associated connotation, bankruptcy, the value is set at 0.

6.3 Fault sources or in a way saturation of the topic

There are dimensions not covered but that would add depth or complexity to the analysis. Laws are multi-layered and structurally differing between jurisdictions, and as such what is captured here under comparing consumer bankruptcy/debt restructuring regimes is complemented by procedural laws, time-limit regulations for the validity of claims, and not least by what measures are available under national law for enforcing claims.

As an example, enforceability options vary between countries, so that e.g. claims to the state may be enforceable directly by courts vis-à-vis the employer to ensure enforcement at the source of income level, whereas this option may not be available for private creditors, leaving the latter with, in reality, non-enforceable claims to the extent the debtor is void on assets that are enforceable by forced sale, such as fixed property (sometimes protected if a modest domicile for the family), high value or luxury household items, etc. These instruments typically take part of procedural or enforcement laws and hence fall outside the scope of the scrutiny of consumer bankruptcy/debt adjustment regulations in Europe but are not outside the relevance for the topic covered.

7 Measuring leniency in the EU - Scoring

7.1 Index scoring results

35 indicators are scored for the 25 countries, which were validated by 19 experts.38 After aggregating the scores, we calculate country indices, which can theoretically range from 0 to 2, and rank the countries (Table 3), creating a leniency map of Europe (Figure 2). We also compare the BAP aggregation results with an EW aggregation of the dimensions. As a result, country indices range from 0.8 to 1.6. The benchmark index of the US legislation is 1.37, placing the US among the top 5 countries in the ranking. There are no significant changes in the ranking if we use EW instead of BAP.

Table 3. Leniency ranking of countries based on BAP and EW aggregation

Ranking	Country	Index (BAP)	Country2	Index (EW)
1	Denmark	1.58	Denmark	1.56
2	Sweden	1.47	Sweden	1.42
3	Poland	1.41	France	1.35
4	France	1.38	Luxembourg	1.34
5	Luxembourg	1.37	Poland	1.32
6	Greece	1.29	Greece	1.29
7	Slovakia	1.27	Slovakia	1.25
8	Austria	1.25	Czech R.	1.23
9	Czech	1.24	Estonia	1.22
10	Estonia	1.22	Austria	1.21

38 By scoring we took the national legislations, the selected chapter of Sajadova (Consumer insolvency proceeding: comparative legal aspects), and the country reports of Melcher and Lurger (Austria), Storme and Helsen (Belgium), Garasic (Croatia), Demetriadi et al. (Cyprus), Sprinz (Czech R.), Orgaard (Denmark), Sajadova and Viirsalu (Estonia), Jaatinen and Remes (Finland), Rublellin and Booth (France), Keinert and Vallender (Germany), Venieris (Greece), Holohan and Farry (Ireland), Cerini et al. (Italy), Sajadova (Lithuania), Hoffeld and Franczak (Luxembourg), Jungmann and Madern (The Netherland), Porzicky and Rachwal (Poland), Carvalho, et al. (Portugal), Zidaru (Romania), Orsula (Slovakia), Dordevic (Slovenia), Arias (Spain), and Hellström (Sweden) as given in *Graziano et al. (2019).*

11	Finland	1.19	Finland	1.16
12	Spain	1.16	Spain	1.13
13	Ireland	1.14	Ireland	1.09
14	Portugal	1.12	Slovenia	1.08
15	Netherlands	1.11	Portugal	1.06
16	Slovenia	1.11	Belgium	1.06
17	Croatia	1.08	Netherlands	1.05
18	Belgium	1.07	Croatia	1.03
19	Italy	1.05	Italy	1.00
20	Cyprus	0.98	Romania	0.96
21	Germany	0.97	Cyprus	0.94
22	Romania	0.97	Germany	0.90
23	Latvia	0.87	Latvia	0.88
24	Hungary	0.87	Hungary	0.85
25	Lithuania	0.85	Lithuania	0.82

Figure 2: Leniency map of Europe

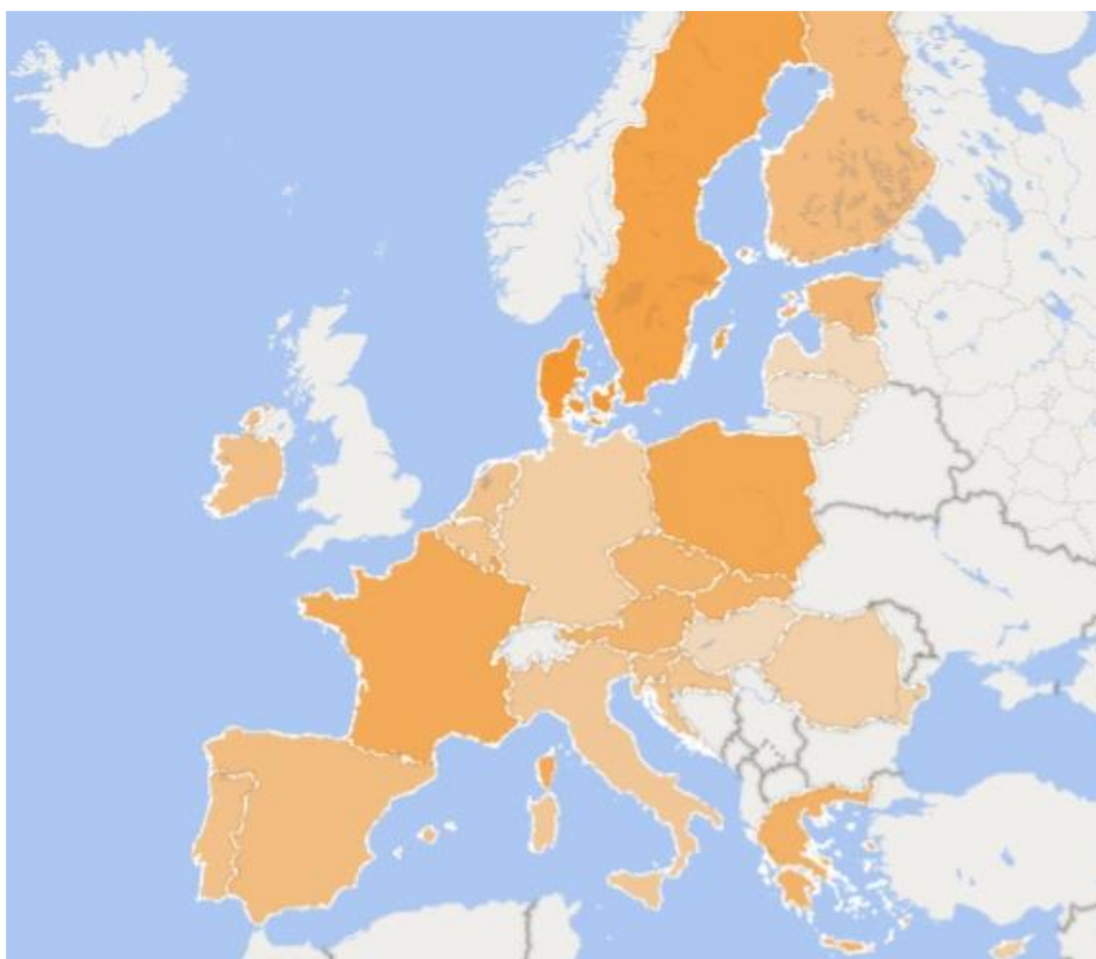


Table 4 presents the dimension scores of the countries that signed their relative deviation to the mean with Color. It shows that countries ranked as least lenient reach high scores in some dimensions. We expected the US Bankruptcy Code to be at the top; however, as can be seen, in some respects ("cost" and "stigma"), it is less lenient than the average of the EU although it offers the lenient element of straight bankruptcy. The correlation matrix of the dimensions shows no strong correlations among the dimensions; the correlation coefficients range from -0.1 to 0.4, and, except for one, the correlations are not significant.39

[39] The strongest correlation with relatively high significance is between expensiveness and stigma (correlation coefficient of 0.4 and significance of 0.04).

