



# European financial law and the state-finance nexus: Sovereign privileges or market discipline for safe public debt?

**Ad van Riet**

United Nations University, Belgium

## Abstract

European financial regulation consistently gives governments privileged access to private investors, reflecting the anchor role assigned to sovereign securities as safe and liquid assets for the financial system. Legislative reforms after the financial crisis of 2008 further expanded the preferential treatment of sovereign securities as zero-risk claims, introduced portfolio requirements in favour of public debt, and constrained market speculation against governments. These sovereign privileges appear counterproductive for fiscal discipline and financial stability: they encourage excessive public debt issuance and make financial institutions holding government bonds – in particular from euro area countries with a variable risk profile – vulnerable to fiscal turbulence. Governments seem to have a conflict of interest. On the one hand, they are prudential regulators of financial risk-taking, on the other hand, they tend to overlook the financial sector's exposure to sovereign risk. This article considers four theories of the state-finance nexus and their solutions to this conflict of interest. The money view, the franchise view, and the modern financial repression view draw on the state's monetary and regulatory powers over finance to confirm sovereign safety. Their positions fundamentally contrast with the neoliberal view, which relies on free markets to enforce sustainable public finances. The article concludes that sovereign privileges present a fundamental dilemma for European financial governance with a neoliberal orientation: they oblige private investors to hold public debt, while weakening the role of markets in promoting fiscal discipline as the very foundation of sovereign safety.

## Keywords

European law, financial governance, state-finance nexus, sovereign privilege, sovereign safety

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### Corresponding author:

Ad van Riet, United Nations University Institute on Comparative Regional Integration Studies (UNU-CRIS), Potterierei 72, BE-8000 Bruges, Belgium. Email: [avanriet@cris.unu.edu](mailto:avanriet@cris.unu.edu). <https://doi.org/10.2218/finsoc.8799>

## Introduction

Ever since the Global Financial Crisis of 2008, the European Union (EU) has taken a more interventionist approach towards the financial sector. Following the lead of the G20, European legislators set out to correct financial market failures, improve the resilience of financial institutions, and safeguard financial stability through tighter regulation and closer supervision. The market disruptions during the sovereign debt crisis of 2010-2012 and at the onset of the coronavirus pandemic in March 2020 provided further momentum to EU legislative measures targeted at preserving financial stability in Europe.

European financial governance aims to enhance the efficient functioning of financial institutions and financial markets in accordance with neoliberal principles. After the 2008 crisis, European agencies continued to work as ‘market guardians’ (Mügge, 2013). Yet, the EU’s regulatory interventions to make financial markets work better also consistently give public issuers privileged access to private investors based on prudential considerations, protecting them from market discipline.<sup>1</sup> These sovereign privileges in EU prudential regulation have important political economy implications that deserve further analysis.

The contribution of this article is twofold. The first contribution is to review the overhaul of EU financial law from 2008 to 2020 in order to identify how it has shaped the creation and distribution of credit in the internal capital market. The main finding here is that European prudential legislators further expanded the scope of sovereign privileges affecting the activities of the banking industry, portfolio investors, and financial market institutions, notably by treating government bonds as safe and liquid assets, introducing portfolio requirements in favour of public debt and limiting market speculation about sovereign creditworthiness (see also van Riet, 2019). On the one hand, the favourable regulatory approach towards public debt appears consistent with the systemic role that government bonds have been assigned as risk-free assets in the single financial space of Europe (Gabor and Vestergaard, 2018; van Riet, 2017). On the other hand, it gives public issuers competing for funds with private borrowers a regulatory advantage which hampers market-based fiscal discipline and undermines fiscal governance, in particular for the weaker members of the Economic and Monetary Union (EMU). The trend of including sovereign privileges in EU financial law points to a conflict of interest between the role of governments as prudential regulators of financial risk-taking and their tendency to ignore the financial sector’s exposure to financial risk where public debt is concerned.

The article’s second contribution is to discuss this conflict of interest via four strands of political economy literature on the state-finance nexus, focusing on the case of EMU. Three of these theories draw on a country’s monetary and regulatory powers over financial markets to confirm the safety promise embedded in sovereign securities, namely the solemn pledge that the government will never fail to repay its debt (Boy, 2015). Hence, the sovereign privileges found in EU financial law appear consistent with the anchor role of sovereign securities as risk-free assets for the modern financial system. The three theories fundamentally contrast with the neoliberal theory, which sees market discipline as the foundation of sovereign safety and therefore rejects a privileged treatment of public debt in prudential regulation.

Considering the state-finance nexus, the ‘money view’ observes that sovereign securities stand near the apex of a money-credit hierarchy with state-issued money at the top and private securities further down. The central bank (also as regulator) manages the dynamics of this hybrid money-credit system in quiet times and secures the liquidity of both the money market and the government bond market in a crisis. The monetary power to prevent private investors from pushing the state into default confirms that public debt is safe – provided that markets

retain confidence in the value of the currency (Mehrling, 2011, 2013). Against this background, governments and financial institutions have a mutual interest in exploiting the structural power that comes with the anchor role of sovereign securities as safe and liquid assets in this financial ecosystem (Culpepper, 2015; Monnet, Pagliari, and Vallée, 2019; Pagliari, 2015). Public issuers can easily find private investors who wish to secure their credit expansion or underwrite their own liabilities with risk-free sovereign assets. EU financial law including sovereign privileges reflects this mutually beneficial relationship, but also enhances market-based credit provision.

The ‘franchise view’ sees the modern financial system as a hybrid public-private partnership. The state in effect grants profit-seeking financial institutions a lucrative license to secure their credit business with central bank money and government securities backed by the full faith and credit of the sovereign, expecting that their superior microeconomic efficiency in generating and allocating credit will contribute to macroeconomic and financial stability (Hockett and Omarova, 2017). Although the state has the lead in this partnership, financial institutions may accrue infrastructural and instrumental powers, causing the monetary and regulatory authorities to accommodate their commercial interests in a financialising economy (Braun, Gabor, and Hübner, 2018; Pagliari, 2015). The franchise view argues that the state must then (re)assert its leadership to ensure that financial firms – under the effective control of the central bank and prudential supervisor – will (re)align their credit creation and allocation with public interests (Hockett and Omarova, 2017). New EU financial regulation helps in this regard by re-focusing profit-driven financial institutions on public concerns, through, for example, the imposition of mandatory public debt quota on shadow banks. It does, however, forego the efficiency gains from free portfolio choices.

The expansion of sovereign privileges in EU financial regulation can also be viewed as a revival of ‘financial repression’ in open capital markets under the modern guise of state agencies exercising more intrusive prudential control over the financial sector (Reinhart and Rogoff, 2011). Quasi-fiscal privileges in financial law create a captive investor base for sovereign securities with the goal of channelling private savings to the public sector. In this regard, central bank operations in the government bond market serve to cap the rate of interest below the rate of inflation and to monetise public debt. Although modern financial repression exploits prudential law and monetary policy to secure sovereign safety, it is also advocated as an effective means to control the provision of credit and curtail the financial industry in the interest of macroeconomic and financial stability (Bezemer, Ryan-Collins, van Lerven, and Zhang, 2021; Kelber and Monnet, 2014). Doubts remain over its effectiveness in open capital markets.

