Debt, Regions and the State -The Political Economy of Financialization

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Der Abschluss einer Promotion ist nicht nur das Ende eines intensiven, mehrjährigen Prozesses, sondern vielmehr auch das Erreichen eines Zwischenziels auf einem langen Weg. Solche Wegmarken laden gleich in mehrfacher Hinsicht dazu ein nachzudenken und innezuhalten. Zum einen über die zurückgelegte Wegstrecke: woher ist man angereist? Ferner über die Reise selbst: wie ist man hergekommen? Schließlich über den nächsten, vor einem liegenden Abschnitt: wohin soll es gehen? Beim Reflektieren über diese Fragen wird immerzu unmissverständlich klar, dass die Promotion, obwohl eine individuelle Auszeichnung darstellend, nicht nur in ihrem Zustandekommen, sondern auch in ihren Vorbedingungen und Richtungsweisungen ein Kollektivprodukt ist, welches ohne die Unterstützung und das Zutun vieler anderer Menschen nicht vorstellbar gewesen wäre.

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Introduction

Financialization as a Megatrend of Contemporary Capitalism Dealing with megatrends is never simple. Especially not if they are the subject of scientific analysis with the goal of creating new insights into the inner workings of things by precise theoretical reasoning and empirical verification. In a way, megatrends are double-edged swords. On the one hand, their appeal is temptingly practical as the denominate broad phenomena that almost everybody sooner or later has come across. On the other hand, this very same breadth can just be a means of camouflaging their fuzziness. In political economy there has been a number of megatrends that always carry the danger of becoming mere buzzwords and empty phrases due to conceptual overstretching and arbitrary application. One of the more prominent examples, if not the most prominent one, is "globalization" - a term that does not wither and can be filled with a plethora of different meanings, each emphasizing specific aspects of a larger phenomenon. However, if appropriately applied, megatrends can also be useful to identify, describe and analyze fundamental, structural trends, which keep unfolding over longer periods of time and alter the character and form of appearance of the things. In the realm of financial markets, and especially the people who study them, another catchphrase has been become increasingly popular within the last ten years. It is the term "financialization", which, I argue, describes one of those megatrends. More precisely, a megatrend in the development of contemporary capitalism. This dissertation is about "financialization", which can be widely captured by Gerald Epstein's famous first approximation as "the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies" (Epstein 2005b: 3). Dealing with specific traits of this overarching rise of finance - forms of debt, regionally varying levels, the state-financial market nexus and changes in alternative banking - I hope to partially fill some gaps and make a contribution to this vivid, yet heterogeneous field of research, which tells us much about capitalist dynamics.

Before going *in medias res*, the remainder of this introductory chapter offers a compressed overview of the three separate papers, which form the basis of this cumulative dissertational thesis. Ahead of that, I commence with some initial remarks on the distinctiveness of financialization by first providing a cursory ride through some classics in political economic thinking. This serves the purpose of being able to better differentiate what is new about financialization. Secondly, I then briefly sketch the history and development of the concept. Purposefully, I leave out its different definitions as well as lengthy treatises on the various branches going along with them. For this I would like to refer to the individual chapters, each providing brief discussions and reflections on terminology and relevant contributions to the field.

While finance had been anything but unknown to scholars from such disciplines as political economy, economic sociology or economics, the latest global financial crisis since 2007 has certainly provoked renewed interest in matters of financial markets. Before, pundits - inside and outside academia - were largely convinced that the economy had entered a "new era", as one Financial Times writer summed up the general euphoria of the late 1990s (Dudley 1998). Sure, there had been critical voices, especially after the eruptions that shattered many East Asian economies in 1997 or the bursting of the dot-com bubble in 2001. However, warnings by prominent insiders such as George Soros, who spoke of a "crisis of global capitalism" (1998), did not alter expert perception. Instead, discussions circled around whether growth could continue forever and if the Dow Jones record high of 36,000 was actually not still undervaluing the economy (Dornbusch 1998; Glassmann and Hassett 1999). Nearly two decades and a string of crisis events - from mortgages, to banks, to public debt to the euro as a currency - later, no serious commentator would doubt that financial markets cannot be simple reduced to efficiency enhancing, information processing, funds channeling entities. Rather the opposite seems true and the notion of an inherent instability to finance, which was for instance prominently formulated by Minsky as early as the 1960s, might be more widespread than ever, although memory can start fading quickly (Minsky 2016).

In contrast to public perception, the tradition of political economy has ever since its emergence as a discipline acknowledged the critical and ambiguous importance of financial markets as a constituent feature of capitalist development. One might say that, in many ways, finance even anteceded the social and economic system of capitalism and sparked both its formation and various transformations. In fact, without finance the historical transitions, which unfolded over several stages from early merchant capital to the establishment of the factory system, the Industrial Revolution, subsequent progress in chemicals and IT, as well as the age of free trade and globalization, would not have been possible (Frieden 2012). Consequently, classic writings regularly mention the role of finance for economic and political dynamics. We might exemplarily look at three seminal works by some of the intellectual founding fathers of political economic thinking to distill key features of how they perceived finance in the pre-financialization phase.

In his *General Economic History* from 1927, Max Weber extensively writes about the preconditions for the establishment of capitalism. Pursuing his general theme of a continuous rationalization process, he mainly points out to progress in production techniques, commerce, citizenship and the state. Yet he also states that

"in modern economic life the issue of credit instruments is a means for the rational assembly of capital. Under this head belongs especially the stock company. This represents a culmination of two different lines of development. In the first place, share capital may be brought together for the purpose of anticipating revenues. (...) Another economically more important form of association is that for the purpose of financing commercial enterprise – although the evolution toward the association most familiar today in the industrial field, stock company, went forward very gradually from this beginning" (Weber 1999: 45)

However, what becomes clear from this quote is that Weber understood finance first and foremost regarding two core principles: rationalization and financing of investments. He thus, at least implicitly, assumes a functional logic behind it. To some extent Weber's historical account complements Marx' *historical* derivation of the origins of capitalism, in which the latter puts more emphasis on exploitation and primitive accumulation (Marx 1990 [1867]: Ch. 26). Yet, when speaking about finance, Marx *logical* derivation offers even more insights. Although he limits his scope in the third volume of *Capital* (1894) by mentioning that

"an exhaustive analysis of the credit system and of the instruments, which it creates for its own use (credit-money, etc.) lies beyond our plan. We merely wish to dwell here upon a few particular points, which are required to characterize the capitalist mode of production in general. We shall deal only with commercial and bank credit. The connection between the development of this form of credit and that of public credit will not be considered here" (Marx 1991: 525),

Marx later on in the same chapter develops his concept of fictitious capital, as a form of capital which exemplifies only legal claims on future profits, can be sold and traded but has no direct connection to productive financing in first place. In doing so he differentiates fictitious capital from money capital (such as loans) and real capital, that is bound to productive processes and the creation of surplus value. While both, Weber and Marx, in their own way noted the perils of the financial system, such as speculation and regularly recurring crises, it seems fair to say that they did not fully account for the potential of political and economic power which finance could develop. To have pointed to this is the merit of Rudolf Hilferding, the third and final author of this succinct review. In his key text *Finance Capital*, originally published in 1910, Hilferding analyzes the emergence of what he calls *organized capitalism*. In contrast to previous phases of liberal or competitive capitalism, its organized form is dominated by the amalgamation of banks with industrial corporations, most importantly via the expansion of stock companies. To illustrate his argument in a nut-shell, it is useful to quote at length:

"The dependence of industry on the banks is therefore a consequence of property relationships. An ever-increasing part of the capital of industry does not belong to the industrialists who use it. They are able to dispose over capital only through the banks, which represent the owners. On the other side, the banks have to invest an ever-increasing part of their capital in industry and in this way they become to a greater and greater extent industrial capitalists. I call bank capital, that is, capital in money form which is actually transformed in this way into industrial capital, finance capital. So far as its owners are concerned, it always retains the money form; it is invested by them in the form of money capital, interest-bearing capital, and can always be withdrawn by them as money capital. But in reality the greater part of the capital so invested with the banks is transformed into industrial, productive capital (means of production and labour power) and is invested in the productive process. An ever-increasing proportion of the capital used in industry is finance capital, capital at the disposition of the banks which is used by the industrialists.

Finance capital develops with the development of the joint-stock company and reaches its peak with the monopolization of industry. Industrial earnings acquire a more secure and regular character, and so the possibilities for investing bank capital in industry are extended. But the bank disposes of bank capital, and the owners of the majority of the shares in the bank dominate the bank. It is clear that with the increasing concentration of property, the owners of the fictitious capital which gives power over the banks, and the owners of the capital which gives power over industry, become increasingly the same people. As we have seen, this is all the more so as the large banks increasingly acquire the power to dispose over fictitious capital.

We have seen how industry becomes increasingly dependent upon bank capital, but this does not mean that the magnates of industry also become dependent on banking magnates. As capital itself at the highest stage of its development becomes finance capital, so the magnate of capital, the finance capitalist, increasingly concentrates his control over the whole national capital by means of his domination of bank capital. Personal connections also play an important role here." (Hilferding 2006 [1910]: 226-227)

This brief excursion to classical texts of political economy has demonstrated the presence of finance, financial markets and finance capital in the works of some of its most prominent thinkers. However, I would like to stress that the phenomenon of financialization is something particular and new to the developments of capitalism. Albeit all three authors mention some important aspects of finance – functionality, speculation, credit provision or even power – their focus lay, understandably so, on industrial production as the dominant form of value creation and organizing socioeconomic principle. Nonetheless they poured the base on which financialization research later on unfolded.

Dating back to the debates in Marxist political economy of the outgoing 1970s, the first wave of financialization research has its roots in discussions about the absorption of surplus value by the financial sector during a time of stagflation and declining rates of profit (Lapavitsas 2013). Later on, in the early 1990s a second wave was popularized by Giovanni Arrighi's book on *The Long Twentieth Century*, in which he re-evaluated the *longue durée* of capitalist evolution and was probably

the first one to use the very term "financialization" (Arrighi 1994: ix). A third group of scholars using financialization have been exponents of the French *Théorie de la Régulation*, whose focus is on identifying different growth regimes and phases of capitalist stability via intertemporal comparison. In the beginning of the new Millennium, one of the most important representative of the regulation school, Robert Boyer (2000), asked, "is a finance-led growth regime a viable alternative to Ford-ism?" Already before the recent global financial crisis, heterodox economists such as Gerald Epstein and sociologist Greta Krippner elaborated on "financialization and the world economy" (Epstein 2005a) and "the financialization of the American economy" (Krippner 2005) respectively. Notwithstanding these the pivotal role of these influential pieces, they were, by and large, exceptions. As figure 1 illustrates this changed dramatically with the events following 2007-2008. Based on a simple "Web of Science" search on the usage of "financialization" since 1990, we can see that its popularity began to rise in 2009 and really started to soar within the last five years.