Table 4: Dimension scores - assigned colour grading relative to deviation to mean

	SB_DIM	EL_DIM	CO_DIM	CX_DIM	PR_DIM	DC_DIM	ST_DIM	**Leniency Index**
Denmark	1	1.40	2.00	1.60	1.82	1.60	1.50	**1.58**
Sweden	0	1.80	2.00	1.40	1.36	1.60	1.75	**1.47**
Poland	1	1.40	2.00	0.80	1.55	2.00	0.50	**1.41**
France	0.5	1.60	2.00	1.40	1.73	1.00	1.25	**1.38**
Luxembourg	0	1.60	2.00	1.40	1.45	1.20	1.75	**1.37**
Greece	2	1.80	0.33	1.00	1.27	1.60	1.00	**1.29**
Slovakia	1	1.60	1.67	1.00	1.45	1.00	1.25	**1.27**
Austria	1	1.20	1.33	1.00	1.36	1.60	1.00	**1.25**
Czech R.	1	1.20	1.00	2.00	1.27	1.40	0.75	**1.24**
Estonia	1	1.40	0.33	1.80	1.64	1.40	1.00	**1.22**
Finland	0	0.40	1.67	1.80	1.18	1.80	1.25	**1.19**
Spain	1	1.40	1.67	1.00	1.36	1.00	0.50	**1.16**
Ireland	1	1.60	0.67	0.60	1.18	1.60	1.00	**1.14**
Portugal	0	1.20	1.67	1.00	1.18	1.40	1.00	**1.12**
Netherlands	0	0.80	1.33	1.60	1.09	1.80	0.75	**1.11**
Slovenia	0.5	1.40	0.33	1.80	1.18	1.60	0.75	**1.11**
Croatia	0.5	1.20	1.33	1.00	1.45	1.25	0.50	**1.08**
Belgium	1	0.33	1.67	0.67	1.09	1.40	1.25	**1.07**
Italy	0	1.80	0.67	0.80	1.45	1.25	1.00	**1.05**
Cyprus	0.5	1.25	0.67	1.00	0.91	1.50	0.75	**0.98**
Germany	0	1.80	0.67	0.60	1.09	1.40	0.75	**0.97**
Romania	0.5	0.60	1.67	0.67	1.45	0.80	1.00	**0.97**
Latvia	0	0.40	0.33	2.00	1.45	1.20	0.75	**0.87**
Hungary	0	0.40	1.67	1.00	1.32	0.80	0.75	**0.87**
Lithuania	0	0.60	0.67	0.80	1.27	1.40	1.00	**0.85**
US	*2.00*	*1.60*	*0.67*	*1.40*	*1.82*	*1.40*	*0.75*	**1.37**

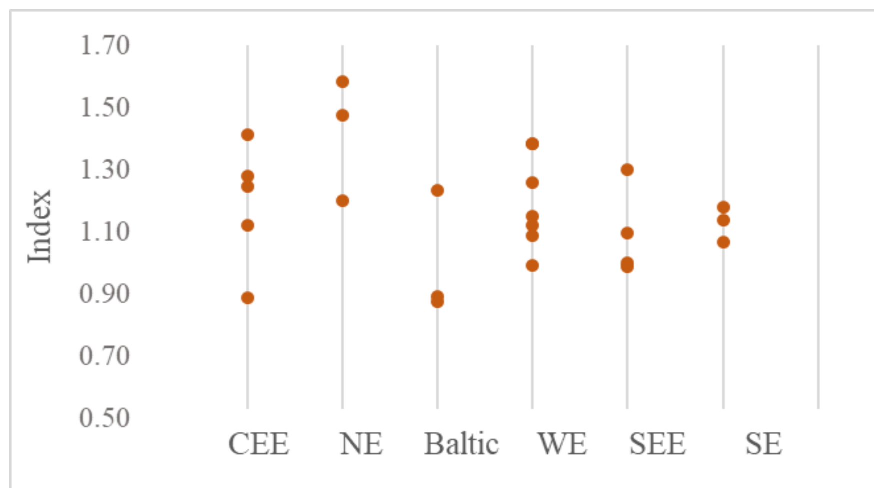
For answering Hypothesis 2 and 3 we are grouping the index scores based on the regional position of the country (Figure 3), we see that no homogeneity is visible due to the extreme scores of some countries. In the "younger" region of CEE, some are positioned out of the main group. This means that countries that typically launched their systems earlier and made reforms in a more lenient direction ever since (such as Poland in 2009 and Slovakia in 2017) have higher scores, and the recently launched systems in Hungary and Romania are less lenient. In South-Eastern Europe, Greece stands far apart from the core group with its more lenient system. In the northern part of Europe, Scandinavia seems to form a different group

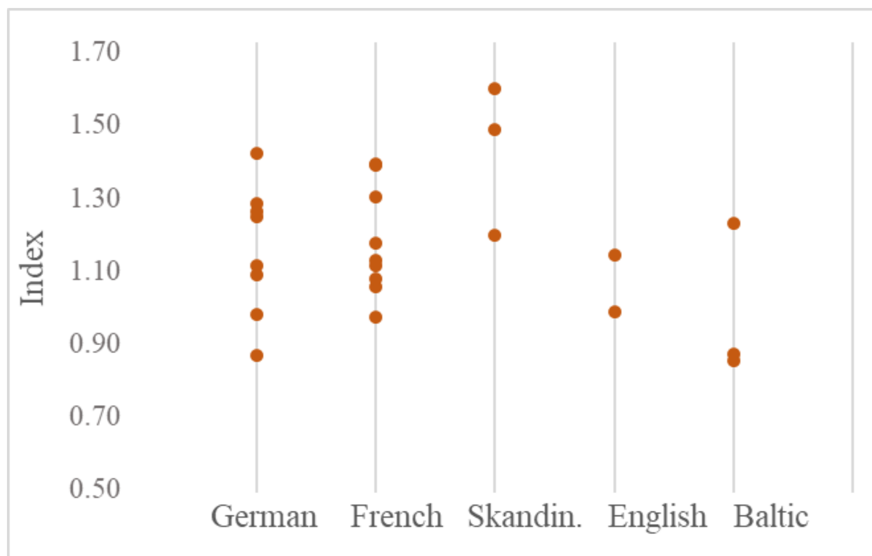
from the Baltic countries, running a generally more lenient system. Estonia is visibly more lenient than the other Baltic countries. In Western Europe, leniency seems to be very heterogeneous, with index scores ranging from 0.97 to 1.37. On the other hand, the leniency levels in the group of countries of South Europe are closer.

7.2 Index analysis

As in other comparative legislation research (La Porta, 1998), we can assume that the loan origin is associated with the leniency level. Figure 3 shows that French law origin countries tend to have closer leniency levels. However, other counties with similar law-origin backgrounds do not form homogenous groups.

Figure 3: Index scores grouped by region and by law origin





To focus on Hypothesis 1 we run a cluster analysis based on the dimension scores. The hierarchical cluster analysis shows no reasonable clusters with different distance measures. The elbow method confirms that no informative clusters can be determined. Cluster analysis based on three main dimensions (eligibility, expensiveness, discharge) results in more separable clusters. In this case, the elbow analysis suggests 4–5 clusters. The K-Mean cluster analysis of 5 clusters, based on the three dimensions, can be seen in Figure 4.