The ‘neoliberal view’ relies on the market to establish an efficient allocation of capital between public and private borrowers (Hayek, 2001 [1944]). Sovereign safety is grounded in market-based fiscal discipline, assisted by strict fiscal rules. From this perspective, sovereign privileges in prudential regulation must be removed. As a consequence, however, fickle markets instead of elected officials would steer the allocation of capital (Gill, 1995), which at times could seriously limit the state’s room for budgetary manoeuvre (Mosley, 2000).

This article argues that sovereign privileges point to a fundamental dilemma in European financial governance. EU financial regulation favouring public debt over private debt in order to ensure that financial institutions hold a sufficient amount of secure assets appears counterproductive for fiscal discipline and financial stability. While there is growing demand for collateral, liquidity, and capital in a financialising economy (Gabor and Ban, 2016), this prudential objective weakens the very foundations of a credible promise of sovereign safety (Boy, 2015). Giving public issuers privileged access to credit undermines the disciplinary role

that markets are expected to play in the neoliberal regime, as well as the effectiveness of EU fiscal surveillance (Ojala, 2021). Whereas EU fiscal governance relies on financial markets to promote fiscal discipline, EU financial governance asks private investors to share a ‘false belief’ that governments cannot fail (Cœuré, 2016), which encourages excessive public debt issuance and could threaten financial stability. This concern applies most clearly to the (most vulnerable) member countries of EMU. Their governments have given up the sovereign privilege of issuing zero-risk claims in a currency under their own monetary control and as a consequence exposed themselves to market discipline (Goodhart, 1998). EMU lacks a central government that could issue a single sovereign asset in its own currency as the eurozone’s risk-free benchmark for the financial system and that could offer the members unconditional access to a common fiscal backstop. Given market perceptions of their creditworthiness, sovereign borrowers perceived as safe occupy a higher position within the euro area money-credit hierarchy than those perceived as risky. The preferential zero-risk treatment of government bonds in EU financial legislation nevertheless disregards their variable risk profile (van Riet, 2021). Making euro area financial institutions vulnerable to a rise in sovereign risk conflicts with the prudential goal of maintaining a stable financial system and takes for granted that the European Central Bank (ECB) will step in to stop a liquidity crisis in government bond markets (De Grauwe and Ji, 2022).

This article is structured as follows. First, it reviews the main sovereign privileges in EU financial law that were introduced from 2008 to 2020. The next part presents four theories of the state-finance nexus and their relation to sovereign safety and regulatory privileges. The article then discusses how these alternative views address the conflict of interest apparent in prudential regulation in the context of EMU. The final section concludes.

## Sovereign privileges in EU financial law

This section reviews ten areas of EU financial reform over the period 2008-2020, listed in Table 1, to identify the main cases of a preferential treatment of public debt affecting the operations of the banking industry, portfolio investors, and financial market institutions.

<i>Main reforms of EU financial legislation</i>	<i>Announced</i>	<i>Entry into force</i>
<i>EU Banking Regulation (CRR I, CRD IV, CRR II)</i>	Jul 2011, Nov 2016	Jan 2014-2019, Jun 2021
EBA Capital Exercise; Ad hoc recommendation	Oct 2011	Applied Oct 2011–Dec 2014
Covid-19 Regulation; Temporary	Apr 2020	Applied Jun 2020–Dec 2023
<i>EU Banking Structure Regulation</i>	Jan 2014	Withdrawn
<i>EU Investment Funds Directive (UCITS IV)</i>	Jul 2008	Jul 2011
<i>EU Regulation on Money Market Funds (MMF)</i>	Sep 2013	Jul 2018/Jan 2019
<i>EU Insurance and Reinsurance Directive (Solvency II)</i>	Mar 2008	Jan 2016
<i>EU Directive for Occupational Pension Funds (IORP II)</i>	Jul 2010	Jan 2017
<i>EU Market Infrastructure Regulation (EMIR)</i>	Sep 2010	Aug 2012
<i>EU Regulation on Short-Selling and CDS Contracts</i>	Sep 2010	Nov 2012
<i>EU Regulation on Credit Rating Agencies</i>	Jul 2011	Jun 2013
<i>EU Common Financial Transactions Tax (FTT)</i>	Feb 2013	Under discussion

**Table 1.** Selection of European financial reforms 2008-2020. *Source:* Author’s own.

Taken together, public issuers are granted a privileged access to private investors and special protections from market speculation. These sovereign privileges effectively tilt the creation and allocation of credit towards the public sector and strengthen the hierarchical position of Member States vis-à-vis financial markets.

### ***Sovereign privileges affecting the banking industry***

The advanced economies agree on global standards governing the prudential supervision of international banks in the Basel Committee on Banking Supervision (BCBS). Ever since the first Basel Accord of 1988 on bank capital requirements, national authorities have been free to grant bank claims on the public sector a preferential zero-risk treatment if certain conditions are met, irrespective of true economic risk (Goodhart, 2011). This provision is based on the conviction that sovereign securities of the advanced economies – including all Member States of the EU – are free from credit risk, easily convertible into money, and therefore best-suited to anchor the global financial system (Bruneau, 2023).

After the 2008 crisis, the BCBS significantly tightened and broadened the prudential supervision of international banks (Basel III), aiming to enhance the quantity and quality of capital, limit large credit risk exposures, ensure sufficient liquidity, promote stable funding, constrain excessive leverage, and strengthen loss absorption capacity. At the European level, the EU Capital Requirements Regulation (CRR I) and the Capital Requirements Directive (CRD IV) transposed these principles into EU law, phasing them in over a period of five years from January 2014 (European Systemic Risk Board (ESRB), 2015; Hauser, 2020).

As before, Europe granted credit institutions the option of assigning in most cases a standard zero weight to the credit risk of claims on (or guaranteed by) EU central governments if these are denominated and funded in their domestic currency. All Member States are treated the same, even though euro area countries no longer issue public debt in a currency under their own monetary control and are therefore more prone to default.

Amid the sovereign debt crisis, the European Banking Authority (EBA) issued in December 2011 an ad hoc recommendation to national regulators, which sought to increase the transparency in relation to unrealised losses hidden in banks' government bond portfolios. The largest banks had to value their claims on governments at market prices and to create by mid-2012 an exceptional and temporary capital buffer against their exposure to sovereign credit risk. The EBA's capital exercise to restore confidence in the EU banking sector temporarily neutralised the preferential zero-risk treatment for sovereign exposures and remained in force until December 2014 (Korte and Steffen, 2015).