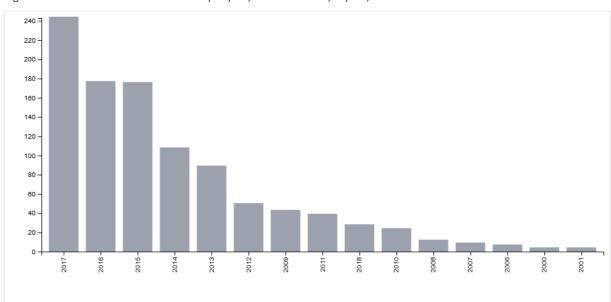


Figure 1: Publications on 'Financialization' per year, Web of Science, Top 15, 1990-2018.

Source: Web of Science (2018)

In the same time, research on financialization also spread throughout different disciplines making it now one of the more momentous topics across political science, economics, sociology, geography and business studies, as figure 2 nicely shows. This has led to numerous studies delivering profound insights. Among them, four broad sub-streams can be identified. The first deals with structural changes in the entire economy and usually understands financialization as a new regime of accumulation where finance holds the central spot for the production of profit. A second stream covers transformation in corporate governance and thus works with financialization for example as a shareholder value orientation by non-financial firms. The third stream concerns the so-called everyday life of finance like the overuse of credit cards and private investment schemes of households. Fourth and finally, the financialization of the state, for instance via the intrusion of financial logics and actors into public institutions, forms another stream of research (van der Zwan 2014). As more detailed discussions can be found in the individual parts of this dissertation thesis, I now conclude the introduction by summing up the subsequent chapters and their contributions.

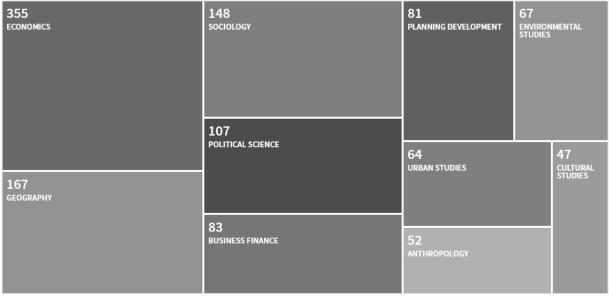


Figure 2: Publications on 'Financialization', Web of Science categories, Top 10, 1990-2018.

Source: Web of Science (2018)

Although financialization research has provided substantial input that enhances our overall understanding of contemporary capitalism and some of its crucial sub-trends, a number of open questions remains. While it would be unfair to speak of blind spots, as many aspects are mentioned or hinted at in relevant contributions, stating that certain puzzle pieces of the financialization picture are still somewhat more underdeveloped than others, hits the nail on the head. This dissertation addresses three core pieces of this mosaic and strives to advance their theoretical and empirical comprehension. Each of the three chapters that follow this introduction, deals with at least one of these aspects and seeks to shed light on their relation to and importance for financialization. In the remainder of this section I will now present concise overviews of them and elaborate on their respective contributions to our state of knowledge as well as persisting limitations that might encourage future research.

Concentrating on the nexus between states and financial markets, chapter 1, entitled "Where States and Markets meet", provides one of the first cross-national and longitudinal studies on changes in sovereign debt management (SDM). Debt and public finance are fundamental functions of modern nation states. In his *General Theory of the State* (1976), first published in 1900, Georg Jellinek famously lists territory, people and authority (*Staatsgebiet, Staatsvolk* and *Staatsgewalt*) as the three defining

characteristics of the state. In modern terms, authority does not exclusively refer to military and police forces to guarantee law and order. Moreover, an administrative apparatus and a functioning bureaucracy are indispensable requirements for governments and governance. Therefore, it becomes clear that in order to not only design but also implement policies, states need financial resources. Historically, besides taxation, the issuance of public debt has been a pivotal means of financing expenditures for states. On the other hand, depending on the context under which debt is issued and accumulated, it might also limit prospective steering and investment capacities. Put differently, "debt serves both to enable and to constrain state power" (Dyson 2014: 34). This conflicting relationship becomes even more pressing in an era of globalized financial markets and soaring levels of debt, both public and private (Schularick 2014). Two of the main fiscal decisions put in place in the course of the "neoliberal revolution" since the 1970s in nearly all developed capitalist countries have been a reform in central banking towards almost complete independence, and a pronounced approach to budgetary frugality, commonly known as austerity. In general, this has led to transformation from the tax state over the debt state to today's consolidation state (Streeck 2014). As a consequence, instead of just blatantly printing money, sovereigns have more and more referred to sources of market finance. In fact, even from the perspective of a longue durée, sovereign debt has been representing one of the most important financial assets, both qualitatively, with minimal riskweight, and quantitatively, as readily available, go-to investment. From these dynamics arises a reconfiguration of the state-market nexus and, concomitantly, a new contradiction between states as participants in and regulators of financial markets.

"Despite variations in relative share of financial assets, sovereign creditworthiness has continued to have enormous implications for financial markets as a whole. Markets—and above all supervisors and regulators—expect sovereign debt to serve a special function as an anchor of stability and a refuge of security in a world of high financial risks. Its capacity to serve this function is problematic. No sovereign is completely safe." (Dyson 2014: 320)

But how has this development of an increasing reliance on market finance unfolded over time? Which commonalities and differences exist between countries? And how can we actually capture the intrusion of financial actors, logics, practices and motifs into the sphere of public debt? These are the questions that chapter 1 addresses. It starts with the wondrous diagnosis that, despite the prominence of debt and finance, studies dealing with the institution of sovereign debt management have been largely absent to political economic debates. When analyzing topics surrounding public budgets, the dominant questions have been about the actual levels of sovereign debt, their underlying reasons, and ways to deal with them. In contrast, sovereign debt management is about the structural composition of debt and its manipulation. Avoiding to focus on 'a most like locus of

financial market influence' (Mosley 2004: 183), hast left this important topic up for grabs for economists and counselors who have produced a pile of econometric and advisory literature (exemplarily: Sundararajan et al. 1997). Therefore, "Where States and Markets meet" partially fills this gap as it transfers financialization to the area of public finance. Florian Fastenrath and Christine Trampusch, I have developed a two-dimensional concept to measure the financialization of sovereign debt management, consisting of the predominance of financial markets as governance mechanism and the adoption of a sense-making framework grounded in financial economics. We argue that in doing so were are able to distinguish contemporary (financialized) debt management from its nonfinancialized predecessor, for which hierarchical or network governance as well as a macroeconomic view sovereign debt had been characteristic. Applying a set of nine indicators to our comprehensive empirical material, we find an impressive trend of financialization, which has unfolded over time in all countries covered by our analysis. This rearranged state-market relationship poses serious questions about stability, regulatory capture and autonomous policy-making. Yet, one mustn't forget that this process is by no means one-sided. As a number of studies has shown, many decisions such as the liberalization of financial markets, the establishment and support of financial centers or the explicit avoidance to tighten regulations, were not only deeply political but very often voluntarily taken and imposed, because of expected beneficial side effects (Helleiner 1995; Krippner 2011). While reforms in sovereign debt management that accommodate financial markets might result from domestic power struggles, as it was the case in Germany (Trampusch 2015), they can also kick-start further financialization processes like the famous 'Big Bang' of 1986 (Dutta 2018). Summing up, chapter 1 a new analytical approach to interrelatedness of states and financial markets, offering insights on their mutual interdependence while at the same time opening routes for further futures analysis of this crucial sphere.

Like public debt, uneven geographical development has been another persisting feature in the historical evolution of capitalism, which can be found on different scales, above and below the nation state as politico-economic entity (Harvey 2006; Smith 2008). On the one hand, on long tradition in economic geography and political economy has dealt with differences in regional production regimes, mostly concentrating on Fordism, manufacturing and flexibility (Crouch, Schröder and Voelzkow 2009; Matthews 1996). On the other hand, an equally prominent line of research stresses the centrifugal effects of liberalization policies and incentivized inter-regional competition for capital and labor on territorial cohesion (Agnew 2001; MacLeod 2001). However, when concentrating on polarization, financialization research so far largely tends to focus on income and wealth, irrespective of geographical dimensions. In this regard, a growing strand of literature deals with the consequences of a growing exposure to finance for the bargaining power of employees and the negative effects on the functional income distribution in the economy (Alvarez 2015; Lin and Tomaskovic-Devey 2013; Stockhammer 2013). In reaction to this, households often have to turn to financial markets to maintain consumption and there reinforce the very same dynamics which have made them perform this turn in first place. Although there are some studies which adopt a macroeconomic stance and deal with variations in financialization on the economy-wide level across countries (Lapavitsas and Powell 2013), they usually focus on relatively few selected countries and completely leave out the sub-national dimension. In a nutshell, we find bits and pieces of inequality, uneven development and varied financialization, but still a handful of important links seems missing. Situated in this context, chapter 2 of this dissertation seeks to combine the renewed political, economic and academic interest in regions as distinct sub-national spaces with a macro-structural stance on financialization in Europe. It asks about causal factors driving regional differences in financialization and thus "Which Roads lead to Wall Street?" Taking into account several standard financial market and political-administrative variables, I strive to go further and make the case that, in order to really understand what causes finance to be more present in one region than another, we have to look at various forms of debt. In that sense, I pick up the comparative view on the finance-debt relation, which also ran as a thread through the previous chapter. However, I make two important changes. First, I scale down from the level of nation states to the level of regions. Second, I flip the causal chain in a sense that I do not ask how financialization is mirrored in debt (management), but which effect debt has on financialization. Despite the sometimes patchy nature of regional data, especially when it comes to finance, and the accruing methodological limitations, chapter 2 offers several interesting results, descriptively and analytically alike. One is that there is a huge heterogeneity in the universe of highly financialized regions. Operationalized as shares of finance and insurance in regional GDP, we find that next to traditional financial centers, former industrial hubs, regions with huge rentier income and such that are rural and lagging behind all can be equally high financialized. Second, it seems that specifically household debt plays a central role in driving financialization. Both findings inform us about the potential which future research on this topic could bear. A fascinating puzzle continues to be the black box of inter-regional credit provision. Also, one might ask whether global finance, which effectively wishes to defy national boundaries, can be adequately by sub-national frames. Yet, promising hint for in-depth case studies might lie in the connection between different reasons for rising household debt and regional or even local financial actors like banks.