Figure 4 - K-Mean cluster analysis 3D scatterplot

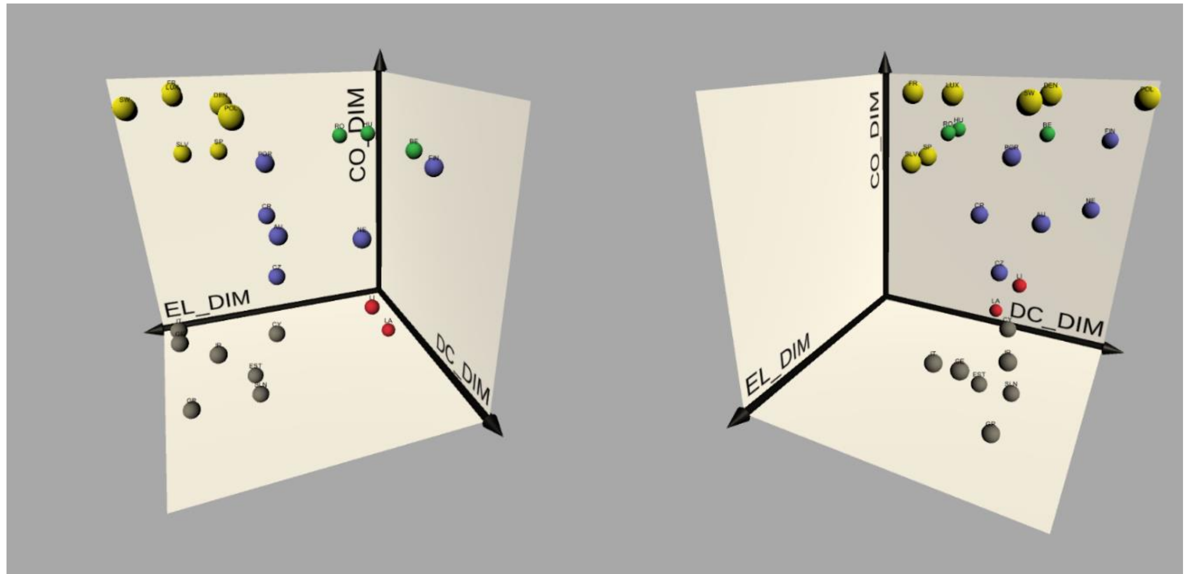


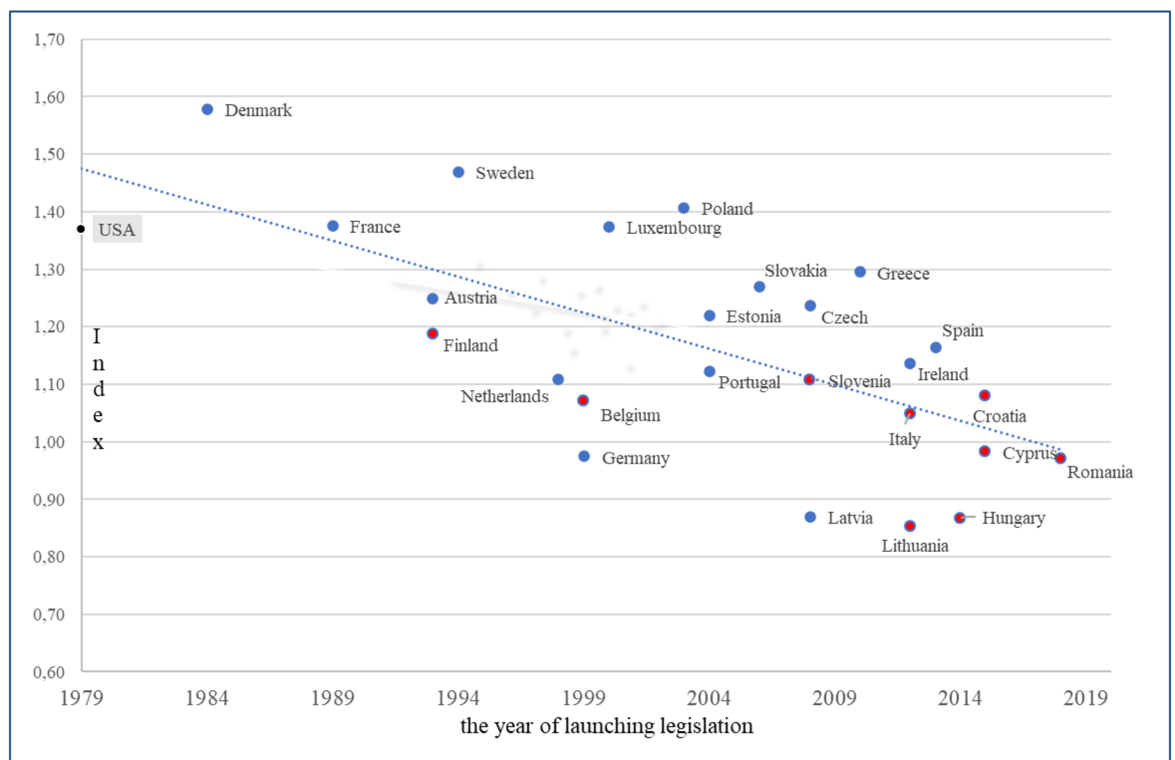
Figure 4 shows K-Mean cluster analysis 3D scatterplot for 3 dimensions (eligibility, cost, discharge): The country plots with the same colours belong to the same cluster based on the three dimensions of eligibility, cost, and condition of discharge.

Although some clusters seem to induce intuitive explanations (such as regional similarities in the clusters of Lithuania and Latvia as red plots; Romania and Hungary as green plots, or Austria-Czech R.-Croatia as blue plots), no overall explanation can be made. Overall, these analyses confirm our view that the legislations are very heterogenous from the leniency structure point of view, and clear and informative clusters based on the dimensions, or final scores cannot be formed.

To answer Hypothesis 4, we also analyse the association between the age of the legislation and the leniency level. A visible association can be detected in the scatterplot (Figure 5), which is confirmed by a correlation calculation with a coefficient of 0.67 and high significance. The older the legislation, the more lenient it is. This supports the hypothesis that countries' personal bankruptcy regulations are usually launched as "conservative" and are later shifted to a more lenient direction.

We do not analyse all the interim changes in the history of the countries in detail to identify all the leniency shifts since their launch. However, we identify the countries that introduced reforms in the past. Basically, most of them shifted their respective regime to a more lenient system. The exceptions are the US BAPCPA reform of 2005 in the United States, the correction in Greece in 2013, and the changes in the Netherlands in 2008. We mark countries based on if any "leniency reform" was made after launching or no considerable change in the regulation was introduced. In the scatterplot (Figure 5), the countries with no significant reform yet (marked with red) are typically in the less lenient region, relative to countries that have already undergone a considerable reform (marked with blue).

Figure 5: Index scores based on age or origin of the legislation – all EU



We divide the countries (and, thus, also the timeline) into two parts. The first group includes the more developed Western European (WE) and North European (NE) countries, which typically launched their systems earlier. The second group consists

of the latecomers in the CEE and SEE. We create two scatterplots (Figure 6) for the two groups.