Preferential treatment is generally also maintained for large holdings of own government bonds in the domestic currency, which enables banks to act as contrarian buyers in case foreign investors withdraw their capital in a national crisis. By contrast, for large exposures to a private client (or group of connected clients) the normal limit is 25% of the eligible capital base. EU banking law in this respect places a high degree of trust in the effectiveness of mandatory bank-internal controls to address concentration risk, especially as a tight bank-sovereign nexus may trigger a negative feedback-loop in a fiscal-financial crisis.

Basel III further introduced new liquidity and funding standards. Under EU rules, banks can treat their claims on (or guaranteed by) EU central governments with a zero weight for credit risk as 'high quality' and 'liquid'. This additional label implies that banks can count these sovereign securities in full towards meeting the new liquidity coverage ratio as a safeguard against severe liquidity stress. Moreover, high-quality and liquid sovereign assets are exempted from the standard diversification requirement.

Banks must also maintain a net stable funding ratio as of mid-2021, which serves to prevent excessive maturity mismatches between their assets and liabilities over a one-year horizon (see the second EU Capital Requirements Regulation, CRR II). For consistency reasons, banks do not need to hold any stable funding against EU central government bonds, irrespective of the actual credit quality and market liquidity of these assets. Hence, both from a short-term liquidity and longer-term funding perspective, it is more attractive for banks to invest in government bonds than in corporate bonds.

Furthermore, since mid-2021 banks must comply with a new minimum required leverage ratio of 3%, measured as main capital divided by total exposure, covering all on- and off-balance sheet items. This additional capital requirement creates another safeguard against the build-up of excessive leverage, because total exposure in this case refers to non-risk weighted assets. Public sector bank deposits for funding 'general interest investments' that enjoy a government guarantee are excluded from the calculation of total exposure. European banks for which the minimum required leverage ratio is binding thus have an interest in increasing the proportion of these earmarked public sector deposits to realise a higher leverage ratio for a given amount of capital.

Finally, as of 2018, credit institutions must calculate their own funds that are available to absorb losses by fully including unrealised gains or losses on their assets or liabilities measured at fair value. The volatility in government bond markets observed after the outbreak of Covid-19 gave rise to unrealised losses on public debt holdings. A temporary prudential filter allowed banks to remove the unrealised losses (and gains) on public sector exposures (as long as these are not credit-impaired) from the calculation of own funds, so as to mitigate the negative impact on their capacity to lend both to the public and private sector.

Following the financial crisis, the European Commission published a proposal for an EU Banking Structure Regulation that addresses political concerns about large banks being 'too-big-to-fail, too-big-to-save and too-complex-to-resolve', especially at the national level. One of the objectives was to structurally separate the core banking functions from the riskier financial activities such as proprietary trading. Removing the latter from bank balance sheets reduces the fiscal costs if governments ever again needed to step in to rescue a troubled bank.

The legislative proposal of January 2014 also specified an exemption for EU sovereign securities from the envisaged ban on proprietary trading as well as from a possible separation of high-risk trading activities, consistent with their zero-risk treatment in EU banking legislation. As political support for a structural reform of the banking sector faded away, the Commission formally withdrew its proposal in July 2018.

### ***Sovereign privileges affecting portfolio investors***

Collective investment funds in Europe have grown threefold since the financial crisis, making it ever more important that they hold an adequate amount of secure assets as a safeguard against liquidity stress. The EU Investment Funds Directive (UCITS) – the fourth edition of which took legal effect in July 2011 – gives the national authorities ample opportunity to let collective investment funds invest large sums in marketable securities issued (or guaranteed) by single public sector entities (Kopf, 2011).

Collective investment funds must diversify their portfolios to spread the risk of losses. They can invest only up to 5% of their assets in transferable securities or money market instruments issued by a single body (or by single entities belonging to the same group). By way of derogation, national regulators may authorise them to place up to 100% of their assets 'in accordance with the principle of risk-spreading' in different instruments issued (or

guaranteed) by a public sector body (but not more than 35% of their assets in a single issue), provided that the unit-holders are adequately protected against losses. Furthermore, collective investment funds may acquire no more than 10% of all the debt securities or 10% of all the money market instruments issued by a single body. Again, national regulators may waive these concentration limits when an eligible public sector body is the issuer (or guarantor).

As interest rates steadily declined after 2008, collective investment funds on average increased the share of corporate bonds and real estate in their portfolios, assets offering less liquidity but higher returns than public debt. During the Covid-19 market turmoil in March 2020 the investment fund sector sold a large amount of sovereign securities in a 'dash for cash' to meet the large collective demand from clients wanting to liquidate their investments (ECB, 2020). Many investment funds still had to temporarily suspend these redemptions. To address the mismatch, the ESRB and the European Securities and Markets Authority (ESMA, 2021) recommended that the affected investment funds should improve their liquidity profile. This statement could also be read as advice to hold more high-quality and liquid instruments issued (or guaranteed) by governments.

Money market funds provide short-term credit to financial institutions, non-financial corporations, and governments, and are widely used by investors to manage their liquidity. A key objective of the new EU Regulation on Money Market Funds (MMF) is to ensure that they are able to withstand redemption pressures in stressed market conditions. The regulation also seeks to address the risk of regulatory arbitrage, leading certain banking activities to migrate to the less regulated shadow banking sector, including money market funds. New EU rules that apply to all money market funds as of January 2019, contain several sovereign privileges.

So-called CNAV funds (that aim to maintain a constant net asset valuation per unit or share) are no longer allowed to invest in private securities but only in public debt. The European Commission is mandated to review within five years the role that money market funds play in financing EU governments and the feasibility of establishing a quota whereby at least 80% of the assets of CNAV funds are to be invested in EU-related public debt.

Furthermore, the requirement that money market funds can only invest in eligible financial assets with a 'favourable' internal credit quality assessment does not apply to eligible instruments issued (or guaranteed) by an EU central government. Money market funds are also explicitly allowed as part of a reverse repo agreement to receive non-eligible but liquid transferable securities or money market instruments, provided that these are issued (or guaranteed) by an EU central government and have received a favourable internal credit quality assessment. Finally, the legal provisions exempt claims on sovereign entities from the diversification requirement as well as the concentration limits in a way similar to the UCITS directive discussed above.

Market volatility after the outbreak of Covid-19 triggered significant net outflows among the money market funds investing in less liquid private securities, while CNAV funds only dealing in liquid public debt saw net inflows. In response, the ESRB (2022) called for enhanced portfolio requirements to improve the liquidity profile of non-CNAV funds, suggesting that these should keep a minimum share of their assets in the form of public debt. While the aim is to make money market funds more resilient to market stress, a mandatory public debt quota also broadens the captive demand for sovereign securities labelled as safe and liquid.