Leaving behind the former while keeping track of the latter is chapter 3, the final one of this dissertation. Applying a two-dimensional concept which is strongly informed by that of the initial chapter, the concluding part analyzes the financialization of German savings banks and critically asks in which way they are "leading by example." This undertaking is of manifold merit for better acknowledging the role of regional financial actors in an era of financialization. First, the chapter synthesizes the original concept of market-based banking (Hardie, Howarth, Maxfield and Verdun 2013), which itself offered a groundbreaking view on how financial systems have changed, with insights from business studies and sociology that deal with specific aspects of a financial logic (Fligstein, Brundage and Schultz 2017; Fligstein and Goldstein 2015; Froud, Tischer and Williams 2017). In this way, it allows for an analysis of single banks and presents a more fine-grained view on changes in finance that complements the system-wide perspective. Second, putting the focus on savings banks and connecting them to the process of financialization breaks up the dichotomous discussion between pundits who suggest that an intensification of global finance can be captured by looking on large private and investments banks only, and those who regard alternative banking as solely defensive financial institutions. Moreover, it helps to generally deepen our comprehension of special banks, a stream of literature which has recently gained momentum (Braun 2018; Trampusch, Linden and Schwan 2014; Mertens and Thiemann 2017; Semenyshyn 2017). Third, its adds a further perspective on the political economy of regions in general and the German Länder in particular, longtime idle field (Deeg 1999). Fourth and finally, directing the limelight on savings banks as pillars of the German system, might also help us to identify transformations in national political economies more broadly. Presenting a structured, focused comparison of two diverse cases, the Sparkasse KölnBonn and the Stadtsparkasse Bad Honnef over a thiry-year period from 1986-2016, chapter 3 utilizes a rich variety of primary source data, including several expert interviews, to illustrate and discuss a trend of differentiated financialization. While German savings banks are still not solely for-profit institutions under public law with an immense tradition in relationship and community banking, financialization has not remained them unaffected. The increasing importance of fee income, a rising activity in proprietary trading, notable downsizing and outsourcing efforts or processes of internationalization and brand building, indicate fundamental shifts in how they conduct their business.

Of course, there are also clear limitations to this study. Most importantly, the question of generalizability can be brought up immediately. Yet, exemplary in-depth descriptions which foster an analytical concept can portend to central developments that might be worth paying attention to. Also, this can encourage future research on the causal mechanisms behind this overarching financialization process which clearly does not halt at the doorsteps of local public financial institutions. Were savings banks willingly accepting all this or were they victims of a rapidly changing context they could not influence? This spills over to other parts and results of the dissertation as well. Did governments adopt new financial techniques in sovereign debt management on their own and out of sheer necessity or has there been substantial lobbying and the structural power of finance at work? Does debt foster financialization or is it the other way round? Reverse causality is always tricky and tempting. Probably both sides bear some truth as socioeconomic change is never monocausal and rarely, if ever, unidirectional. In any case, as a megatrend of capitalism, financialization is neither exclusively internal nor external, but reciprocal and recursive. Which direction one chooses, depends on the concrete questions one wishes to answer and the research design that comes along with it.

Notes

For the sake of uniformity, the entire document follows American English (US) grammar rules, albeit punctuation and orthography might differ in the original publications due to respective journal guidelines. Citations, annotations and reference lists, however, may vary in style and format.

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Publication status and individual contribution

Chapter 1 is based on the paper "Where states and markets meet: the financialization of sovereign debt management", published in *New Political Economy* 22:3. All three authors have contributed equally to this publication, meaning that concept formation, empirical analyses, structuring and writing the paper have been joint tasks.

Chapter 2 builds on the original article "Which Roads lead to Wall Street? The Financialization of Regions in the European Union", a single-authored work published in *Comparative European Politics* 15:4.

The final chapter 3 presents the single-authored manuscript called "Leading by Example. The Financialization of German Savings Banks", which, as of March 28, 2018, has been submitted to *World Politics*.

Chapter 1

Where States and Markets Meet

Abstract

Financial markets play an indispensable role in the management of sovereign debt, that is, the mechanics of how and from whom governments borrow. This paper suggests a novel, two-dimensional concept to measure the financialization of sovereign debt management (SDM): (1) the reliance on financial markets as a governance mechanism and (2) the adoption of a sense-making framework grounded in financial economics. We split this concept into nine indicators and apply it to data from 23 OECD countries between 1980 and 2010. Our analysis illustrates the predominant commonalities across countries, but at the same time, country-specific differences. We interpret them as two sides of the same coin in the light of an overarching trend of increasing alignment to financial markets. This article is not only one of the first cross-national as well as longitudinal studies of the dynamics in SDM; it also reveals that the relationship between finance and governments in the SDM is by no means one-sided.

(Co-authored with Florian Fastenrath and Christine Trampusch) (Published in *New Political Economy* (2017), 22:3, 273-293)

1.1 Introduction

At the World Bank's 1989 Government Borrowers' Forum in Helsinki, representatives of about 30 countries met officials from Merrill Lynch, Morgan Stanley and Salomon Brothers, who were 'specially invited to present their prescriptions for advanced debt management' (Nars 1997: 5). The three investment banks had already done much work on the topic. For some years, they had been 'fishing for new business by telling their official customers how to move around their existing borrowing sources' and were even 'offering their computer packages free in the hope of winning the business, such as swaps, that they generate' (The Economist 1988: 117–18). In the end, they obviously made a big catch; since in the mid-1990s, most sovereign bodies were already using financial market techniques and instruments for managing their continuously rising levels of public debt.

Now, numerous examples from around the globe illustrate the potential consequences of this development. Several governments in Europe, for instance, used derivatives such as interest rate swaps for window-dressing purposes to hide their official debt levels. In the wake of the European Economic and Monetary Union (EMU), Italy and Greece were the most prominent offenders (Piga 2001a, 2001b, Dunbar 2003, Lagna 2016). Another problem when using derivatives is the risk of recording financially harmful losses. This happened, for example, in Australia, where the government was subsequently accused of 'losing billions of [...] taxpayer dollars through "gambling"" (Yusuf and Batten 2009: 295) and Belgium, with losses amounting to 44.3 billion francs (van Gerwen and Cassimon 2000).¹ Episodes like these demonstrate 'the entrance of financial markets in the management of public debt, extending financial logic to the public sphere' (Marazzi 2011: 120), which is a relevant but still underexplored subject (Munoz Martinez 2016).

Scholars of international and comparative political economy regularly investigate the relationship between financial markets and governments. They often analyse phenomena like deregulation, globalization, financialization of the economy, soaring public debt levels, financial repression and crises (e.g. Helleiner 1994, Cohen 1996, Epstein 2005a, Krippner 2011, Boyer 2013, Hardie et al. 2013, van Riet 2013, Dyson 2014, Streeck 2014, Reinhart and Sbranica 2015, Rommerskirchen 2015). Contributions then focus either on the ways in which the explosive growth of global financial markets constrains governments (Cerny 1994, Strange 1996, Streeck 2014) or on how public authorities have essentially facilitated the re-emergence of these markets (Helleiner 1994, 1995, Krippner 2011). Our paper, in contrast, illuminates the state–market nexus in the sovereign bond market, 'a most likely locus of financial market influence' (Mosley 2004: 183) on government policies. We do so by examining sovereign debt management (SDM), a phenomenon to which so far

'political scientists have paid scant attention' (Mosley 2015: 158). Understood as the mechanics of how and from whom governments borrow money, SDM is not concerned with the actual level of debt, but with the manipulation of its structural composition.² This includes both the use of various debt instruments and the techniques of selling them to financial investors. By analysing changes associated with SDM, this article provides a clearer understanding of the state–market nexus in the age of global financial markets. We conceptualise this as part of a larger process to which there have been rather few political economic contributions so far: the financialization of the state (Wang 2015, Lagna 2016).

How did SDM change over the last few decades? Is there a uniform development across countries or do they substantially differ? These are the puzzles which this paper addresses. As one of the first cross-national as well as longitudinal studies of this topic (cf. Abbas et al. 2014), our objective is foremost conceptual and descriptive. Following Caramani (2010: 43), we assume that empirical, descriptive analysis plays a major role in comparative politics, as it 'allows us to get dependent variables right' and 'to discover phenomena' (italics in original). We characterise the outcome, suggest a concept including indicators and provide data on a phenomenon which the discipline has not sufficiently identified and captured yet. Future studies on the causes and effects of the financialization of SDM might draw on our work.

Our study of 23 selected OECD countries from 1980 to 2010³ reveals a fundamental transformation in the ways governments manage their debt. Following Epstein's (2005a: 3) notion of financialization as 'the increasing role of financial motives, financial markets, financial actors and financial institutions', we extend this framework to SDM. In contrast to other concepts such as 'marketization', we argue that referring to 'financialization' best suits the analysis of the changes in SDM that we uncover. However, to be analytically clearer and more precise, our concept of financialization of SDM includes two dimensions: (1) the reliance on the market as a governance mechanism and (2) the adoption of a sense-making framework grounded in financial economics. As we will justify in more detail, narrowing Epstein's broad definition equips us to analyse the financialization of SDM effectively.

The main finding of our study is that the process of financialization of SDM is characterised by overarching commonalities accompanied by country-specific differences in both dimensions. Although the process fundamentally affects all countries, national specificities continue to exist. Financialised forms of SDM may take different shapes according to country-specific contexts. Draw-

ing on Streeck (2012: 22), this 'highlights the commonalities of [capitalism and] its varying institutional embodiments, or more precisely: the common dynamics that are responsible for the parallel trajectories on which national capitalisms historically move'.