Figure 6: Index scores based on age or origin of the legislation – all WE and NE

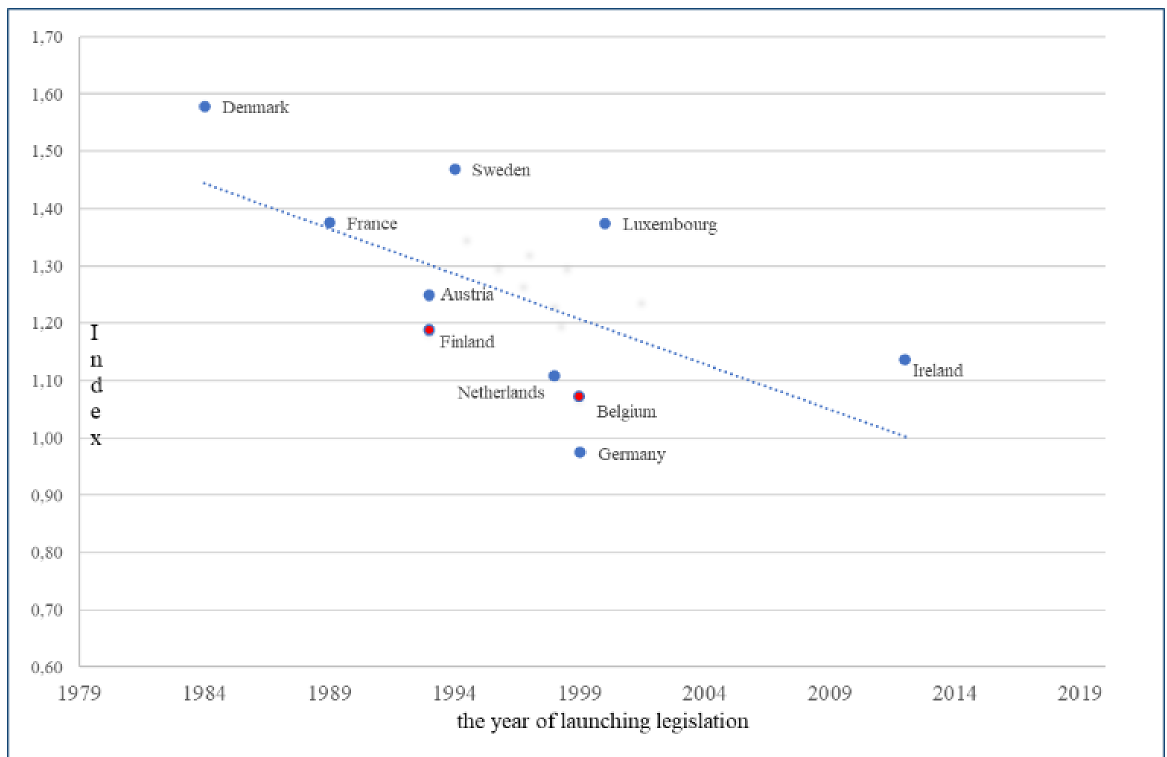


Figure 7: Index scores based on age or origin of the legislation – SEE and CEE

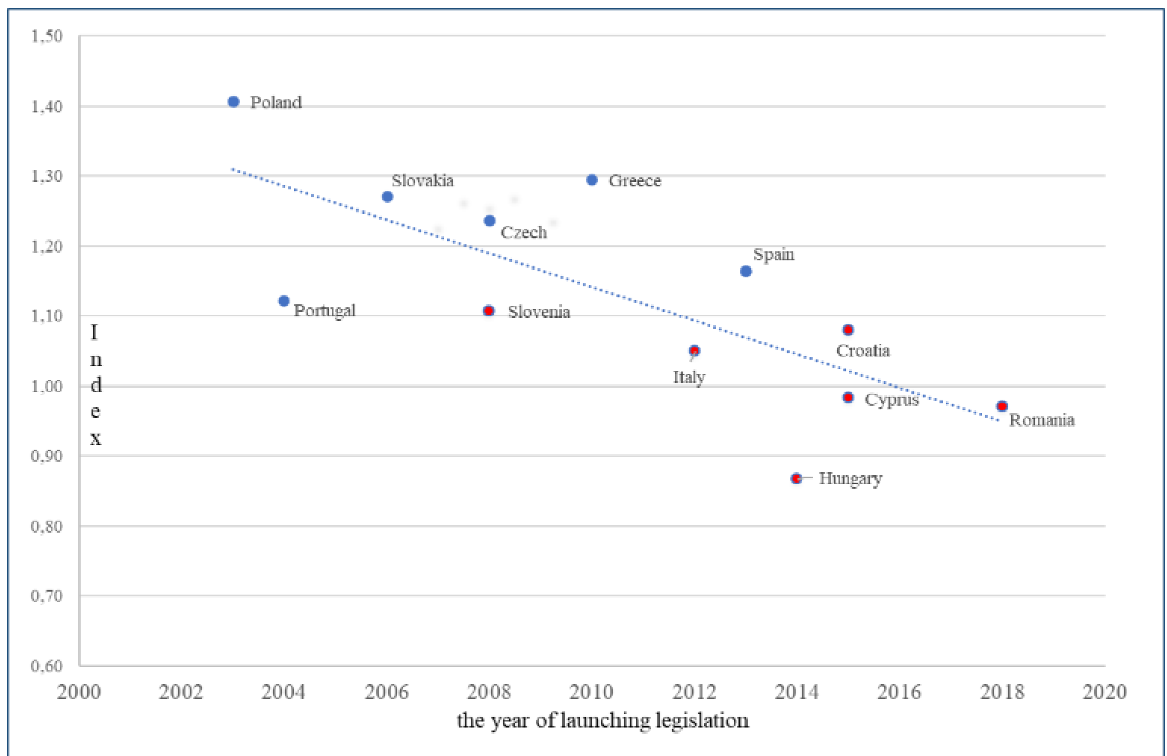


Figure 6 respectively 7 also visibly supports the association between leniency and the age of regime in the two separate groups, especially among the CEE-SEE countries.

8 Discussion and conclusions

A large part of the literature on personal bankruptcy focused on the effects of fresh start and level of leniency on the society, financial markets, entrepreneurship, and labour supply, which were obtained through comparative analyses in time or across countries. However, measuring leniency in these papers was limited to one-time legislative changes or a few characteristics such as homestead exemptions. In contrast, we create a compact measure of the leniency of very different personal bankruptcy regimes based on seven main dimensions and 35 categories. The dimensions prove to be independent and, after aggregation, could be used to rank countries, identify differences, set a basis for analysing the differences across countries, and measure changes in the legislation.

We use the composite index framework to measure the leniency of the EU countries' legislations and the US regime as a benchmark. We assess the 25 EU countries, allowing personal bankruptcy by scoring the categories, and we finally aggregate the scores based on the elaborated methodology. Validation of the country scores and the aggregation is supported by a highly diversified international expert panel. Based on the index scores, we rank the countries and identify the more and less lenient regimes.

By analysing scores based on region, law origin, and cluster analysis, we conclude that systems inside the EU are very heterogenous and no real clusters can be detected. Neither the law of origin nor regionality supports any strong association with leniency.

To focus on Hypothesis 1 we run a cluster analysis based on the dimension scores. Answering hypothesis 1, we can conclude, that by analysing scores based on all the 7 dimensions, no relevant groups could be detected, countries show high heterogeneity. By reducing dimension into the main 3 dimensions, cluster analysis resulted in 5 groups, however, it still does not lead to accepting the hypothesis, as diversity seems to be too high. Although some clusters seem to induce intuitive explanations (such as regional similarities in the clusters of Lithuania and Latvia as

red plots; Romania and Hungary as green plots, or Austria-Czech R.-Croatia as blue plots), no overall explanation can be made. Hence, hypothesis 1 is rejected.

For Hypothesis 2 and 3 we grouped the index scores based on the regional position of the country (Figure 3), we see that no homogeneity is visible due to the extreme scores of some countries. In the "younger" region of CEE, some are positioned out of the main group. This means that countries that typically launched their systems earlier and made reforms in a more lenient direction ever since (such as Poland in 2009 and Slovakia in 2017) have higher scores, and the recently launched systems in Hungary and Romania are less lenient. In South-Eastern Europe, Greece stands far apart from the core group with its more lenient system. In the northern part of Europe, Scandinavia seems to form a different group from the Baltic countries, running a generally more lenient system. Estonia is visibly more lenient than the other Baltic countries. In Western Europe, leniency seems to be very heterogeneous, with index scores ranging from 0.97 to 1.37. On the other hand, the leniency levels in the group of countries of South Europe are closer. As no real association can be detected based on neither of the characteristics of the country (region, law origin) we cannot accept Hypothesis 2 and 3 either. Hence, Hypothesis 2 and 3 is rejected.

On the other hand, there is a strong association between leniency level and the legislation age. Charts and correlations support the hypothesis that the older a legislation, the more lenient it is. We assume that countries' bankruptcy regulations are usually rather strict at launch, due to fear of potential abuse, and are later shifted to a more lenient direction. We cannot reject Hypothesis 4, however, the casualty and the strength of association requires further studies.

As regards the limitation of our research, it is a cross-sectional analysis and shows the leniency level of the countries based on the regulation valid in these countries in 2020. When new major reforms are implemented, our results and conclusions could change, therefore, continuous monitoring and updates in the scoring and calculations are necessary. Furthermore, our study focuses only on the EU. Some European countries that virtually play an important role in Europe (Great Britain, Switzerland, Norway, or Russia) are not in the scope. Finally, the scoring is sensitive to the interpretation of the wide variety, hardly comparable legislative formulations, the different legal structures, the possible difference between case-

law and the verbatim legal text. Therefore, giving scores to a few indicators caused some uncertainty. Most of the scores were validated by local legal experts, however, some indicators were debated. We mitigate most of these open issues by iterating the expert opinions, expanding legal sources, and also by estimating the sensitivity of some categorial scores on the final index scores. We conclude that even if opinions might differ in some cases, they do not alter the final country index scores and the ranking significantly.

Using the term lenience carries with it the underlying narrative that by reducing the debt of the borrower by an act of grace by society leniency has been granted to the debtor. This again relies on moral assumptions of what has been lent must be returned as a whole. As credit has arisen as a dedicated branch of business, so has regulation of the credit assessment that has to be undertaken. Furthermore, as examples of over-indebtedness have increased in many jurisdictions, so has the need to regulate against excessive lending in addition to the remedy of the borrower of debt restructuring, including eliminating the debt in part or in whole. As such one could argue, that in more modern terms perhaps it is not a question of the grace to be granted an individual in terms of leniency but rather a question of distribution of risk, namely the risk of insolvency (over-indebtedness) of the consumer debtor.

There is an inherent trade-off between on the one hand the obvious risk of the consumer providing insufficient information prior to contracting the debt and for the consumer debtor to behave opportunistically to minimize their repayment and on the other hand the financial institution creditor having advanced modelling and processing capabilities enabling them to set requirements for credit granting respectively controlling the issued credit, to absorb losses from substandard credits issued and to also behave opportunistically by extracting the maximum return from debtors irrespective of its impact on society. From the perspective of society, the balance has to be found on this issue to encourage lending to increase economic activity through maturity transformation on the one hand, and on the other hand ensuring the maximization of productivity in the economy by entrepreneurs, inventors, and not least the workforce at large. Insufficiently calibrated credit risk frameworks encompassing all components from credit assessment requirements (including consumer information provision) over credit loss absorption requirements to consumer over-indebtedness regimes carries with it the risk of

systemic banking defaults, excessive lending or insufficient innovation/entrepreneurialism but also, and perhaps not least, to stimulate the shadow economy by disincentivizing overindebted debtors with insufficient tools for reducing over-indebtedness to take part in the regular economy. As for the latter component, if over-indebtedness regulations are not sufficiently granular in distributing the credit risk between the credit and the consumer debtor, the latter might be incentives to go into the shadow economy if that is the most economically viable (rational in that person's sense) in a situation. At the systemic level, such a level of creditor protection leads to an outcome that is inefficient from a tax and state perspective. As little as it may be from a perspective of novelty, the humble suggestion of this study is to modernize the narrative and labelling of consumer over-indebtedness from "leniency" to the plain technical consumer credit-risk allocation. The flip side of leniency is oppressive. What is suggested here is balancing for a socially efficient outcome.