Moving to European institutional investors, both insurance firms and pension funds seek to match long-dated financial liabilities with long-term financial assets and therefore invest a lot in low-risk domestic government bonds issued with long maturities and in the home currency. The most recent EU Insurance and Reinsurance Directives (Solvency I and II) also entail a preferential treatment of sovereign bonds (ESRB, 2015; Nouy, 2012).

Solvency I, which applied from 2004 to 2015, exempted investments in EU central government bonds from portfolio diversification requirements. Solvency II, which applies since January 2016, requires insurance companies to hold adequate capital against an array of risks related to their investments, the so-called Solvency Capital Requirement (SCR). However, their claims on EU central governments enjoy a capital exemption in the standard calculations of the exposure to concentration risk and credit spread risk.

The significance of this preferential treatment of sovereign exposure is diminished by the fact that insurance companies are to invest all their assets – including government bonds – in accordance with the ‘prudent person’ principle so as to ensure the security, quality, and liquidity of their portfolios. They must also undertake an adequate own risk and solvency assessment, even in those cases where the calculation of credit risk allows them to consider their sovereign exposure as risk-free.

The European Insurance and Occupational Pensions Authority (EIOPA) argued in December 2020 that Covid-19 could materially impact the risk profile of insurance undertakings and it therefore called for an EU-wide ad hoc own risk and solvency assessment that accounts for the impact of the pandemic. More fundamentally, the ongoing Solvency II review could reconsider how to handle sovereign risk in the case of life insurers (Basse, 2020).

To maintain a level playing field between insurance undertakings and occupational pension funds, the European Commission suggested in July 2010 to introduce a solvency rule and corresponding capital requirement also in the EU Directive on the Activities and Supervision of Institutions for Occupational Retirement Provision (IORP II). The proposed solvency rule would likely contain a similar preferential treatment of EU government bonds as in Solvency II. Following strong criticism from stakeholders, the Commission in the end introduced an alternative legal proposal without capital requirement.

### ***Sovereign privileges affecting financial market institutions***

After the Global Financial Crisis, EU regulators set out to reduce systemic, counterparty and operational risk in the over-the-counter (OTC) derivatives market in order to secure the resilience of post-trading systems and collateral markets. The new European Market Infrastructure Regulation (EMIR), which took effect in August 2012, demands that OTC derivative contracts are cleared with recognised central counterparties and secured by high-quality and liquid collateral assets with minimal credit and market risk (government bonds and cash). However, official public debt management operations involving OTC derivatives are exempted from this central clearing requirement, just as central bank interventions. Another sovereign privilege arises from the fact that the central counterparties themselves are required to observe similar capital adequacy rules as banks, with the same preferential treatment of claims on EU governments.

As the financial crisis in Europe intensified and evolved into a sovereign debt crisis, several euro area countries introduced emergency measures to counter speculative activity in their home markets. A new EU market regulation harmonised with effect from November 2012 the rules for short selling and certain aspects of credit default swaps, conferring powers of coordination and intervention on the ESMA. The common rules place restrictions on the uncovered short-selling of shares and debt instruments and prohibit taking uncovered sovereign CDS positions, because these speculative activities are seen as contributing to negative price spirals and disorderly markets. While uncovered positions pose a danger of settlement failure, this EU market regulation also constrains sophisticated market actors in expressing a negative view on the creditworthiness of sovereigns.



Credit rating agencies came under strong criticism for downgrading governments amid the sovereign debt crisis. Empirical evidence suggests that their judgements generally lagged behind financial markets; they were too positive in the run-up to the sovereign debt crisis and too negative when markets calmed down (Eijffinger, 2012).

Following new EU rules of conduct and the introduction of ESMA authorisation and supervision, the EU Regulation on Credit Rating Agencies (in force since June 2013) also imposed specific requirements for issuing sovereign credit ratings (de Haan and Amtenbrink, 2012). As a result, credit rating agencies have to publish annually at the end of December a calendar for the next 12 months setting two or three dates for issuing unsolicited sovereign ratings and rating outlooks. The sovereign ratings must be accompanied by detailed research reports explaining the assumptions, perceived risks, and other key elements on which they are based. Governments were also given a full working day instead of just 12 hours to react to a change in their credit rating before it is made public, so that they can better verify the underlying data.

The start of the Covid-19 crisis sparked a renewed debate on the role of credit ratings in the financial system, since the pandemic triggered a new wave of pro-cyclical credit rating downgrades hitting the private sector and in some cases the public sector (Ross, 2020). The ESMA decided to closely monitor the credit rating actions during the pandemic to assess the risk of too mechanistic references to credit ratings in EU financial law and their possible negative impact on financial stability.

Responding to a request from the European Parliament, the European Commission came in 2011 with a proposal for an EU-wide Financial Transactions Tax (FTT). The main objectives were to counter excessive market activity, contribute to avoiding future financial crises, and ensure that financial institutions make a fair and substantial contribution to tax revenues. However, many Member States were opposed to a uniform FTT.

As an alternative, 11 euro area countries willing to go ahead (namely Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia) committed to introduce by 1 January 2016 a common financial transactions tax under the enhanced cooperation procedure. The harmonised FTT would seek to curb destabilising short-term speculative trading in secondary markets for shares, bonds, and derivatives (Hemmelgarn, Gaëtan, Bogdan, and Vermote, 2016).

Official transactions undertaken for the purpose of monetary policy, public debt management, and some international public policies would be exempted. Some participating euro area countries wanted to go further and exclude all trade in sovereign securities from the scope of the common FTT. The European Parliament suggested to temporarily limit the tax rate on government bond transactions to only half of the standard rate, and to apply that reduced tax rate temporarily to all financial trades by pension funds as large investors in public debt. Finance ministries and the ECB opposed a tax on repo transactions, given their importance for government bond market liquidity (Braun, 2020). These sovereign privileges would create a clear cost advantage for secondary market transactions in public debt relative to private debt.

All things considered, the plan was changed to make a start with a common FTT imposed only on shares and some derivatives – with Estonia stepping out. However, politicians were unable to agree on the final modalities and the distribution of the tax revenues. An EU-wide FTT was put back on the table as a potential new own resource for the EU budget that could help to secure the repayment of EU debt issued for financing the recovery from the Covid-19 crisis.

## **Sovereign privileges and the state-finance nexus**

Member States face a conflict of interest in EU financial governance between the stated objective to promote financial soundness in a free market context and the political wish to encourage the financial sector to accumulate public debt, which in a fiscal crisis raises concerns for financial stability. This section analyses the political economy of sovereign privileges in EU financial regulation and their EMU application from the perspective of four theories of the state-finance nexus, focusing on the power relations they rely on as the foundation of sovereign safety.

### ***The state enables finance for mutual benefits***

According to the ‘money view’, which highlights the stabilisation task of the central bank (also as regulator), public and private balance sheets constitute an integrated money and credit system (Mehrling, 2011, 2013). State-issued money stands at the apex of the money-credit hierarchy, as the safest and most liquid of all claims, followed by bank deposits insured by the state. Sovereign securities – which the state guarantees to convert into money when they mature – assume the next position and private securities are placed further down. This hybrid money-credit hierarchy where cash is king and sovereign securities are close to money emerges organically through the unconstrained operations of profit-seeking market makers as the central bank supplies and withdraws liquidity in normal times and acts as lender of last resort and dealer of last resort in turbulent times.