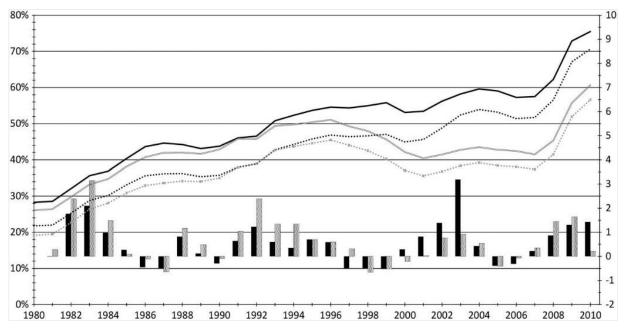
In order to further clarify and underpin our argument this article proceeds as follows: the next section elaborates our understanding of a financialization of SDM in more detail and illustrates how far it differs from its former non-financialised form. We view SDM as economic activity, because it comprises decisions on how and from whom governments borrow money to finance their budget deficits. Hence, we analyse its past and present forms along two dimensions: the governance mech-anisms used to coordinate this economic activity between different actors (Hollingsworth and Lindberg 1985, Mayntz 2001) and the underlying intellectual frameworks of economic ideas, which enable sense-making and legitimization (Weick 1995, Weick et al. 2005, Fligstein et al. 2014). We split these two dimensions into a set of nine indicators⁴ for our analysis in sections three and four. Finally, section five points to the contribution of this article to the analysis of the financialization of the state and the state–market nexus. We conclude that financialization is a continuing process affecting crucial state areas. Moreover, financial markets effectively define but do not determine courses of action for SDM.

1.2 The financialization of SDM: a two-dimensional concept

Before we reveal our concept for measuring the change in SDM and argue why it is useful to transfer the term financialization to this area, we want to emphasise that all governments in our sample have been facing ever-higher debt levels. Figure 1 shows that since the 1980s, there has been an overall trend towards rising indebtedness in our 23 OECD countries. In 30 years, the debt-to-GDP ratio more than doubled from less than 30 to almost 75 per cent. While this alone is not new news, Figure 1 also reports that the share of marketable debt (MD)⁵ grew even more strongly. With the exception of a few rather short periods, most notably in the late 1990s, MD has constantly risen in relation to non-marketable liabilities. As a result, its share in total government debt increased from about 70 per cent in 1980 to more than 90 per cent in 2010. Consequently, this figure confirms that political science should not only scrutinise the levels or change rates of public debt, but also show how far governments use market-based modes of refinancing and the related financial markets transactions of debt managers.

When social scientists analyse current trends in the dynamics of financial markets and debt, they very often refer to the term 'financialization' (van der Zwan 2014). Dealing with this rise of finance, most contributions are in line with Epstein's (2005b) previously mentioned concept and centre on three subfields: the economy (e.g. Krippner 2005, 2011), corporations (e.g. Fligstein 1990, Froud et al. 2006) and the everyday life of households (e.g. Langley 2008, Fligstein and Goldstein 2015). Surprisingly, with few exceptions (Wang 2015, Lagna 2016), explicit analyses of the financialization of the state are still missing (Davis 2009: 177–87, van der Zwan 2014: fn. 13).

Figure 2: Total central government debt (continuous line) and total marketable debt (dotted line) as a % of GDP (left). Annual growth of marketable debt as a share of total central government debt (bars) in percentage points (right). OECD 23: bold, OECD 22 excluding JAP: light.



Sources: own calculations using OECD (2015) and other primary sources (see supplementary file). Notes: data for all countries from 1980–2010 except CAN, IRL, ESP (1981–2010), FIN, LUX (1990–2010), FRA, NZL (1992–2010), NOR (1982–2010), CH (1986–2010) and UK (1998–2010). Although the picture becomes obscured with Japan out of the equation, the overall trend still holds. While the other countries reduced their debt-to-GDP ratios from 1996–2001 and even in the past relied on MD more strongly, Japan caught up with respect to the latter from 2000–3.

Of course, scholars acknowledge that there is a close relationship between financialization in general and the role of governments in expanding their markets for sovereign debt (e.g. Mosley 2003, Quinn 2010, Hardie 2012,⁶ Pacewicz 2013, Streeck 2014). Illustrative episodes are the ongoing Eurozone crises or the Basel II agreement of 1992, which more or less squeezed banks into buying zero-risk weighted sovereign bonds. Nevertheless, how governments become actively engaged in private sector style financial market practices to manage their debt is usually left aside (Mosley 2010: 29). In addition, the political science literature on SDM and related topics is still in its infancy (exceptions are Datz 2008, Gabor 2012, Dyson 2014, Trampusch 2015, 2016, Lagna 2016, Livne and Yonay 2016, Munoz Martinez 2016). This paper contributes to filling these gaps in three ways. First, we extend the concept of financialization by applying it to the practices involved in SDM. Second, we suggest that the process of financialization of SDM is reflected in an increasing reliance on financial markets as governance mechanisms and the adoption of a sense-making framework grounded in financial economics. Third, we complement existing analysis by adding a longitudinal and cross-national perspective. Thus, we provide new data and a conceptual application to the debate on financialization.

Characteristics	Non-financialised SDM	Financialised SDM
Governance mechanism	 Non-market (hierarchical, network) Interest rates on bonds were politically controlled and determined; captive sources of financing; debt monetization Financing decisions based on short-term expediency within a highly regulated domestic environment Predominantly loans and long-term relationship financing 	 Financial market (competitive) Predominantly marketable debt instruments sold to privileged primary dealers (Indicators: MD, PDS) Interest rates on bonds are market-determined by auctions, thus subject to supply and demand (Indicator: Auctions) Sovereign refinancing as a tool to develop fi- nancial markets and broaden the investor base in a globally deregulated and competitive envi- ronment (Indicators: MDNR, MDFC, ILBs)
Sense-making framework	 Macroeconomics → passive administration Operational responsibility in the hands of central banks and civil servants inside Departments of Finance or Treasuries Limited toolkit of instruments at use Traditional public sector form of cash-based accounting 	 Financial economics → active management Operational responsibility in the hands of specific and separate agencies (DMOs). (<i>Indicator:</i> DMOs) Use of complex financial innovations like derivatives, which allow for separating issuance from portfolio decisions. (<i>Indicator:</i> Swaps) Modern private sector form of accruals accounting. (<i>Indicator:</i> Accruals Accounting)

Table 1: Characteristics of financialized and non-financialized SDM.

Source: own compilation based on the literature quoted in the main text.

The reason for bringing these extensions into the literature on financialization becomes clear when one inspects the main trends of SDM over the last few decades. Economic and advisory literature on SDM shows that between the 1970s and 1990s, SDM has fundamentally changed in major OECD countries (Carracedo and Dattels 1997: 100–5, Nars 1997, Magnusson 1999, Blommestein 2002, Wheeler 2004, Wolswijk and de Haan 2005: 6–8, Storkey 2006, Andabaka Badurina and Svaljek 2012: 77). Table 1 displays the main characteristics of past and present SDM. While the former can be described as non-financialised since it was less dependent on financial markets, their actors and logics, the latter clearly features many aspects of a growing alignment of SDM practices with financial markets. For better analytical understanding and conceptual clarity, we suggest discussing both forms of SDM according to the predominantly adopted governance mechanisms and the respective underlying sense-making frameworks, a point that will we now develop in detail.

Following the common conception of governance in the comparative political economy literature, economic activities can be coordinated through various governance mechanisms: state or firm hierarchies, networks, associations or market transactions (Hollingsworth and Lindberg 1985, Hollingsworth and Boyer 1997, Mayntz 2001, Lütz 2003). In the past, two of them mainly played an important role in SDM. On the one hand, hierarchical governance describes non-financialised SDM best, since non-market, state-centred coordination was its crucial feature. Highly controlled sovereign bond markets, with investors 'captured' by investment regulations, formed the (mostly) domestic environment in which financing decisions were based on short-term expediency. Another significant aspect of this was the use of debt monetization (inflation) for deficit financing until the 1970s.

On the other hand, there were also certain aspects of networks, because bank loans and longtermoriented relationship financing were dominant features of SDM (Panizza et al. 2009: 655–6, Abbas et al. 2014). Thus, sovereign borrowers accessed capital markets with the help of banks, which functioned as their underwriters and whose reputation and 'brand' granted 'market access on favourable terms' (Flandreau and Flores 2009: 647).

In contrast, when describing present, financialised SDM, it is indispensable to speak of competitive (financial) market-based forms of governance. They take place in a globally deregulated environment and largely follow the logic of supply and demand. While in the past interest rates on bonds were politically determined, they are now subject to market fluctuations because debt instruments are issued at auctions with competitive bidding.⁷ Furthermore, the role of MD has been strengthened to deepen and widen financial markets. In order to measure this change towards financial marketbased governance of SDM, we use the following six indicators: the share of MD, marketable debt held by non-residents (MDNR) and marketable debt in foreign currency (MDFC), as well as the introduction of auctions, primary dealer systems (PDSs) and index-linked bonds (ILBs).

The second analytical dimension is about divergent underlying sense-making frameworks of SDM. Before developing this at length, we would like to emphasise why it seems crucial to us to include it in our concept. As Livne and Yonay (2016), for example, have elaborated for the Israeli case (GDMU), specific economic ideas and mathematical models based on these ideas effectively pre-shape discussions about debt management decisions. This is part of the larger argument about the influence of economists on policy-making in general (Hall 1989, Fourcade 2006, 2009) and financial ideas in particular (Blyth 2003). Referring to Karl Weick's (1995) insights from organisational sociology and psychology when analysing decisions of the US Fed, Fligstein et al. (2014: 9–18) note

that it is crucial to reflect different ways of sense-making. This means that within (economic or financial) organisations, evaluating different courses of action, and ultimately taking a decision, is always structured by pre-existing frameworks that represent a specific view of how the economy works (Fligstein et al. 2014: 11). Therefore, sense-making frameworks and governance mechanisms are interwoven (Weber and Glynn 2006). Relating this to our case, we argue that non-financialised SDM relied on the intellectual foundation of classic macroeconomics (Pecchi and Piga 1995, Giovannini 1997: 44). Starting in the 1960s, SDM included macroeconomic goals and was a tool for stabilising the economy. This clearly distinguished it from private sector debt management (Wolswijk and de Haan 2005: 6-8). Debt management was viewed as an 'extension of monetary policy' (Currie et al. 2003: 11), which implies that macroeconomists inter alia 'assigned debt management the important role of stabilizing aggregate demand' (Pecchi and Piga 1995: 30). This becomes clearer when one takes into account the fact that in the past, operational responsibility for SDM was in the hands of central bankers and civil servants inside treasuries or ministries of finance. Administrative tasks were performed with a limited toolkit of debt instruments at hand, while bureaucrats at the same time used traditional public forms of cash-based accounting. Next to the emphasis on the macroeconomic impact of borrowing decisions, debt managers acted rather passively, since SDM was restricted to 'keeping books and records on borrowing transactions and the repayment of debt' (Andabaka Badurina and Svaljek 2012: 76).