Our overall results open the gate to new research areas. With the composite index, the leniency of other countries outside Europe can also be measured and ranked. A cross-time analysis can present how the leniency levels of EU countries (and the overall EU) have changed and whether other patterns or tendencies exist. The differences in bankruptcy statistics, entrepreneurial activities, labour supply, and credit market conditions can be analysed and explained (cross-country and cross-time, based on the leniency index level changes and differences). On the other hand, the main drivers causing differences among countries are still not obvious[40]. The legislation age and leniency show strong associations, but further analysis is required to find more explanatory factors.

---

[40] Equally the regulator feels the need for further research in this area. As the newly adopted, not yet fully implemented EU directive on a new start only has entrepreneurial activity within its binding scope, and only – if clearly – it encourages national governments to extend the framework also to consumers, it also contains a call for further research to look into this area, namely, to assess if a harmonisation of EU legislation in the area is called for. Recital no. 98 of EU Directive 2019/1023 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt.

9 References

Adler, B.; Polak B. and Schwartz, A. (2000): Regulating Consumer Bankruptcy: A Theoretical Inquiry, The Journal of Legal Studies, Vol. 29, No. 2

Agarwal, Sumit; Chomsisengphet, Souphala; Liu, Chunlin and Mielnicki, Lawrence (2005): Impact of State Exemption Laws on Small Business Bankruptcy Decision. Southern Economic Journal , Jan., Vol. 71, No. 3, pp. 620-635

Agarwal, Sumit and Chomsisengphet, Souphala (2009): Role of Personal Bankruptcy Exemption Laws on Mortgage Availability, Cityscape, Vol. 11, No. 1,

Armour, John and Cumming, Douglas (2008): Bankruptcy Law and Entrepreneurship, American Law and Economics Review, Vol. 10, No. 2, pp. 303-350

Ayotte, Kenneth (2007): Bankruptcy and Entrepreneurship: The Value of a Fresh Start, Journal of Law, Economics, and Organization, Vol. 23, No. 1, pp. 161-185

Balatti, Mirco and López-Quiles, Carolina (2021): Limited liability, strategic default and bargaining power, ECB Working paper series, No 2519

Bar-Gill, Oren and Warren, Elisabeth (2008): Making Credit Safer, University of Pennsylvania Law Review, Vol. 157, No. 1

Berkowitz, Jeremy and White, Michelle J. (2004): Bankruptcy and Small Firms' Access to Credit, The RAND Journal of Economics, Vol. 35, No. 1, pp. 69-84

Bhutta, Niel; Dokko, Jane and Shan, Hui (2017): Consumer Ruthlessness and Mortgage Default during the 2007 to 2009 Housing Bust, The Journal of Finance, Vol. 72, No. 6, pp. 2433-2466

Bishop, P. (2017): Spatial variations in personal insolvency choices: The role of stigma and social capital, Urban Studies, Vol. 54, No. 16

Blazy, Régis; Chopard, Bertrand: Langlais, Eric and Ziane, Ydriss (2013): Personal Bankruptcy Law, Fresh Starts, and Judicial Practice, Journal of Institutional and Theoretical Economics (JITE) / Zeitschrift für die gesamte Staatswissenschaft , Vol. 169, No. 4, pp. 680- 702

Block-Lieb, Susan (2015): Austerity, Debt Overhang, and the Design of International Standards on Sovereign, Corporate, and Consumer Debt Restructuring, Indiana Journal of Global Legal Studies, Vol. 22, No. 2, pp. 487-541

Buckley, F.H. and Brinig, M.F. (1998): The Bankruptcy Puzzle, The Journal of Legal Studies, Vol. 27, No. 1.

Cerqueiro, Geraldo and Penas, María Fabiana (2017): How Does Personal Bankruptcy Law Affect Startups?, The Review of Financial Studies, Vol. 30, No. 7, pp. 2523-2554

Chatterjee, Satyajit; Corbae, Dean; Nakajima, Makoto and Ríos-Rull, José-Víctor (2007): Econometrica , Vol. 75, No. 6, pp. 1525-1589

Dick, A. and Lehnert, A. (2010): Personal Bankruptcy and Credit Market Competition, The Journal of Finance, Vol. 65, No. 2.

Dobbie, Will and Song, Jae (2015): Debt Relief and Debtor Outcomes: Measuring the Effects of Consumer Bankruptcy Protection, The American Economic Review , Vol. 105, No. 3, pp. 1272-1311

Dolfsma, W. and McMaster, R. (2007): Revisiting Institutionalist Law and Economics: The Inadequacy of the Chicago School, Journal of Economic Issues, Vol. 41, No. 2

Elqueta, Giacomo Rojas (2013): The Paradoxical Bankruptcy Discharge: Rereading the Common Law- Civil Law Relationship, Fordham Journal of Corporate and Financial Law, Vol. 19, No. 1.

Efrat, Rafael (2002): Global Trends in Personal Bankruptcy. American Bankruptcy Law Journal, 76. 81-109.

Eraslan, H.; Kosar, G., Li, W. and Sarte, P.-D. (2017): An anatomy of U.S. personal bankruptcy under chapter 13, International Economic Review, Vol. 58, No. 3.

Estrin, Saul; Mickiewicz, Tomasz and Rebmann, Anna (2017): Prospect theory and the effects of bankruptcy laws on entrepreneurial aspirations. Small Business Economics, Vol. 48, No. 4, PP. 977-97

Fan, Wei and White, Michelle J. (2000): Personal Bankruptcy and the Level of Entrepreneurial Activity. Working Paper No. 2000-02, Available at http://dx.doi.org/10.2139/ssrn.221948 [accessed 21.03.2021]

Fay, S.; Hurst, E. and White, M.J. (2002): The Household Bankruptcy Decision, The American Economic Review, Vol. 92, No. 3

Fenaba, R. Addo (2017): Seeking relief: Bankruptcy and health outcomes of adult women, SSM - Population Health, Volume 3, pp. 326-334.

Flint, Richard E. (1991): Bankruptcy Policy: Toward a moral justification for financial rehabilitation of the consumer debtor, 48 Wash. and Lee L. Rev. 515

Fossen, Frank M. (2014): Personal Bankruptcy Law, Wealth, and Entrepreneurship—Evidence from the Introduction of a "Fresh Start" Policy, American Law and Economics Review , Vol. 16, No. 1, pp. 269-312

Friesner, D.; Hackney, D.; McPherson, M. and Axelsen, D. (2011): Has Anything Changed in the Past Century? Revisiting Graue's "The Social Cost of Bad Debt", Journal of Economic Issues , Vol. 45, No. 4, pp. 755-784

Gala, Vito and Kirshner, Jodie A. and Volpin, Paolo F. (2013): The Political Economy of Personal Bankruptcy Law. Available at http://dx.doi.org/10.2139/ssrn.2359591 [Accessed 22.03.2021]

Garmaise, Mark J. and Natividad, Gabriel (2017): Consumer Default, Credit Reporting, and Borrowing Constraints, The Journal of Finance,Vol. 72, No. 5

Graue, Erwin (1939): The Social Cost of Bad Debt, The Quarterly Journal of Economics , Vol. 53, No. 3, pp. 477-486

Graziano, Thomas Kadner; Bojars, Juris and Sajadova, Veronika (Eds) (2019): A guide to consumer insolvency proceedings in Europe (Elgar)

Greenhalgh-Stanley, Nadia and Rohlin, Shawn (2013): How Does Bankruptcy Law Impact the Elderly's Business and Housing Decisions? The Journal of Law and Economics , Vol. 56, No. 2, pp. 417-451.

Gropp, R.; Scholz, J.K. and White, M.J (1997): Personal Bankruptcy and Credit Supply and Demand, The Quarterly Journal of Economics, Vol. 112, No. 1

Han, S., and Li, W. (2007): Fresh start or head start? The effects of filing for personal bankruptcy on work effort. Journal of Financial Services Research, 31,123–152.