The central bank’s unlimited monetary power prevents private investors from pushing the state into default, as long as markets retain confidence in the internal and external value of the currency. As a result, the yield curve of sovereign securities forms the risk-free benchmark for pricing more risk-prone private securities and naturally assumes a pivotal role in money and capital markets (International Monetary Fund, 2012).

The EMU architecture comprises a politically independent central banking system, centered on the ECB, with the monetary tools to address a liquidity crisis. However, it lacks a central government that could issue a single sovereign asset in its own currency as a comparable risk-free base asset for the euro area financial system (Goodhart, 1998). Market perceptions of sovereign creditworthiness translate in a euro area money-credit hierarchy where the securities of the safest country (Germany) serve as the benchmark asset for the whole eurozone. The EU authorities had to take recourse to financial legislation to overcome the varieties of sovereign risk among the euro area countries, as necessary to create the single financial space that is vital for an effective single monetary policy and an efficient cross-border provision of private credit.

As capital markets were liberalised, EU prudential legislation generally allowed financial institutions to treat their exposure to all Member States – irrespective of their sovereign credit rating – as a safe investment that is exempted from capital charges, large exposure ceilings, and concentration limits (Bruneau, 2023; ESRB, 2015; Hauser, 2020; van Riet, 2019). At the start of EMU, the introduction of the euro made euro-denominated securities interchangeable for regulatory purposes in terms of both currency risk and credit risk, suggesting that the sovereign signatures of euro area countries are of identical high value (van Riet, 2017). European collateral arrangements in turn enabled the financial sector to construct euro general collateral pools for securing sale and repurchase (repo) agreements and securities lending transactions between financial intermediaries across the whole eurozone. The regulatory treatment of euro area sovereign securities as equally safe stores of value in long-

term portfolios and as equivalent collateral assets that give access to cash delivered both financial integration and liquid government bond markets (Gabor and Ban, 2016); in fact, it constructed a workaround for the missing single sovereign asset for the eurozone.

A financial infrastructure anchored by public debt strengthens the power of both governments and the financial industry in the form of a mutually beneficial relationship in open capital markets (Monnet, Pagliari, and Vallée, 2019). Public issuers will always be able to find private investors who wish to secure their credit expansion or underwrite their own liabilities with risk-free sovereign assets. The mutual advantages and dependencies in this state-finance nexus are most evident in the fact that repo and securities lending transactions nowadays form the backbone of liquid government bond markets that provide low-cost public funding as well as near-money collateral for securing private credit flows and shadow money creation (Gabor and Ban, 2016).

The preferential treatment of public debt over private debt in EU prudential regulation mirrors the pivotal position that government bonds have assumed in this financial ecosystem. At the same time, this regulatory privilege based on public debt being a safe and liquid asset facilitated the transition from the traditional bank-based credit system to the modern market-based credit system where the growing prominence of shadow banks carries risks for financial stability.

### ***The state steers finance towards public goals***

Following the ‘franchise view’, the modern financial system effectively consists of a hybrid public-private partnership grounded in the full faith and credit of the sovereign, that is the privilege to issue money and raise taxes to repay public debt at maturity in the domestic currency. As part of a franchise arrangement, the state grants legal rights to financial institutions to dispense the sovereign’s safety promise embedded in central bank money and treasury securities as an ‘indefinitely extensible’ public resource for underwriting the private provision of credit to the economy in line with public concerns (Hockett and Omarova, 2017).

With the central bank as backstop of sovereign safety, the treasury supplies a sufficiently large volume of marketable securities that are free from credit risk and readily convertible into money to financial firms, expecting that their superior microeconomic efficiency in generating and allocating credit will assist public actors in maintaining macroeconomic and financial stability. Sovereign privileges in prudential regulation reflect the safety promise and constitute an integral part of the finance franchise to attract an adequate demand for treasury securities.

Although the state determines the goals of the partnership with finance, the franchise theory recognises the risk that credit intermediaries could exploit the supply of sovereign assets for promoting private interests. A passive attitude of the central bank and prudential supervisor with regard to the size and nature of credit accumulation would give the financial sector – driven by short-term profit expectations – the opportunity to generate too much credit for the real economy and/or to misallocate credit to financialising markets (Hockett and Omarova, 2017). This unintended result may be linked to the infrastructural and instrumental powers of finance.

When public actors govern themselves through financial markets to achieve public goals, their transactions impart a distinct infrastructural power on the financial intermediaries that they employ in the process (Braun, Gabor, and Hübner, 2018). The private actors with whom they are entangled gain in market influence, because they are of vital importance for the outcome of public policies. The central bank could in this view be captive to the commercial

interests of (shadow) banks when it depends on their cooperation in financial markets to achieve macroeconomic stability.

As a case in point, the ECB implements its monetary policy through the integrated euro area repo and securities markets, which gives the banks it uses as counterpart as well as the shadow banks operating in the same markets a distinct infrastructural power. The ECB will therefore serve as their advocate and resist those EU market reforms or transaction taxes that would constrain the profitable market-making business of (shadow) banks (Braun, 2020). Mindful of the Global Financial Crisis, EU legislators have nevertheless introduced tighter regulation and closer supervision of (shadow) banks, while adding sovereign privileges.

A permissive stance of the prudential supervisor can be related to the success of the financial sector in using its instrumental power to influence regulatory outcomes or to escape regulatory oversight (Pagliari, 2015). This regulatory capture of the legislators takes the form of a successful lobby by organised financial firms against new prudential measures that would not only limit their excessive risk-taking but also constrain their profits, for example from financial innovation. If regulation is expanded unevenly, it could trigger regulatory arbitrage between neighbouring financial sectors subject to heavy-handed rules (like systemic banks) and light-touch regulation (such as shadow banks).

One could argue that in the run-up to the Global Financial Crisis the EU legislators – following neoliberal tracks – too much accommodated the commercial interests of the financial industry by accepting market-based governance or self-regulation. The tightening of EU prudential regulation and enforcement since 2008 and the broadening of regulatory oversight counters this instrumental power. Adding (further) sovereign privileges to EU-wide rules, such as a mandatory public debt quota for shadow banks, serves in this regard to stabilise government bond markets and secure a resilient financial sector.

Altogether, the franchise view argues that the state must (re)assert its leadership vis-à-vis finance to steer private credit towards public goals (Hockett and Omarova, 2017). The central bank should actively fine-tune market conditions and credit aggregates to ensure that financial intermediaries supply the right amount of credit to productive enterprises and the prudential authority should closely supervise the asset quality and leverage of the financial sector. However, effective public control of the (infra)structural and instrumental powers of the financial industry is likely an illusion when credit markets are inherently unstable – unless resort is taken to financial repression (Mügge, 2013).