In contrast, financialised SDM takes monetary policy as given (Abbas et al. 2014: 4, fn. 3) and is informed by financial economics as its intellectual foundation (Nars 1997). The fact that sovereigns have started to make sense of their debt as a 'portfolio' instead of focusing on individual loans (Caplen 1995) mirrors the crucial shift in the underlying frameworks towards financial economics. This perspective implies that debt managers are focusing on optimisation calculations based on cost-risk trade-offs. Standard portfolio theory (Markowitz 1952) provides instructions for the best possible combination of investment alternatives in order to optimise the investor's portfolio. An optimal portfolio minimises risks while maintaining or increasing the expected return. This main tenet of portfolio theory has been adopted by state executives (Abbas et al. 2014: 4) - only in reverse. They now aim at minimising debt service costs resulting from a portfolio of liabilities, just as a private 'asset manager would seek to add return to his portfolio' (Lee 1996). Hence, a greater significance and consideration of risks in the daily debt management operations has accompanied the shift in frameworks (Magnusson 1999, OECD 2005, Holler 2013). While conducting our research, we have found numerous instances of evidence justifying sense-making as a conceptual dimension. A notable example is the former CEO of the German Finanzagentur, who explicitly speaks of the importance of Markowitz' (1952) portfolio theory and its modern versions for dayto-day debt management practices (Daube 2009). Thus, in general, we regard this change in sensemaking frameworks as a fundamental 'shift in thinking (...) which redefined debt management in important ways' (Currie et al. 2003: 15).

This implies, first, that nowadays, in most OECD countries, SDM is the operational responsibility of special debt management offices (DMOs), which primarily employ well-paid professional portfolio managers coming from private investment banks (e.g. Currie et al. 2003). Because DMOs compete with private financial institutions in hiring these experts, they also reformed their salary scales. On the one hand, these personnel are recruited based on experience in private financial sector firms but also with regard to their skills in risk and portfolio management, including the corresponding mathematical models such as Monte Carlo simulations. The German Finanzagentur (2002), for instance, has set up a team of trained financial economists, mathematicians and physicists to execute portfolio management and financial engineering.⁸ On the other hand, the newly hired staff also contributes to the establishment of a specific culture. For the UK for example, Davies (2005: 234), at that time senior official at the UK DMO, notes that 'the most important aspect is that a strong risk management culture pervades the organization at all levels'. This perception of risk is typically associated with classic portfolio theory. To detect the risk structure inscribed in the debt portfolio, the introduction of accruals accounting brings a market-based view to public balance sheets (Newberry 2015). Accounting, including its various historical forms, is a generally important aspect of sense-making, since it functions as a 'cognitive device' (Carruthers and Espeland 1991: 55). Moreover, Quinn (2016: 7) even regards it as one of the 'building blocks of understanding'. Speaking of financial economics, the application of portfolio theory to debt management then advises debt managers to diversify risks by issuing various types of securities and using mathematics in financial risk management. As a result, each country now possesses its own characteristic debt portfolio, put together and constantly manipulated in the light of the cost-risk trade-off. In other words, 'debt managers have increasingly become risk managers as well' (Bröker 1993: 12). This allows them to play with interest rates and currency rate risks. They do so by using various forms of derivatives. In this regard, together with the aforementioned introduction of accruals accounting, 'sense-making frameworks (...) reflect beliefs about what is, and beliefs about what ought to be' (Starbuck and Milliken 1988: 51). Formerly, stricter international capital controls and less developed financial instruments had blocked this option. We operationalise the shift to financial economics in the sense-making framework with the following three indicators: the use of derivatives, the introduction of accruals accounting and the establishment of professional DMOs.

After having synthesised the main features of financialised SDM, the following two sections present our empirical analysis. Therefore, we start with the governance mechanisms before dealing with the sense-making frameworks. By connecting our indicators to the empirical material, we highlight the commonalities of financialization while also pointing to country-specific trajectories as differences within this trend. We rely on metric and non-metric (timing) data provided by international organisations like the OECD, the IMF and the World Bank, as well as academic research on this topic.⁹ Although conceptual considerations guide our choice of indicators, the scarcity of useful cross-national data at the same time constrains it.

1.3 Governance mechanisms of SDM: from states to financial markets

The first six indicators that we present refer to the governance of SDM. Regarding the timing of reforms, we analyse the years of introduction of auctions, PDSs and ILBs. Concerning metrics, we look at MD in general, as well as the share held by non-residents (MDNR) and issued in foreign currencies (MDFC).

Figure 2 depicts the share of marketable debt (MD). Its volume measures the degree to which debt managers are able 'to maintain the marketability of the government's debt instruments [which ...] thereby ensures continued and broader access to financial markets' (OECD 1982: 12). It also suggests that liquid secondary markets, on which bonds are sold and traded,¹⁰ are increasingly significant. Therefore, the share of MD is a proxy for the level of securitisation of sovereign debt. Furthermore, 'to the extent financial markets are seen to have a comparative advantage in diversifying risk, the cost-risk trade-off also implies that sovereign debt managers will typically prefer to issue marketable debt' (Abbas et al. 2014: 4). Thus, the higher the share of MD, the more debt managers use the market mechanism to borrow and the more financialised the SDM becomes. The numbers in Figure 2 reveal a clear increase in the MD share across our sample of 23 OECD countries. First, after a brief initial decline in the very beginning, the median rose by more than one-third from 65 per cent to 90 per cent in the period 1981-2010. Second, as the scatter plot shows, this trend has even affected countries that were initially reluctant to issue MD. Whereas in the early 1980s, Denmark, the USA or Austria already relied (almost) exclusively on MD, countries like Germany and Spain were at the bottom of the distribution list with values of 33 and 16 per cent. However, from the late 1990s, both have been constantly recording averages above 94 and 91 per cent. Despite supporting our claim of substituting hierarchies and networks with (financial) markets as governance mechanism, data on the share of MD also present some evidence for the unequal manner of this process. Since there are still differences in the degree to which debt managers use MD, as the

examples of Norway (63 per cent in 2005) or Luxembourg (76 per cent in 2010) show, we can argue that this aspect of financialization unfolds on country-specific trajectories. Our next two indicators of the governance dimension of the financialization of SDM build on what we have argued so far. By seizing the opportunity of appealing to non-resident buyers, debt managers can take part in international capital markets. The share of marketable debt held by non-residents (MDNR) covers exactly that and represents a tendency which has gained further momentum in some countries after the effective abolition of exchange rate risks by the EMU (Wolswijk and de Haan 2005: 17–18). Consequently, a higher proportion of MDNR signals a shift towards a financial market governance mechanism in SDM.

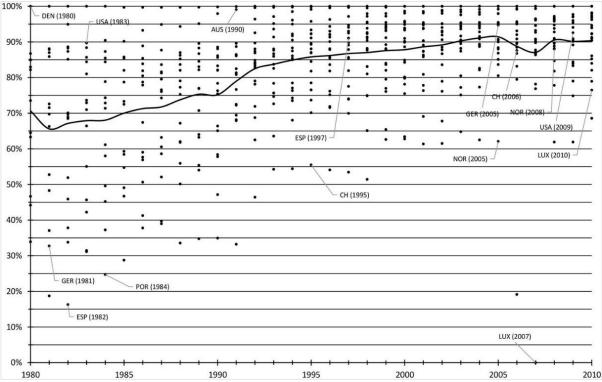


Figure 3: Marketable debt in % total outstanding central government debt, 1980–2010.

Sources: own calculations according OECD (2015) and other primary sources (see supplementary file). Black line: median. Note: Data for all countries from 1980–2010 except CAN, IRL, ESP (1981–2010), FIN, LUX (1990–2010), FRA, NZL (1992–2010), NOR (1982–2010), CH (1986–2010) and UK (1998–2010).

Turning to our data, Figure 3 clearly displays an increasing trend throughout almost all our countries. In the 30 years that we cover, the median value has quadrupled, reaching 45 per cent in 2010. In the early 1980s, Iceland was the only country with more non-resident than resident debt. At the end of the period, however, Finland, France and Austria lead our sample. Many countries now issue nearly half of their liabilities to non-residential investors; Portugal is a prime example connecting this to financialization (Rodrigues et al. 2016: 15–18). With a share of about 20 per cent MDNR, Canada and Norway lie at the other end of the spectrum. There are also countries which almost exclusively issue debt domestically. An example is Luxembourg, the only reporting country with zero per cent MDNR throughout. Japan also falls in this category. Because of its model of domestic pension fund capitalism with large institutional investors (Tokuoka 2010, Andritzky 2012), Japanese debt managers do not need to turn to international capital markets or do so very carefully, taking a share of about only five per cent.¹¹ Finally, there are also countries which have actually reduced their share of MDNR (e.g. New Zealand from 53 per cent in 1995 to36 per cent in 2010). Overall, this confirms our claim that financialised SDM is common to developed capitalist economies, while at the same time unfolding unequally and on country-specific trajectories.

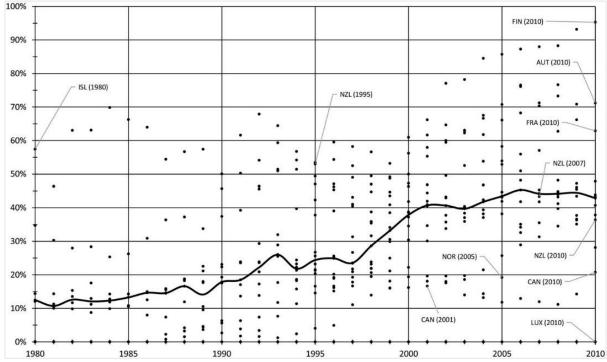


Figure 4: Marketable debt held by non-residents in % of total central government debt, 1980–2010.