Han, S. and Li, G. (2011): Household Borrowing after Personal Bankruptcy, Journal of Money, Credit and Banking, Vol. 43, No. 2/3, pp. 491-517

Heuer, J-O (2020). Hurdles to debt relief for "no income no assets" debtors in Germany: A case study of failed consumer bankruptcy law reforms. *Int Insolv Rev*. 29: pp. 44–76. https://doi.org/10.1002/iir.1359 [Accessed 21.03.2021]

Hoffman, H.B. (1999): Consumer Bankruptcy Filers and Pre-Petition Consumer Credit Counseling: Is Congress Trying to Place the Fox in Charge of the Henhouse? The Business Lawyer, Vol. 54, No. 4

Hurst, A.L. (2012): The different meanings of "living beyond your means": Distinguishing debtors in undue hardship bankruptcy cases, Michigan Sociological Review,
Vol. 26

Hynes, Richard and Posner, Eric A (2002): The Law and Economics of Consumer Finance, American Law and Economics Review, Vol. 4, No. 1

Jia, Ye (2015): The impact of personal bankruptcy law on entrepreneurship, The Canadian Journal of Economics / Revue canadienne d'Economique, Vol. 48, No. 2, pp. 464-493

Kilborn, Jason J. (2007), Comparative Consumer Bankruptcy, Carolina Academic Press, https://ssrn.com/abstract=1008150 [Accessed 21.03.2022]

Kilborn, Jason J. (2016): The Personal Side of Harmonizing European Insolvency Law, Norton Journal of Bankruptcy Law and Practice, No. 5

Kischel, U., Comparative Law (2019), Oxford University Press

Krebs, T.; Kuhn, M. and Wright, M.L.J. (2015): Human Capital Risk, Contract Enforcement, and the Macroeconomy, The American Economic Review, Vol. 105, No. 11

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R.W (1998).: Law and Finance, Journal of Political Economy, 106, No. 6, pp. 1113–1155

Lee, Seung-Hyun; Peng, Mike W. and Barney, Jay B. (2007): Bankruptcy Law and Entrepreneurship Development: A Real Options Perspective, The Academy of Management Review , Vol. 32, No. 1, pp. 257-272

Li, W., Meghir, C., and Oswald, F. (2017): Consumer bankruptcy, mortgage default and labor supply. Working paper [downloaded 21.11.2020] https://www.cemfi.es/ftp/pdf/papers/pew/model-current.pdf

Lilienfeld-Toal, von U., and Mookherjee, D. (2016): A general equilibrium analysis of personal bankruptcy law, Economica, 83, pp. 31–58.

Lin, Y. E., and White, M. J. (2001): Bankruptcy and the market for mortgage and home improvement loans. Journal of Urban Economics 50, pp. 138-62.

Livshits, Igor, James MacGee, and Michèle Tertilt (2010): Accounting for the Rise in Consumer Bankruptcies, American Economic Journal: Macroeconomics, no. 2, pp. 165-93

Lopes, Jose Reinaldo de Lima (2003): Consumer Bankruptcy and Over-indebtedness in Brazil. In Niemi-Kiesiliiinen, Ramsay, and Whitford (2003), 85-103.

Lyons, Angela C. (2003): How Credit Access Has Changed Over Time for U.S. Households, The Journal of Consumer Affairs, Vol. 37, No. 2, pp. 231-255

McCormack, Gerard; Keay, Andrew; Brown, Sarah and Dahlgreen, Judith (2014): Study on a new approach to business failure and insolvency. Comparative legal analysis of the Member States' relevant provisions and practices. University of Leeds 2016 under EU tender Tender No. JUST/2014/JCOO/PR/CIVI/0075 for the European Commission, DG Just.

Macovei, Codrin (2019): 'Highlights of the Romanian Perspective of Datio in Solutum for Consumer Borrowers' 24(1) Tilburg Law Review pp. 89–104, DOI: https://doi.org/10.5334/tilr.136 (Accessed 15/05-2021)

McGowan, Müge Adalet and Andrews, Dan (2016): Insolvency regimes and productivity growth: A framework for analysis. OECD Economics department, Working papers no. 1309 (OECD ECO/WKP(2016)33)

Murphy, Robert G. (1998): Household Debt and Consumer Spending, Business Economics, Vol. 33, No. 3

Niemi-Kiesiliinen, Johanna (1997): Changing Directions in Consumer Bankruptcy Law and Practice in Europe and USA. In Niemi-Kiesiläinen, Johanna, and lain Ramsay, guest eds. 1997 Special Issue: Changing Directions in Consumer Bankruptcy Law and Practice in Europe and North America. Journal of Consumer Policy 20:133

Niemi-Kiesiläinen, Johanna (1999): Consumer bankruptcy in comparison: do we cure a market failure or a social problem? Osgoode Hall Law Journal, Vol. 37, pp. 474-503

Niemi-Kiesiläinen, Johanna; lain Ramsay and William Whitford, eds. (2003): Consumer Bankruptcy in Global Perspective. (Hart Publishing)

Norberg, Scott F. (1999): Consumer Bankruptcy's New Clothes: An Empirical Study of Discharge and Debt Collection in Chapter 13. American Bankruptcy Institute Law Review, Vol. 7, No. 2. Available at SSRN: https://ssrn.com/abstract=1402828 [Accessed, 21.03.2021]

Parrish, Leslie (2016): A Roll of the Dice: Debt Settlement Still a Risky Strategy for Debt-Burdened Households, Cityscape, Vol. 18, No. 2.

Pavan, M (2008): Consumer durables and risky borrowing: The effects of bankruptcy protection, Journal of Monetary Economics, 55(8), 1441–1456.

Ramsay, I. (2007): Comparative consumer bankruptcy. University of Illinois Law Review, No. 1

Ramsay, I. (2011): Between neo-liberalism and the social market: Approaches to debt adjustment and consumer insolvency in the EU. In EUI Working Papers Department of Law, Consumer Bankruptcy in Europe, Different Paths for Debtors and Creditors, No. 9

Rubellin, Pascal and Booth, Christoffer (2019); Country report on France, in *Graziano et al 2019*

Simkovic, M (2009): The effect of BAPCPA on credit card industry profits and prices, American Bankruptcy Law Journal, Vol. 83, No. 1.

Sommer, Henry J. (1998): Causes of the Consumer Bankruptcy Explosion: Debtor Abuse or Easy Credit?," Hofstra Law Review: Vol. 27: Iss. 1, Article 4.

Sullivan, T.A., Warren, E. and Westbrook, J.L. (1997): Consumer Bankruptcy in the United States: A Study of Alleged Abuse and of Local Legal Culture. Journal of Consumer Policy Vol. 20, pp. 223–268.

Sullivan, T.A., Warren, E. and Westbrook, J.L. (2006): Less Stigma or More Financial Distress: An Empirical Analysis of the Extraordinary Increase in Bankruptcy Filings, Stanford Law Review, Vol. 59, No. 2

Tabb, Charles Jordan (1991): The Historical Evolution of the Bankruptcy Discharge. American Bankruptcy Law Journal Vol. 65, pp. 325-371.

Tabb, Charles Jordan (1995): The History of the Bankruptcy Laws in the United States. American Bankruptcy Institute Law Review Vol. 3, pp. 5-51.

Tabb, Charles Jordan: The Law of Bankruptcy. Westbury, N.Y.: Foundation Press.

Tabb, Charles Jordan (1999): A Century of Regress or Progress?: A Political History of Bankruptcy Legislation in 1898 and 1998. Bankruptcy Developments Journal, no. 15, pp. 343-381

Thorne, D. and Anderson, L. (2006): Managing the stigma of personal bankruptcy, Sociological Focus, Vol. 39, No. 2

Walter, G. (2020): Personal bankruptcy: Model structures and the fresh start. Working paper, Corvinus University of Budapest. http://unipub.lib.uni-corvinus.hu/5681/

Ware, Stephen J. (2014): A 20th Century Debate About Imprisonment for Debt: The American Journal of Legal History, Vol. 54, No. 3, pp. 351-377

White, M. J. (1998): Why Don't More Households File for Bankruptcy?, Journal of Law, Economics, and Organization, Vol. 14, No. 2 pp. 205-231

White, M. J. (2007): Bankruptcy reform and credit cards. Journal of Economic Perspectives, Vol. 21, No. 4, pp. 175–99.

White, M. J. (2015): Economics of Personal Bankruptcy and Insolvency, CESifo DICE Report, ISSN 1613-6373, ifo Institut - Leibniz-Institut für Wirtschaftsforschung an der Universität München, München, Vol. 13, No. 4, pp. 3–7

Yeager, Frederick C. (1974): Personal Bankruptcy and Economic Stability, Southern Economic Journal, Jul., Vol. 41, No. 1 pp. 96-102.