### ***The state captures finance to meet fiscal needs***

Following the ‘financial repression view’, which can be traced back to McKinnon (1973) and Shaw (1973), the government will actively exploit state regulation and market intervention to allocate private savings with priority to the public sector at affordable interest rates. Some observers argue that after the Global Financial Crisis a new era of financial repression started with the objective to ease the post-crisis public debt burden in an open market environment (Eijffinger and Mujagic, 2012; Reinhart, Kirkegaard, and Sbrancia, 2011).

Accepting this view, European public actors instrumentalise financial regulation and monetary policy to ease the government budget constraint and guarantee sovereign safety for all euro area countries. EU prudential rules imposing portfolio requirements in favour of public debt grant governments secured access to private investors. Furthermore, treating national government bonds as identical high-quality liquid assets and protecting public issuers against speculators gives lower-rated EMU members power to enter capital markets on relatively favourable terms.

The pivotal role of sovereign securities in euro area money and finance also imparts infrastructural power on euro area countries. To realise its price stability objective, the ECB is bound to accept government bonds as collateral in credit operations with banks and to undertake quantitative easing mostly through public sector purchase programmes (Wolswijk, 2020). In addition, it will fight fragmentation risk in government bond markets. Hence, the ECB is captive to the budgetary interests of the (most vulnerable) member countries, because to ensure an even monetary transmission, the national varieties of sovereign risk can only play a modest role. This modern equivalent of financial repression, organised through prudential legislation and monetary policy (Reinhart and Rogoff, 2011; van Riet, 2018), in effect turns public issuers into unrestricted suppliers and private investors into captive buyers of low-cost sovereign securities. Without meaningful constraints on excessive public debt, government bondholders are vulnerable to an unexpected sovereign default.

Some observers suggest to target the tools of modern financial repression at securing macroeconomic and financial stability rather than sovereign safety (Bezemer, Ryan-Collins, van Lerven, and Zhang, 2021; Kelber and Monnet, 2014). In their view, public actors could return to proactive credit policies in support of productive sectors of the economy while more effectively curtailing the (infra)structural and instrumental powers of the financial industry. The central bank could implement credit controls to counter financial boom-bust cycles. The prudential authority could take measures aimed, for example, at controlling leverage and shrinking the shadow banking system. Although these forceful interventions offer an alternative to the neoliberal recipe of trusting free markets to discipline private finance, their effectiveness in open capital markets may be limited.

### ***The state lets finance impose fiscal discipline***

The ‘neoliberal view’, which is associated with orthodox economists like Hayek, Friedman, and Buchanan, sees the disciplinary forces of the market as the central governance mechanism for an efficient allocation of resources in an open economy (for example, Hayek, 2001 [1944]). Effective market discipline in this view grants private investors the power to discriminate between public and private borrowers as well as among public issuers competing for funds in international capital markets (Lane, 1993).

Financial market perceptions of a country’s creditworthiness translate in risk premia on government bond yields. This price signal creates incentives for the state to maintain sustainable public finances and to avoid economic interventions that hamper productivity growth (Hoogduin and Wierdsma, 2012). Hence, the neoliberal conception of sovereign safety is grounded in sound budgetary and economic policies enforced through market discipline, assisted by binding fiscal rules if needed. Financial policies to make markets work better are welcome, but sovereign privileges distort market signals and must be removed.

The Maastricht Treaty of 1992 laid down the neoliberal principles governing EMU, which apart from centralising monetary and exchange rate policy also empowered financial markets to discipline the member countries (Rommerskirchen, 2015). Governments could no longer ‘encapsulate’ their domestic capital markets to establish privileged access to private credit, other than for prudential reasons (Preunkert, 2017).<sup>2</sup> A country in trouble could never receive a bail-out, neither from EU institutions nor from its partner countries. Since the ECB was made independent from political interference, the euro area countries could also no longer expect direct monetary financing to ease their predicament.

This EMU environment was expected to deliver the high intrinsic quality of public debt that was vital for an integrated capital market and a stable euro. Although market discipline

was muted until 2008 as private investors granted the EMU entrants an interest bonus, it returned with full force as the sovereign debt crisis unfolded. Ever since, euro area countries have been captive to market perceptions of their fiscal soundness.

The neoliberal belief that fiscal discipline ought to be enforced through government bond markets contrasts with the idea that the state is capable of exercising economic sovereignty over finance and should be accountable to voters, not to markets (Gill, 1995; Ojala, 2021). Letting market forces determine the allocation of capital in society could at times severely constrain the state's access to credit and its budgetary 'room to move' (Mosley, 2000). European governments decided to rebalance this state-finance relationship, using the scope for sovereign privileges in EU financial law based on prudential considerations to facilitate public debt management and 'manufacture' euro stability (Gelpern and Gerding, 2016).

### **Sovereign privileges and the conflict of interest in EMU**

Sovereign privileges in EU prudential regulation oblige private investors to hold public debt and make the financial system vulnerable to fiscal turbulence. This section describes the conflict at stake in the particular case of EMU and it analyses how the four state-finance theories presented above would resolve it.

#### ***Sovereign privileges as a risk for euro stability***

EMU comprises euro area sovereigns with a variable risk profile. EU prudential regulation promoting the pivotal role of sovereign securities in finance, while treating the government bonds of euro area countries as interchangeable risk-free assets, reduces economic efficiency, promotes risky public debt, and endangers the stability of the euro.

On the demand side of the capital market, a financial system built on public debt as cornerstone fuels market incentives to avoid risk rather than to manage risk and distorts an efficient allocation of resources to more productive private activities (Sissoko, 2019). Financial institutions hunting for sovereign assets with a zero-risk label subsidise public borrowing and reduce incentives for fiscal adjustment, in particular for the low-rated euro area countries that would otherwise face market pressures from higher interest rates.

On the supply side, the circulation of public debt must keep pace with the growing need for safe (collateral and portfolio) assets in a financialising economy. Two countervailing forces reduce the average rating of public debt outstanding. Euro area countries perceived as risky enjoy a strong regulatory incentive to issue more of their low-rated public debt – against the intentions of EU fiscal governance. By contrast, euro area countries regarded as safe prefer to limit the supply of their high-rated public debt in order to preserve their market reputation of fiscal strength that underpins the stability of the euro (van Riet, 2021).

Considering financial risk-taking, the prominence of repo-based lending by shadow banks secured by borrowers pledging sovereign collateral marked at market prices entails a systemic vulnerability to margin calls and collateral sales which will drain liquidity from government bond markets in critical times (Sissoko, 2019). EU prudential regulation provides financial institutions with a false sense of security about sovereign risk, leading them to ignore the declining average quality of their government bond portfolios. This 'sovereign virus' (Gros, 2013) could trigger financial turbulence and disrupt the single financial space of EMU each time when risk-averse investors reassess their sovereign exposure and dump the riskier instruments.