Sources: own calculation based on OECD (2015) and other primary sources (see supplementary file). Black line: median. Notes: Data for all countries from 1980–2010, except: CAN (1981–2010), FIN (1990–2010), FRA (1987–2010), IRE (1995–2010), ITA (1988–2010), NED (1985–2001), NZL (1992–2010), NOR (1989–2010), SWE (1995–2010) and UK (1996–2010). No data for: AUS, BEL, GER, GRE, JAP and CH.

Marketable debt issued in a foreign currency (MDFC) can be another tool to attract a broader range of investors. In the past, this instrument especially enabled countries with limited domestic capital markets and minor currencies, like Ireland or the Scandinavian economies, to attract international investors. Whereas countries with leading currencies like the USA, Switzerland, Germany or the UK either refrained completely from MDFC or started using it relatively recently (Carracedo and Dattels 1997: 112). We would like to stress that foreign currency and non-resident debt are not necessarily mutually exclusive in all cases. There is, for example, also the possibility of issuing domestic currency debt to non-residential investors as well as having resident creditors buy foreign currency debt. The main line of division here runs along the size of the economy. The OECD (2012a: 5), for instance, notes that 'for the larger OECD countries, foreign currency issuance does not appear crucial for attracting non-resident financial investors (...)'. On the other hand, even Germany now issues a Dollar-Bund as a reaction to investor demands and this provides a wider choice of instruments (Finanzagentur 2005). The scatter plot in Figure 4 displays the share of MDFC over time and shows a decline in country-specific differences. At its peak in 1985, the median MDFC value was about 11 per cent, whereas nowadays it is close to zero. As illustrated below, prime examples of this fall in MDFC are Portugal, Finland and Ireland. However, not all countries have reduced their share equally: marketable foreign currency debt still makes up 20 per cent in Denmark and Sweden. With Germany and the Netherlands going against the tide, there are even some contemporary 'outliers'. Both countries have started issuing MDFC quite recently, although still at very low levels of three and one per cent.

Two major causal factors have seemingly fuelled this development: first, a steep decline in MDFC occurred in the wake of the EMU. The introduction of the euro as a common currency has fundamentally reduced national exchange rate risks while simultaneously widening the investor base (Favero et al. 2000: 4). At the same time, the euro itself has contributed to further financialization in general (Rossi 2013). Second, an increase in the use of derivative financial instruments not only gave sovereign debt managers the potential to hedge existing risks, but also made MDFC numbers disappear from the balance sheets. We will come back to this again in more detail when discussing the use of derivatives. In sum, our findings overall reflect a development of MDFC in the direction of financialised SDM. While these factors, which seemingly account for general decline of foreign currency debt at first sight – the EMU and the use of swaps – both express financialization on their own, cross-national variation in MDFC signifies country-specific trajectories embedded in a general trend towards a financialised SDM as a commonality.

Three other important indicators which measure the change in the governance mechanism towards a financialised SDM are the introduction of auctions, PDSs and ILBs. For these indicators, we were able to collect the years of their introduction. The first two measure in more detail the institution-alisation of primary and secondary markets, and hence the shift from relationship financing to market-based techniques in the issuance of debt instruments (World Bank and IMF 2001, Andabaka Badurina and Svaljek 2012: 76).¹² Auctions mean that prices of government securities are determined through arm's length, competitive bidding by (international) investors.

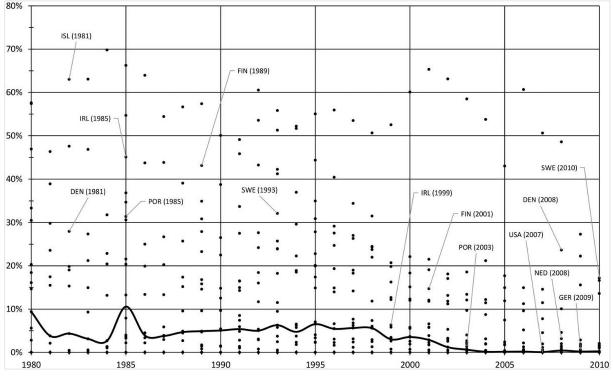


Figure 5: Marketable debt in foreign currency in % of total central government debt, 1980–2010.

Sources: own calculation based on OECD (2015) and other primary sources (see supplementary file). Black line: median. Notes: Data for all countries from 1980–2010, except: FIN (1980, 1985, 1989–2010), FRA (1980, 1985, 1989, 1991–8, 2002–10), GER (1980, 1985, 1989, 1991, 1993–2010), GRE (1980, 1985, 1989, 1991, 1993, 1995–2006), JAP (1980–2009), LUX (1990– 2010), NZL (1992– 2010), NOR (1981–2010), POR (1980, 1985, 1989, 1991, 1993, 1995, 2000–10), ESP (1980, 1985, 1989–2010) and CH (1986–2010).

According to Bröker (1993: 17), the use of auction techniques is 'perhaps the most typical indication of market governance in public debt management'. Complementarily, the introduction of a PDS indicates the establishment of a communication and selling mechanism. It ensures continuous orientation towards investor demands (e.g. Arnone and Iden 2003, AFME 2015) because a fixed number of global investment banks 'are appointed by sovereign issuers to buy, promote and distribute sovereign bonds' (AFME 2015: x).¹³ They are the debt managers' advisors on issuing matters as well as their eyes and ears in the market and are 'entrusted to distribute debt and promote secondary market liquidity' (Gabor 2012: 6). In return, they have privileged access to government bonds including 'fairly generous selling commissions' (Kalderen 1997: 86). Another specific aspect of this investor orientation – and thus financial market governance – is the introduction of ILBs. This indicator captures whether debt managers wish to attract and meet a growing demand from institutional investors (Lemoine 2013) and broaden their investor base. These instruments usually link the interest paid by sovereigns to the domestic inflation rate. Hence, they particularly hedge the long-term interests of pension funds or insurance companies.

Figure 5 illustrates the cumulative proportion of adopters, where we record the timing of the introduction of these three indicators. Over time, we see an impressive and clear trend of commonalities in the financialization of SDM. Whereas in 1980 only five countries were already using auctions with PDS and ILBs almost non-existent, by 2010, the picture has been reversed: 16 countries were issuing ILBs, 17 had set up a PDS and all but one made use of auctions. As the progress of each curve shows, financialization of SDM unfolds at a steady pace. In the early 1980s, a few 'innovative' governments paved the way for others to follow. Although the number of countries using auctions has changed only little since the early 1990s, the establishment of PDS and the introduction of ILBs unfolded more gradually over the entire 30-year period. In the end, however, what had once been non-financialised SDM with hierarchical and network governance, ultimately transformed into financialised SDM based on financial markets as governance mechanism.

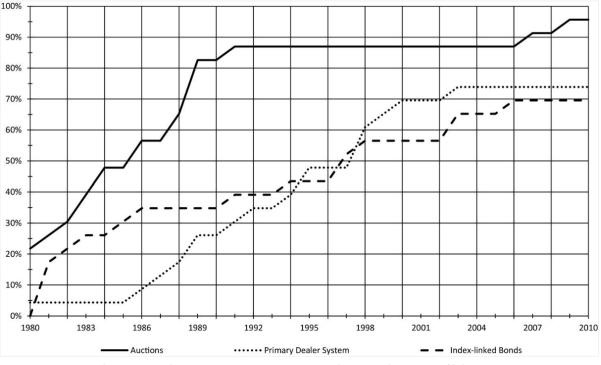


Figure 6: Auctions, primary dealer systems and ILBs as cumulative proportion of adopters, 1980-2010.

Source: own compilation according to various primary sources (see supplementary file).

As with the previous indicators, it is important to stress that this trend of commonalities does not imply a levelling out of differences. For instance, countries still vary to some degree in the specific mechanics of how they operate either single-price or multiple-price auctions (Bröker 1993: 97, OECD 2012b). At a single-price auction (also uniform-price or Dutch auction), 'all bonds are sold at the same lowest accepted price', but at a multiple-price auction, 'bonds are sold at the actual bid

price of successful bidders' (OECD 2012b: 64). Furthermore, differences exist not only in the timing of the introduction of a PDS, but also in its design. Most significantly, the number of primary dealers included and the supervision of a PDS reflect these differences (Arnone and Iden 2003: 22).

Moreover, speaking of country-specific trajectories, this also holds true for the extent to which debt managers actually use ILBs. Some countries such as the UK, Sweden, France and the USA have increasingly expanded their ILB use over the years. Yet, other countries do not issue ILBs at all, either because inflation pressure is low, as in Switzerland, or because debt managers prefer other variable-rate instruments like those available in Austria, Belgium and Portugal (Missale 1999: 63–6) (see supplementary file Tables 11 and 12). ILBs differ not only in the extent to which they are used, but also with regard to their underlying index. In addition to the Consumer Price Index, other 'inflation indices (such as wholesale prices, average earnings and the GDP deflator) have been used' (Deacon et al. 2004: 6). Although ILBs are a debt instrument of generally increasing importance, there are still noticeable differences underlying country-specific trajectories.

Completing this first part of our empirical analysis, we conclude that there is ample evidence underpinning our argument for a shift from hierarchies and networks towards financial markets as a governance mechanism of SDM. In line with our concept, we interpret this as the first aspect of the financialization of SDM, shared by all countries in our sample, but with different countryspecific trajectories. In the following, second, empirical section, we now examine the underlying sensemaking frameworks.