Zinman, Jonathan (2015): Household Debt: Facts, Puzzles, Theories, and Policies. Annual Review of Economics, Vol. 7, pp. 251-276

Zhou, L., Tokos, H., Krajnc, D., and Yang, Y. (2012): Sustainability performance evaluation in industry by composite sustainability index. *Clean Technologies and Environmental Policy, 14*(5), 789–803

Zhu, N. (2011): Household Consumption and Personal Bankruptcy, (2011), The Journal of Legal Studies, Vol. 40, No. 1

Zweigert, H. and Kötz (1996), H.: Einführung in die Rechtsvergleichung , 3. aufl. (Mohr Siebeck)

Zywicki, Todd J. (2005): An Economic Analysis of the Consumer Bankruptcy Crisis, Northwestern University Law Review, Vol. 99, No. 4, pp. 1463-1541, George Mason Law and Economics Research Paper No. 04-35.

Author's publications in the given topic:

Walter, G and Krenchel, J. V. (2021): The Leniency of Personal Bankruptcy Regulations in the EU Countries, Risks 9: 162, pp. 1-20, https://doi.org/10.3390/risks9090162

Annex I – Country scoring sheet of dimensions and categories

1. Straight bankruptcy option	
SB1: Straight bankruptcy option	• If straight bankruptcy exists, yes – 2 • Simplified bankruptcy exists for entrepreneurs, or bankruptcy (and discharge) only for persons approved by the court based on their status, wealth, poverty, etc. – 1 • No straight (simplified) bankruptcy exists – 0
SB2: Secured asset – return and walk away option	• There is a walk away possibility (giving the asset but no further claims) – 2 • No such walk away possibility – 0
2. Eligibility criteria	
EL1: Entitled to participate (natural person, entrepreneurs)	• There is a unified, complex legal process for both entrepreneurial/business loans of private persons and for consumer debts, obligations – 2 • Some processes are open for a private person (consumer) and another for entrepreneurial obligations, business activity, but not in a complex, unified form – 1 • The process is only for personal/consumer loans – 0
EL2: Income, wealth (income) constraint on a minimum amount of debt to file	A debt to wealth/income criteria as a restriction is defined to be eligible: • no – 2 • yes, for some processes – 1 • yes, for all processes – 0
EL3: Exclusion criteria of criminal record	• Criminal offence conviction is not an obstacle for eligibility – 2 • Criminal offences conviction of financial/bankruptcy crimes in connection with taking up/handling debt, bankruptcy, etc. is an obstacle – 1

	• Other criminal offences and acts (not just financial but other civic / or just suspicion /or being unemployed and not accepting job/ or gross negligence) is an obstacle – 0
EL4: Minimum amount of debt	Minimum amount of debt • is equal/less than 1000 euro, or no minimum – 2 • 100-5000 euro, or there are thresholds exist for separating different processes – 1 • more than 5000 euro – 0
EL5: Stigmas for filing	If filing for a similar process in the past is an excluding condition for filing again • less than 5 years ago or no such condition – 2 • less than 10 years but more/equal to 5 years – 1 • more, equal than 10 years – 0
3. Cost of procedure / Expensiveness	
CO1: Court fee	Amount of court fee (usually at start, filing, petitions): • fee is paid by creditor, state, or possibility to get it free – 2 • fees is equal or less than 100 euro – 1 • fee is more than 100 euro or proportional – 0
CO2: Who bears the costs of the procedure	• Cost is dominantly beard by the creditor or state – 2 • Cost is beard together by the creditor and debtor – 1 • Cost is dominantly beard by the debtor – 0
CO3: Deposit for the costs	• No such deposit required or can be exempted – 2 • Deposit exist but likely to be less than 500 – 1 • Deposit exist but likely to be more than 500 euro – 0
4. Complexity	
CX1: Who, how many office holders conduct the process (bankruptcy office, committee, court, municipality)	• Only one office/ office holder conduct all process (+court) – 2 • 2 types of offices/ office holders could conduct the different types of procedures – 1

	• More than 2 types of offices/officeholders conduct the different types of procedures – 0
CX2: Number of regimes named (routes like liquidation, debt settlement, restructuring proceeding, etc.)	• There are less than 3 different procedure-types are named – 2 • There are 3 different procedure-types are named – 1 • There are more than 3 different procedure-types are in legislation – 0
CX3: Complexity of the procedure for professionals (expert opinion)	• Less complex and relatively known – 2 • Complex – 1 • Highly complex and lack of knowledge from professionals (economists, layers) side – 0
CX4: Complexity for applicants (the workflow to start, to apply, consider eligibility criteria, etc.)	• Easy process how to start, to file – 2 • Complex to start, to file – 1 • Highly complex and lack of knowledge from debtor side – 0
CX5: Debt counselling service	• Counselling service is part of the official state system (even if officially financed non-profit institution) and is free of charge – 2 • Counselling service is part of the official state system (even if they are officially financed non-profit institution) but Not free of charge – 1 • Counselling service does not exist or just in the private and/or non-profit (not financed by state) area, or state provides only a simple homepage – 0
5. Process of repayment	
PR1: Pre-action stage, amicable settlement	• No out of court process is named in the official process – 2 • It is voluntary, but part of the system – 1 • It is a compulsory requirement to go first before going to debt settlement – 0
PR2: Initiator (who is entitled to initiate the procedure, creditor, debtor,	• The debtor can initiate all the processes – 2 • The creditor and the debtor can initiate the processes or the creditors some of the processes – 1

public entity, combinations, etc.)	• Only the creditor can initiate the process –0
PR3: Are all creditors included	• All credit/obligations types (secured, unsecured, utility, not just bank loans, credit cards, etc.) are included – 2 • Some loan types (like utility obligations, unsecured loans, student loan) is/are not included – 1 • Only secured claims are included – 0
PR4: Repayment/debt relief plan	• Repayment plan is drafted by the debtor first – 2 • Repayment plan is drafted by office/other mandated – 1 • Repayment plan is drafted by the creditor – 0
PR5: Degree of disability of the debtor during the process	Restrictions on the debtor's civil and economic rights related to bankruptcy: • if no restrictions are related (other than disposal of property, revenue) – 2 • for also for economic disabilities (i.e. restrictions on obtaining credit, being involved in the management of a company) – 1 • interference with mail and/or travel (i.e. prohibition on travel without consent, mail opened by trustee) civic disabilities (i.e. loss of right to vote, hold elected office, membership of professional groups) – 0
PR6: Violating the duties (debtor) results in possible penalties	• No such penalties (maximum prohibition from doing business) – 2 • Fine – 1 • Fine and other penalties (detention, other prohibition) – 0
PR7: Possible measure, decision of during the repayment, debt settlement processes (due to a sudden	• There is a possible measure in the restructuring process: • partial debt reduction, or release – 2

event, the debtor is hit by an event, etc., the court can decide to relief partly from debt)	• no partial reduction but measure to ease the payment-burden (suspending payment, suspend the sale of assets, aid, or any other measures) – 1 • no such measure is possible – 0
PR8: Decision mechanism (the majority of creditors, court, etc.)	• The court can make alone an obligatory decision at approving the plan or at the end (like in a debt relief plan) – 2 • Majority of creditors and / or claim is necessary for approval – 1 • The majority of creditors is not enough and/or decision-making is more complex or not binding for everybody – 0
PR9: Exemption income (value, magnitude, the strictness of exemptions during the process; properties or future income a debtor can prevent creditors from recovering)	This relates to prebankruptcy assets which are exempted from the bankrupt estate and so retained by the debtor. • if exemptions are more generous than listed below. – 2 • if exemptions of assets from the bankruptcy estate cover only personal items, tools of trade, etc. – 1 • if exemptions are 'negative', i.e. spousal common property can be • pulled into the estate – 0
PR10: Asset sale	• Asset could be sold only with the consent of the debtor, or the debtor can sell it with the approval of the officer – 2 • In at least one process, finally the asset could be sold by the officer/court alone (by other processes with the approval of the creditor) – 1 • Asset (in all types of process) could be sold by the officer (trustee, etc.) only with the approval of the creditor – 0
PR11: Consequences of commencement of the procedure	• All actions (collection, other insolvencies) against the debtor are suspended – 2