### **Ways to resolve the conflict of interest in EMU**

From the perspective of the money view, it is the responsibility of the central bank to stabilise the money-credit system in a crisis by pumping as much liquidity as needed into the government bond market, serving both public and private interests (Mehrling, 2011). Considering the case of EMU, EU financial regulation appears to assume that, if prudential measures protecting governments against market pressure are ineffective, the ECB – in line with the money view – will neutralise the national varieties of sovereign risk so as to preserve financial stability. Absent a central government that could assist the member countries, the ECB indeed intends to contain government bond spreads, notably through a flexible implementation of public sector purchase programmes, a transmission protection instrument, or outright monetary transactions. However, these monetary support mechanisms are only activated at the discretion of the ECB when specific conditions – including fiscal criteria – are met (De Grauwe and Ji, 2022).

The franchise view argues that the sovereign's full faith and credit underwrites the financial system and the state must steer credit markets to preserve stability (Hockett and Omarova, 2017). Since EMU lacks a central government, this leadership must come from the member countries, assisted by the ECB. The EU has indeed used the post-crisis overhaul of financial regulation to discipline private finance while adding sovereign privileges which protect public finance – working alongside the ECB to maintain financial stability. However, the franchise approach also counts on the superior microeconomic efficiency of financial firms in the provision of credit, whereas steering their investment choices and risk management frustrates this objective.

According to the modern version of the financial repression view, the public authorities should adopt intrusive prudential and monetary measures to keep finance under control and preserve sovereign safety. Since the sovereign debt crisis, EU financial regulators and the ECB have already moved towards direct market interventions to safeguard vulnerable sovereigns and guarantee financial stability. The consequent market distortions, however, weaken the incentives for fiscal adjustment and could in the end oblige the ECB to monetise excessive public debt (Hoogduin and Wierds, 2012).

In line with the neoliberal foundation of EMU, the conflict of interest in EU financial governance ought to be resolved by rolling back the sovereign privileges so as to strengthen the role of government bond markets in enforcing fiscal discipline as the fundamental source of sovereign safety (Hauser 2020). As a result, however, government bondholders feeling uncertain about the fiscal solidity of a euro area country and the fiscal solidarity from its partners may run for the exit and trigger financial volatility, with negative implications for capital market integration and the stability of the euro.

Overall, each of the four state-finance theories on the foundation of sovereign safety presents a particular solution to the conflict at stake in EMU. However, their solutions also face important limitations that appear difficult to resolve in a satisfactory manner.

### **Concluding remarks**

After the Global Financial Crisis of 2008, Europe set out to create a more resilient financial system and to secure financial stability. A close examination shows that the overhaul of EU financial law also deepened and broadened the existing regulatory provisions that give public issuers privileged access to private investors, based on the view that sovereign securities are risk-free assets and a stable anchor for the financial system.

This article has highlighted that governments face a conflict of interest in EU financial governance between the official objective to promote financial soundness based on free-market principles and the preferential treatment of public debt over private debt, which in a fiscal crisis raises concerns for financial stability.

Three of the theories of the state-finance nexus presented here resolve the conflict at stake (with important limitations) through the state's monetary and regulatory powers to sustain the promise of sovereign safety: the money view, which entrusts the central bank with the task to secure government bond market liquidity as needed for a stable money-credit system that serves mutual state-finance interests; the franchise view, where the state takes the lead to align private credit with public interests based on the full faith and credit of the sovereign vested in central bank money and treasury securities; and the modern financial repression view, which sees the state exploiting financial and monetary policies to enforce sovereign safety. These three theories fundamentally contrast with the neoliberal view, according to which sovereign safety is grounded in fiscal discipline enforced by free markets, assisted by binding fiscal rules. The neoliberal solution to the conflict of interest is to remove the sovereign privileges in prudential regulation so as to strengthen market discipline for public issuers.

EMU member countries have given up the privilege of issuing risk-free sovereign securities in their own currency. As a consequence, their position within the euro area money-credit hierarchy is determined by market perceptions of their individual creditworthiness. From a neoliberal point of view, EU prudential regulation promoting the systemic role of sovereign securities in finance while ignoring their variable risk profile is counterproductive, because it undermines fiscal discipline and excessive public debt poses a risk for financial stability. This points to a fundamental dilemma in EU financial governance that neither of the existing state-finance theories on the foundation of sovereign safety is able to resolve satisfactorily.

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## Notes

1. The Treaty on the Functioning of the European Union explicitly allows governments to have privileged access to financial institutions based on prudential considerations (Art. 124, ex Art. 104a). However, this exemption must not be used as a cover to disguise privileged access (see Council Regulation (EC) No 3604/93 of 13 December 1993 specifying definitions for the application of the prohibition of privileged access referred to in Article 104a of the Treaty).
2. See references listed in note 1 above.

## References

- Basse, T. (2020) Solvency II and sovereign credit risk: Additional empirical evidence and some thoughts about implications for regulators and lawmakers. *International Review of Law and Economics*, 64: 105933.
- Bezemer, D., Ryan-Collins, J., van Lerven, F. and Zhang, L. (2021) Credit policy and the 'debt shift' in advanced economies. *Socio-Economic Review*, <https://10.1093/ser/mwab041>.