1.4 Sense-making frameworks of SDM: from macroeconomics to financial economics

Our three final indicators – the introduction of accruals accounting, the establishment of DMOs and the use of derivatives – grasp the shift from macro- to financial economics sense-making frameworks of SDM. In this regard, it is especially important to note that since the late 1980s, these frameworks, which shape how debt managers view the role of SDM in the economy and thus guide their day-today behaviour, have increasingly been grounded in the principles of portfolio theory (Bröker 1993, Nars 1997). It follows from this that a financialised SDM narrowly aims at minimising long-term borrowing costs at an acceptable level of risk (IMF and World Bank 2001, Hubig and Blommestein 2013: 21). In other words, 'government debt managers increasingly combine cost considerations with related risk considerations in the well-known trade-off fashion which has been developed by modern portfolio theory' (Bröker 1993: 40). This refers to the assumption that decreasing potential costs go along with increasing risks. In particular, there is a trade-off between reducing either borrowing costs or rollover risk.¹⁴ Together, these three indicators describe a fundamental change: in a portfolio theory way, debt managers now treat the composition of sovereign liabilities as a debt portfolio similar to the asset and liability structure of a finance company.

Thereby, the introduction of accruals accounting captures the attempt to reveal the total cost and risk structure inscribed in sovereign debt portfolios. This signals transparency vis-à-vis financial investors and helps debt managers to 'take adequate borrowing and restructuring decisions' (Bröker 1993: 154). Thus, the introduction of accruals accounting reflects an important aspect of the shift in the sense-making framework towards financial economics: the perceived necessity to adjust the data basis and its representation for decision-making. According to Taylor and Crocker (1981, cited Starbuck and Milliken 1988: 51), frameworks 'categorize data, assign likelihoods to data, hide data, and fill in missing data'. In contrast to its traditionally administrative cash-based form, accruals accounting introduces a market-based view of finance to the public sector that resembles a corporate balance sheet (Newberry 2015). In an OECD publication, Günther Bröker (1993: 154) highlights this similarity and notes that the only remaining difference is that 'during a particular reporting period, a government debt manager would count as "total costs" of the government debt or of individual debt instruments what a portfolio manager would count as "total return" on his portfolio'. As Figure 6 depicts, the introduction of accruals accounting marks a relatively new phenomenon. Beginning in the late 1980s and early 1990s with only a few pioneering countries like Spain (1986), New Zealand (1989), USA (1990) or Belgium (1991), it then accelerated at the end of the Millennium. Eventually, by the end of our reporting period, 70 per cent of the countries had introduced it. Zooming in on this commonality, one also finds nuanced differences in accruals accounting. As the IMF study by Khan and Mayes (2009: 2) shows, some countries execute on 'full accrual basis' that is in line with international accounting standards (e.g. Australia, Canada or France), while others combine cash and accruals accounting (e.g. Finland, Ireland or Sweden).

The degree of SDM financialization also depends very much on the existence of separate DMOs. The establishment of DMOs is an important reform. They very often hire investment bankers or hedge fund managers. Thus, DMOs reflect another aspect of shifting sense-making frameworks towards financial economics. DMOs are responsible for most of the tasks described above and generally follow the organisational structure of a private sector financial institution having separate front, middle and back offices, each with distinct functions (Hubig 2013: 4, IMF and World Bank 2014: 21). Performing according to pre-defined benchmarks, they are equipped with financial sector personnel and technology. With the establishment of DMOs, since the late 1980s, governments

have increasingly replaced passive issuance with portfolio management practices similar to those found in the private sector (Currie et al. 2003).

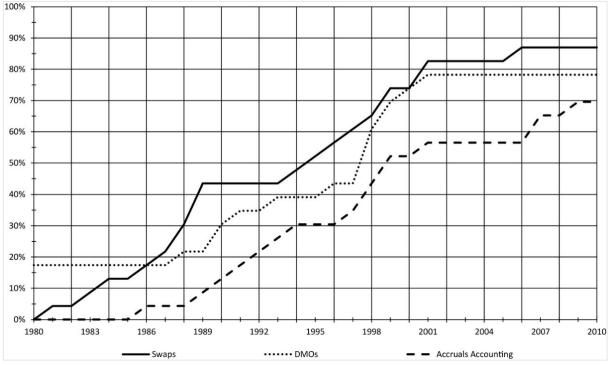


Figure 7: Swaps, debt management offices and accruals accounting as cumulative proportion of

Source: own compilation according to various primary sources (see supplementary file).

An illustrative case is the Swedish DMO. In addition to hiring financial sector staff, the Riksgälden even hires external portfolio managers and uses the SimCorp Dimension software package that was especially designed for private investment funds and asset managers (Jönsson 2005: 227). It is important to note that with the application of such computer programmes, the respective forms of sense-making based on financial economics are transferred to these public DMOs since the respective models effectively pre-shape what can be perceived, detected and handled as inherent risk (Grimpe 2012). Apart from the USA, which had already introduced a separate public debt entity in 1940, the forerunners regarding DMOs were Switzerland (1979), New Zealand (1988), Sweden (1989), Iceland (1990), Ireland (1990) and Denmark (1991). Another significant wave, during which many European countries followed suit, marked the period before the introduction of the euro. After that, the curve has remained flat, so that now, 18 of our 23 countries have a DMO (Figure 6). Although, the introduction of separate DMOs is a common trend in the sample, there exist different organisational settings with correspondingly different degrees of independence from political interference (e.g. Cassard and Folkerts-Landau 1997: 23-36, Currie et al. 2003, Gross and Hoshmand 2015, Trampusch 2015, 2016). One can distinguish three different locations for a DMO: inside or outside the Ministry of Finance (with New Zealand and the UK for the former and Germany and Ireland for the latter) or within the Central Bank (e.g. Denmark).

Our final aspect of the shift in frameworks of SDM towards financial economics is the use of financial derivatives. In contrast to the various debt instruments dealt with in the previous section, derivatives are risk management instruments. This becomes clear when one sketches the entire debt management process along its timeline. Before using derivatives, the organisational structure (staff, software, etc.) has to be set up. Also, the debt portfolio itself has to exist and to be perceived as such. This means that both its composition of different instruments (foreign currency, long-term or short-term debt, etc.) and the notion of having a portfolio to hand which now has to be riskmanaged must be given. Especially for the latter, the shift in frameworks is crucial. Accordingly, we argue that tracking the use of derivatives for debt management allows us to conclude that sensemaking is now based on financial economics. In the case of SDM, derivatives usually encompass interest rate and cross-currency swaps. This is of crucial importance because it captures the finegrained fundamentals of portfolio theory. Derivatives can be seen as useful tools for achieving two goals: lowering borrowing costs and optimising risk structure (Finanzagentur 2002, OECD 2002, 2011). By using swaps, debt managers seek to 'reduce the size of liabilities and to increase the value of the portfolio' (Delduque 2000: 12). Inscribed in this very principle, there is always the opportunity of trying to take advantage of small differences in prices (Medeiros et al. 2007: 3). By doing so, debt managers might then turn into traders (Grimpe 2012).

Despite the hedging function of derivatives, one cannot exclude the potentially speculative and opportunistic behaviour that goes along with them. The few studies of government swap deals so far strikingly indicate their misuse, for example, for window-dressing purposes (Piga 2001a, Irwin 2012, Lagna 2016). Even international advisers like the IMF view this as a twilight zone and legal limbo (Medeiros et al. 2007: 42). Although we have traced the year when governments permitted the use of derivatives for SDM, exact numbers for the extent to which debt managers have actually used this risk(y) instrument are not accessible, because most sovereigns treat the conditions, contents and results of swaps deals as highly confidential (Piga 2001a, Irwin 2012, Munoz Martinez 2016). Trailblazers in the use of swaps are Austria (1981), Denmark (1983), Canada (1984), Finland (1987), Australia (1988), Belgium (1989) and New Zealand (1989). In the 1990s, most other countries followed suit and now almost 90 per cent of them have entered derivatives markets (Figure 6). Thus, we can speak of another crucial commonality in the process of financialization of SDM in our sample. However, looking at individual countries or country groups also reveals differences, both in the types of swaps they use and the extent to which they do so. The former depends very much on a country's monetary position. Cross-currency swaps are important for countries with weak currencies such as New Zealand or Sweden. Before the introduction of the euro, this was also true for other Nordic economies, most of the South, Ireland and Belgium (Missale 1999: 57-8,

Wheeler 2004: 33). Still, this does not mean that these countries now refrain from using swaps but they use them differently, since the euro itself contributed to further financialization, as already pointed out. Examples like Finland, where the advent of the euro 'allowed for an increase in the use of derivative instruments' (Republic of Finland State Treasury 2013: 47), and Ireland, where the national debt management agency (NTMA) decided to hedge all foreign currency debt in euros from 1999 onwards (NTMA 1993–2011), underline this fact. Differences in the extent of swap use mainly depend on existing legal limitations, as a 2002 OECD report has noted for Finland, Germany, Italy and Spain. Furthermore, the degree of risk taking is different among countries. More aggressive DMOs, like the Swedish Riksgälden or the German Finanzagentur, also use tactical swaps, which are supposed to save additional costs in the short to medium term.

Summing up, we argue that countries have become more alike. Despite existing country-specific differences, they are all subject to common trends and benchmarks. This, we argue, runs through our entire empirical analysis. Whether it is regarding a shift from hierarchies and networks to financial markets as governance mechanisms, or concerning the substitution of macroeconomics with financial economics as underlying sense-making frameworks, financialization is a mega trend affecting all political economies and their SDM. Of course, this does not mean that we rule out distinct trajectories or even stark differences. What we want to stress instead is that one must always reflect them against the common background of financialization. In the concluding paragraphs of this study, we now discuss the main implications of our results and the future options for research.

1.5 Discussion and conclusion

This article has directed the attention of political scientists away from changes in the level or rate of public debt to the study of SDM. We have discussed a phenomenon which, until now, has almost fallen below the radar of debates in international and comparative political economy: the financialization of SDM. Against this background, our main contribution is conceptual and descriptive. We have mapped a new research field for political science by providing a two-dimensional concept, including indicators and data. With these, we have also shown that the financialization of SDM exists and how it has spread across a subset of OECD countries. Transferring the term 'financialization' to the arena of SDM, we defined it via a two-dimensional concept as the increasing reliance on financial markets as governance mechanism and the adoption of sense-making frameworks grounded in financial economics that both define governments' decisions about how and from whom they borrow. The financialization of SDM suggests the decline of the 'old mode' of SDM, which was very much based on hierarchy (for example, political determination of credit conditions) or networks (for example, long-term relationship financing), and grounded in an intellectual framework stemming from macroeconomics.