	• Some actions (some auctions commenced prior bankruptcy, secured obligations, accrual of interest, penalties) go on – 1 • Nothing is suspended concerning collection – 0
6. Conditions for discharge	
DC1: Discharge is possible (in at least one type of the processes)	Discharge is possible in the legislation: • Yes, without any revoking possibility – 2 • Yes, but could be altered, revoked for a while, in case of hiding assets, did against pari passu, etc. – 1 • No, discharge is not possible, all obligations must be paid – 0
DC2: Length of the necessary repayment period, the settlement period	In debt repayment, relief plan based on the legislation • the length could of repayment could be maximum or less than 3 years – 2 • repayment plans based on the loan is more than 3 less than 7 years – 1 • could last more/equal than 7 years/no limit is defined, or no discharge – 0
DC3: Level of repayment benchmark, a minimum quota for closing (as a percentage of debt)	• No minimum quota relative to debt is prescribed in the law – 2 • There is a minimum quota, but under or equal 25% of the debt appear in at least one of the process types – 1 • Minimum quotas are typically above 25%, or no discharge – 0
DC4: Automatic discharge conditional of a court decision	• Discharge is automatic if conditions are fulfilled (maximum formal decision is needed) – 2 • Discharge is always based on court decision – 1 • No discharge – 0
DC5: Discharge is valid for all credits, claims (depending on lodged in the process)	• Yes, for all claims even if it was not lodged in the course of proceeding – 2 • Only for claims lodged in the course of proceeding – 1

	• No discharge – 0
7. Stigmas	
ST1: Other provisions against the debtor on the financial market (loan, banking, etc.)	• No formal limitation in accessing debt market – 2 • There is a formal limitation about further credit access for less/equal to 5 years – 1 • There is a formal limitation about further credit access (blacklist) after the process is closed for more than 5 years – 0
ST2: Publicity stigmas (appearance in public registries, announcements, etc.)	• No such registration exists – 2 • Information about the procedure not publicly available / or limited, difficult access – 1 • Information about the procedure is publicly available (in registration, etc.) – 0
ST3: Limit on further access to similar discharge later on	• No such limit – 2 • There is a limit – for less or equal than 5 years – 1 • There is a limit – for more than 5 years or one-shot – 0
ST4: Names, calling of the procedures, laws	Name of the law: • Settlement/Restructuring or euphemistic phrase – 2 • Insolvency – 1 • Bankruptcy – 0

Annex II – EU Country scoring of categories

	SB1	SB2	EL1	EL2	EL3	EL4	EL5	CO1	CO2	CO3	CX1	CX2	CX3	CX4	CX5	PR1	PR2	PR3	PR4	PR5	PR6	PR7	PR8	PR9	PR10	PR11	DC1	DC2	DC3	DC4	DC5	ST1	ST2	ST3	ST4
Austria	2	0	1	2	1	2	0	2	0	2	0	1	1	1	2	2	1	2	2	2	0	1	2	1	0	2	1	1	2	2	2	2	0	1	1
Belgium	2	0	0	0	0	0	1	2	1	2	1	1	1	0	0	0	2	2	1	1	0	0	2	1	1	2	1	1	2	2	1	2	0	1	2
Croatia	1	0	1	2	1	1	1	2	0	2	1	1	1	0	2	1	2	2	2	2	2	0	1	1	1	2	1	1	2	1	0	2	0	0	0
Cyprus	1	0	2	2	0	0	1	0	0	2	1	1	0	0	2	2	1	1	1	1	0	1	0	0	1	2	2	1	2	1	0	1	0	1	1
Czech R.	2	0	2	0	2	2	0	2	0	1	2	2	2	2	2	2	1	2	1	2	0	1	2	1	1	1	1	1	2	1	2	2	0	0	1
Denmark	2	0	1	1	1	2	2	2	2	2	2	2	2	2	0	2	2	2	1	2	2	2	2	2	2	1	1	1	2	2	2	2	2	0	2
Estonia	2	0	2	2	1	2	0	1	0	0	2	1	2	2	2	2	1	2	1	2	0	2	2	2	2	2	1	1	2	1	2	2	0	0	2
Finland	0	0	0	2	0	0	0	2	1	2	2	2	2	1	2	2	1	2	1	0	0	2	2	1	1	1	2	2	2	2	1	1	2	0	2
France	1	0	0	2	2	2	2	2	2	2	2	0	1	2	2	2	2	1	1	1	2	2	2	2	2	2	1	0	2	1	0	1	0	2	2
Germany	0	0	1	2	2	2	2	0	0	2	1	0	0	0	2	0	1	2	1	0	0	2	2	2	1	1	1	1	2	1	2	2	0	0	1
Greece	2	2	1	2	2	2	2	0	0	1	2	0	1	2	0	1	1	2	2	2	0	2	1	1	1	1	1	2	2	1	2	0	1	2	1
Hungary	0	0	2	0	0	0	0	2	1	2	2	1	0	0	2	0	2	2	1	1	1	2	2	1	2	1	1	1	0	1	1	2	1	0	0
Ireland	2	0	2	2	2	1	1	0	0	2	1	0	1	0	1	2	2	1	2	0	0	1	2	1	0	2	2	1	2	2	1	2	0	1	1
Italy	0	0	1	2	1	2	1	0	0	2	1	0	1	1	0	2	2	2	2	2	2	0	1	1	0	2	1	0	2	1	1	2	1	1	0
Latvia	0	0	1	0	1	0	0	1	0	0	2	2	2	2	2	2	2	2	2	1	0	1	2	1	1	2	1	2	1	1	1	2	0	0	1
Lithuania	0	0	2	0	1	0	0	2	0	0	1	2	1	0	0	1	2	1	2	2	2	0	1	1	1	1	2	1	2	1	1	2	0	2	0
Luxembou	0	0	0	2	2	2	2	2	2	2	0	1	2	2	2	0	2	2	1	2	2	1	2	1	1	2	1	0	2	1	2	2	1	2	2
Netherlan	0	0	2	0	0	2	0	2	0	2	2	1	2	1	2	0	2	2	2	0	0	0	2	0	2	2	2	2	2	1	2	1	0	0	2
Poland	2	0	1	2	2	2	0	2	2	2	1	2	0	1	0	1	2	2	1	1	2	2	2	1	1	2	2	2	2	2	2	2	0	0	0
Portugal	0	0	1	2	1	2	0	2	1	2	2	1	1	1	0	1	1	2	2	0	2	0	2	1	1	1	1	1	2	1	2	2	0	0	2
Romania	1	0	1	0	0	1	1	2	1	2	1	1	0	0	0	2	2	2	1	1	2	1	1	1	1	2	1	1	1	1	0	2	0	1	1
Slovakia	2	0	2	2	2	2	0	2	2	1	2	1	1	0	0	2	2	2	1	2	0	2	2	1	1	1	1	1	0	2	1	2	0	1	2
Slovenia	1	0	2	2	1	2	0	0	1	0	2	1	2	2	2	2	2	2	1	1	0	0	2	0	1	2	1	2	2	1	2	2	0	0	1
Spain	2	0	2	2	1	2	0	2	1	2	2	1	1	1	0	1	1	2	2	1	1	1	2	1	1	2	1	1	1	1	1	2	0	0	0
Sweden	0	0	1	2	2	2	2	2	2	2	1	1	1	2	2	2	1	2	2	2	0	0	2	1	1	2	1	1	2	2	2	2	1	2	2

Annex III – Correlation matrix of dimensions

		SB_DIM	EL_DIM	CO_DIM	CX_DIM	PR_DIM	DC_DIM	ST_DIM
SB_DIM	**Pearson Correlation**	**1**	**0.292**	**-0.115**	**-0.127**	**0.180**	**0.149**	**-0.111**
	Sig. (2-tailed)		0.157	0.584	0.546	0.389	0.476	0.598
EL_DIM	**Pearson Correlation**	**0.292**	**1**	**-0.069**	**-0.138**	**0.224**	**0.132**	**0.179**
	Sig. (2-tailed)	0.157		0.742	0.511	0.282	0.529	0.393
CO_DIM	**Pearson Correlation**	**-0.115**	**-0.069**	**1**	**-0.107**	**0.341**	**-0.132**	**.406***
	Sig. (2-tailed)	0.584	0.742		0.610	0.096	0.530	0.044
CX_DIM	**Pearson Correlation**	**-0.127**	**-0.138**	**-0.107**	**1**	**0.215**	**0.198**	**0.123**
	Sig. (2-tailed)	0.546	0.511	0.610		0.302	0.344	0.557
PR_DIM	**Pearson Correlation**	**0.180**	**0.224**	**0.341**	**0.215**	**1**	**-0.257**	**0.265**
	Sig. (2-tailed)	0.389	0.282	0.096	0.302		0.215	0.200
DC_DIM	**Pearson Correlation**	**0.149**	**0.132**	**-0.132**	**0.198**	**-0.257**	**1**	**-0.002**
	Sig. (2-tailed)	0.476	0.529	0.530	0.344	0.215		0.994
ST_DIM	**Pearson Correlation**	**-0.111**	**0.179**	**.406***	**0.123**	**0.265**	**-0.002**	**1**
	Sig. (2-tailed)	0.598	0.393	0.044	0.557	0.200	0.994	