- Boy, N. (2015) Sovereign safety. *Security Dialogue*, 46(6): 530-47.
- Braun, B., Gabor D. and Hübner, M. (2018) Governing through financial markets: Towards a critical political economy of Capital Markets Union. *Competition & Change*, 22(2): 101-16.
- Braun B. (2020) Central banking and the infrastructural power of finance: The case of ECB support for repo and securitization markets. *Socio-Economic Review*, 18(2): 395-418.
- Bruneau, Q. (2023) In the club: How and why central bankers created a hierarchy of sovereign borrowers, c. 1988-2007. *Review of International Political Economy*, 30(1): 153-75.
- Cœuré, B. (2016) Sovereign debt in the Euro area: Too safe or too risky? Keynote address at Minda de Gunzburg Center for European Studies, Harvard University, 3 November.
- Culpepper, P.D. (2015) Structural power and political science in the post-crisis era. *Business and Politics*, 17(3): 391-409.
- De Grauwe, P. and Ji, Y. (2022) The fragility of the Eurozone: Has it disappeared? *Journal of International Money and Finance*, 120: 102546.
- de Haan, J. and Amttenbrink, F. (2012) Taming the beast? New European regulation for credit rating agencies. *Journal of Comparative and European Policy*, 10(4): 433-58.
- Eijffinger, S.C.W. (2012) Rating agencies: Role and influence of their sovereign credit risk assessment in the Eurozone. *Journal of Common Market Studies*, 50(6): 912-21.
- Eijffinger, S.C.W. and Mujagic, E. (2012) The age of financial repression. Column on Project Syndicate, 21 November.
- European Central Bank (ECB) (2020) *Financial Stability Review*, November. Frankfurt am Main: ECB.
- European Securities and Markets Authority (ESMA) (2021) *Report on Recommendation of the European Systemic Risk Board (ESRB) on Liquidity Risk in Investment Funds*. Paris: ESMA.
- European Systemic Risk Board (ESRB) (2015) *Report on the Regulatory Treatment of Sovereign Exposures*. Frankfurt am Main: ESRB.
- European Systemic Risk Board (ESRB) (2022) Recommendation of 2 December 2021 on Reform of Money Market Funds. ESRB/2021/9, 25 January.
- Gabor, D. and Ban, C. (2016) Banking on bonds: The new links between states and markets. *Journal of Common Market Studies*, 54(3): 617-35.
- Gabor, D. and Vestergaard, J. (2018) Chasing unicorns: The European single safe asset project. *Competition & Change*, 22(2): 139-64.
- Gelpern, A. and Gerding, E.F. (2016) Inside safe assets. *Yale Journal on Regulation*, 33(2): 363-421.
- Gill, S. (1995) Globalisation, market civilisation, and disciplinary neoliberalism. *Millennium: Journal of International Studies*, 24(3): 399-423.
- Goodhart, C.A.E. (1998) The two concepts of money: Implications for the analysis of optimal currency areas. *European Journal of Political Economy*, 14(3): 407-32.
- Goodhart, C.A.E. (2011) *The Basel Committee on Banking Supervision: A History of the Early Years 1974-1997*. New York: Cambridge University Press.
- Gros, D. (2013) Banking union with a sovereign virus: The self-serving treatment of sovereign debt in the Euro area. *Intereconomics*, 48(2): 93-97.
- Hauser, P. (2020) Critical analysis of the zero risk weight privilege for European sovereign debt in light of Art. 124 TFEU. *The Economists' Voice*, 17(1): 22.
- Hayek, F.A. (2001 [1944]) *The Road to Serfdom*. New York: Routledge.
- Hemmelgarn, T., Gaëtan, N., Bogdan, T. and Vermote, P. (2016) Financial transaction taxes in the European Union. *National Tax Journal*, 69(1): 217-40.
- Hockett, R.C. and Omarova, S.T. (2017) The finance franchise. *Cornell Law Review*, 102(5): 1143-1218.
- Hoogduin, L. and Wierds, P. (2012) Thoughts on policies and the policy framework after a financial crisis. BIS Paper, No 65: 83-90. Basel: Bank for International Settlements.

- International Monetary Fund (IMF) (2012) Safe assets: Financial system cornerstone? In: *Global Financial Stability Report: The Quest for Lasting Stability*. Washington, D.C.: IMF, 81-122.
- Kelber, A. and Monnet, E. (2014) Macroprudential policy and quantitative instruments: A European historical perspective. *Financial Stability Review*, 18: 151-60.
- Kopf, C. (2011) Restoring financial stability in the Euro area. *CEPS Policy Brief*, No 237. Brussels: Centre for Economic Policy Studies.
- Korte, J. and Steffen, S. (2015) Zero risk contagion: Banks' sovereign exposure and sovereign risk spillovers. Working Paper, 7 April. Frankfurt am Main: Frankfurt and European School of Management and Technology.
- Lane, T.D. (1993) Market discipline. *IMF Staff Papers*, 40(1): 53-88.
- McKinnon, R.I. (1973) *Money and Capital in Economic Development*. Washington, D.C.: Brookings Institute.
- Mehrling, P. (2011) *The New Lombard Street: How the Fed Became the Dealer of Last Resort*. Princeton NJ: Princeton University Press.
- Mehrling, P. (2013) The inherent hierarchy of money. In: Taylor, L., Rezai, A. and Michl, T. (eds.) *Social Fairness and Economics: Economic Essays in the Spirit of Duncan Foley*. London: Routledge, 394-404.
- Monnet, E., Pagliari, S. and Vallée, S. (2019) Beyond financial repression and regulatory capture. The recomposition of European financial ecosystems after the crisis. *Actes de la recherche en sciences sociales*, 229(4): 14-33.
- Mosley, L. (2000) Room to move: International financial markets and national welfare states. *International Organization*, 54(4): 737-73.
- Mügge, D. (2013) Resilient neo-liberalism in European financial regulation. In: Schmidt, V. and Thatcher, M. (eds.) *Resilient Liberalism in Europe's Political Economy*. Cambridge: Cambridge University Press, 201-25.
- Nouy, D. (2012) Is sovereign risk properly addressed by financial regulation? *Financial Stability Review*, 16: 95-106.
- Ojala, M. (2021) Doing away with the sovereign: Neoliberalism and the promotion of market discipline in European economic governance. *New Political Economy*, 26(1): 203-15.
- Pagliari, S. (2015) Financial industry power and regulatory policies: What lessons from the global financial crisis? *Rivista Italiana di Politiche Pubbliche*, 10(2): 209-32.
- Preunkert, J. (2017) Financialization of government debt? European government debt management approaches 1980-2007. *Competition & Change*, 21(1): 27-44.
- Reinhart, C.M., Kirkegaard, J.F. and Sbrancia, M.B. (2011) Financial repression redux. *Finance & Development*, 48(1): 22-26.
- Reinhart, C.M. and Rogoff, K.S. (2011) A decade of debt. Policy Analyses in International Economics, No 95. Washington, D.C.: Peterson Institute for International Economics.
- Rommerskirchen, C. (2015) Debt and punishment: Market discipline in the Eurozone. *New Political Economy*, 20(5): 752-82.
- Ross, V. (2020) In conversation: Credit rating agencies back in the spotlight? Speech given at the ECMI 10th Annual Conference, 6 November.
- Shaw, E.S. (1973) *Financial Deepening and Economic Development*. New York: Oxford University Press.
- Sissoko, C. (2019) Repurchase agreements and the (de)construction of financial markets. *Economy and Society*, 48(3): 315-41.
- van Riet A. (2017) Addressing the safety trilemma: A safe sovereign asset for the eurozone. ESRB Working Paper, No 35. Frankfurt am Main: European Systemic Risk Board.
- van Riet, A. (2018) Modern financial repression in the euro area crisis: Making high public debt sustainable? SUERF Policy Note, No 34. Vienna: SUERF.

- 
- van Riet, A. (2019) The preferential treatment of government debt in financial law: The case of Europe. In: Avgouleas, E. and Donald, D.C. (eds.) *The Political Economy of Financial Regulation*. Cambridge: Cambridge University Press, 385-418.
- van Riet, A. (2021) Safe and risky sovereigns in the Euro area capital market: Financial drivers of fiscal policies in Germany and Italy. *German Politics*, 30(3): 441-61.
- Wolswijk, G. (2020) Drivers of European public debt management. ECB Working Paper, No 2437. Frankfurt am Main: European Central Bank.