The main result is that we discern a double trend of overarching commonalities and countryspecific differences in the financialization of SDM. This trend confirms Streeck's (2012: 22) notion of a common trajectory of national capitalisms, 'as result of their ever closer interaction in capitalist world markets', on the one hand, and their 'differentiation and specialization' because of 'differences in economic, political and ideational power', on the other hand.

Consequently, our analysis also suggests that further studies aiming to detect the determinants of the financialization of SDM should refer to both an increasing interdependence between capitalist political economies and country-specific trajectories because of domestic conditions. In the analysis of the commonalities that result from growing interaction, it might be of interest that our data on the timing of reforms reveal that the USA is the single innovator, followed by the early adopters Sweden, Finland and New Zealand (see supplementary file: Table 14). Krippner (2005, 2011) confirms this likely role-model function of the USA by showing that in the 1970s, the US government worked to create the world's financial markets, because it was looking for a way to fund its debt. This implies that the USA was the first country interested in creating a market in sovereign debt. Global investment banks like Baring, Merrill Lynch, J.P. Morgan, Salomon Brothers and UBS then triggered the spread of reform to other countries. Central bankers and debt managers of pioneering countries (USA, Ireland, New Zealand, Sweden or Denmark) and international organisations (IMF, World Bank, OECD and UNCTAD) functioned as major transmitters (Nars 1997: 5, Australian National Audit Office 1999: 47, Wheeler 2000: 154-5, 2004: 22, fn. 4, Currie et al. 2003: 16, Gabor 2012: 4-6; Grimpe 2012). This pattern resembles Streeck's (2012: 22) explanation of the financialization of the economy: '[I]f the United States adopts financialization as its preferred strategy of wealth creation, this redefines the constraints and opportunities for the rest.'

However, national differences are the other side of the coin. Obviously, one should not treat them as merely endogenous to economic conditions like the rise of information and communications technologies and the capital market pressures, which investors and institutional creditors exert on governments (Mosely 2015). Our data point to country-specific trajectories in the use of instruments which are conditioned by domestic political economic institutions and conditions. They include pension schemes (e.g. Japan and non-resident holdings), the size of domestic capital markets (e.g. New Zealand and foreign currency bonds) or socio-economic contexts (e.g. Switzerland with low inflation risk and no ILBs). This signals that key characteristics of a country's debt profile remain contingent to a certain point and that further research should distil the political economic determinants thereof (Hoogduin et al. 2010, Breen and McMenamin 2013). These differences may also mirror country-specific interplay between economic, political and ideational power.

Our notion of commonalities and differences happening simultaneously also addresses a broader discussion: Are governments playing, or played by, the market (Schelkle and Barta 2014)? Do sovereigns use markets by making choices and do they still have autonomy (e.g. Mosley 2003, 2004, 2010) or do markets use governments (e.g. Strange 1996, Streeck 2014)? With reference to this, our analysis provides evidence that one needs to take into account both arguments. In the financialization of SDM, politics and states do play a major role. Central bankers and debt managers were reviewing best practices in SDM and cooperating with investment banks to learn more about portfolio theory and its application in practice. The negotiators of the Basel agreement had sufficient knowledge about how to boost the sovereign debt market through banking regulation. Moreover, the share of non-resident debt holders may depend on political factors such as the fractionalisation of political parties (e.g. Hoogduin et al. 2010, Mosley 2015: 158). However, it is also accurate to discern a rising influence of international financial markets on governments. This is not only evidenced by global investments banks as major transmitters of the adoption of portfolio theory in SDM or their role as primary dealers of government bonds. Both the global financial crisis and the ongoing sovereign debt crisis in the Eurozone nicely illustrate this. Examples like these support the view that financial markets exert discipline over EMU governments (Streeck 2014, Rommerskirchen 2015). Consequently, in a broader sense, our study indicates that the relationship between finance capital and governments in the SDM is complex, by no means one-sided and in flux.

Our study not only contributes to the debate on the state–market nexus, but also alludes to the literature on the financialization of the state. Wang (2015) interprets this process as a shift towards the 'shareholding state' as an increasing shareholder and institutional investor in the economy. Our analysis, however, demonstrates that financial markets have also already entered the core domain of modern democracies: public finance and debt. Here, the question arises whether the financialization of SDM makes democratic borrowing control an intractable problem. Do parliaments, their commissions and supreme audit offices still understand the structure of government debt and the complex financial instruments debt managers use? In particular, the obvious non-transparency of sovereign swap deals may cast doubt on the possibility of adequate democratic control. Similarly, other conflicts may evolve, for example, between the roles of governments as prominent financial

market actors and market regulators: *Quis custodiet ipsos custodes*? Dealing with these questions promises further insights into the dynamics and prospects of the tight connection between financial markets and public finance as well as their democratic control.

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Notes

- 1. So far, financial markets have punished not only central governments but also local administrations for using derivatives. Notable examples are Orange County, CA, the London borough of Hammersmith and Fulham or the German city of Hagen.
- 2. Of course, debt levels and fiscal policies play a role as SDM seeks to cut down interest payments on public debt and thus indirectly reduce its level. Still, SDM does not include debt ceilings or other austerity policies.
- 3. Our sample contains different types of developed capitalist economies and thus is suitable for cross-national, inter-temporal comparison. Selecting 1980–2010 as our period of analysis is due to both data availability and the fact that the early 1980s saw the beginning of the financialization of the economy. As the OECD currently modifies its database, data end in 2010.
- 4. One could also include other quantitative and qualitative indicators. However, due to the limited availability of cross-national data, we decided to concentrate on the nine we present in this paper. Other potential indicators are, for example: the introduction of risk-management software, system based on Value-at-Risk, the performance of DMOs against pre-defined benchmarks, the permission to use debt buybacks or Repos, the introduction of a regular issuance calendar or the possibility of stripping, that is, the separate trading of interests and debt titles in secondary markets. Another important aspect of SDM that underwent substantial changes are the maturities of outstanding debt. Although we had initially included them into our analysis, we finally decided to leave them out for two reasons. On the one hand, the data gaps are too large and the most common indicator for measuring maturities, the Macaulay duration, was not available for our country set at all; on the other hand, the correct interpretation of maturity requires enormous case-specific knowledge, for example, how maturities are combined with swap deals which make long-term maturities shorter.
- 5. While marketable debt instruments include short-term (Treasury bills), medium-term (notes) and long-term securities (bonds), typical non-marketable debt instruments are foreign-currency loans, loans from financial institutions and savings bonds for personal investors (cf. Missale 1999).

- 6. Hardie (2012) speaks of the financialization of the sovereign bond market, but he limits his analysis to emerging market economies and leaves out the management of sovereign debt.
- 7. However, as was nicely demonstrated in the aftermath of the recent financial crisis, central banks still have a certain influence on the interest rates of sovereign bonds.
- 8. In a survey report about DMOs in OECD countries, McCray (2005: 75) notes that 55 per cent of all DMO staff are involved with middle office functions like portfolio management and risk management policy.
- 9. We have extracted our metric data for the indicators marketable debt, marketable debt held by non-residents and marketable debt in foreign currency – mainly from the OECD Central Government Statistics database (2015), the collections of Missale (1999) and Abbas et al. (2014), as well as further primary sources such as annual DMO reports or treasury bulletins. For these indicators, we report the annual country values of their share of total outstanding central government debt as well as their medians. However, the available sources did not allow us to trace back the year of their first use (with exception of ILBs). Metric data on the use of ILBs, which we did not include in the main text due to the word constraint, are listed in the supplementary file. Regarding the indicators auctions, primary dealer systems, accruals accounting, DMOs and swaps, it is not possible to measure them metrically, either because of their qualitative nature or due to the lack of availability of data. Therefore, we identify the year of their introduction, which enables us to describe the timing of the reforms across countries. Overall, we have also sent out email inquiries to several national debt managers and central bankers. Nevertheless, despite thorough consultation of the material, there are still notable gaps in the data. In cases of doubt, we sought to obviate these by incorporating only values we were able to cross-reference. Since our data remain partially incomplete, please check the annotations below each figure for details.
- 10. Market liquidity generally refers to the ability of markets to facilitate quick transactions. This means, for instance, that once an asset is acquired, it can be sold again on short notice.
- 11. In the cases of Luxembourg and Japan, there is however, a very small share of non-marketable debt held by nonresidents, which cannot be traded further on the secondary market. To the same extent, Switzerland has lately started to sell some titles to non-residents, although so far only less than 1 per cent.
- 12. There are roughly three types of selling techniques: Auctions, syndications and issuance on tap.
- 13. Most prominently, primary dealer systems typically include banks like Barclays, BNP Paribas, Citigroup, Deutsche Bank, J.P. Morgan, HSBC or Morgan Stanley.
- 14. Rollover risk is refinancing risk that occurs when debt is about to mature. If interest rates develop adversely when rolling over old with new debt, future payments are higher than before.

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Chapter 2

Which roads lead to Wall Street?

Abstract

This paper investigates the financialization of regions in the European Union. It zooms in on the regional level and provides and systemic and macro-structural analysis of the factors that account an increase in finance and insurance activities. Theoretically, the argument highlights the crucial importance of various forms of indebtedness as the social, economic and political relationship that constitutes financialization processes. Empirically, the paper stresses the subnational dimension and thus contributes to fill an important, yet largely underappreciated gap in the political economy of finance. In order to fully grasp the extent to which financialization has transformed capitalism throughout the last three decades, it seems indispensable to include regions into the analysis. By injecting geography into the political economic debate, the paper might animate future research and a renewed discussion on regional specificities.

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2.1 Introduction

This article takes financialization and the new regionalism, two central developments that have shaped the trajectory of global capitalism in the last three decades, as a point of departure. Albeit many researchers so far have examined either of them in detail, systematic analytical links between both continue to be rather scarce. By taking up this task, I aim at partially filling this gap and contributing to a better understanding of how regions differ when it comes to the importance of finance. Specifically, I address the political economic literature on financialization. By focusing on regions, I seek to extend its structural and macroeconomic strand beyond nation states. Of course, this is an ambitious undertaking that clearly surpasses the limitations of one single paper. However, I strive to initiate a renewed discussion on the various regional trajectories of financialization within the common context of global financial market capitalism. Zooming in on regions within national political economies seems very promising since it enables scholars to identify important differences in a more fine-grained way while at the same time maintaining an aggregate level of analysis that is not present in studies of single cases. Consequently, the research question of this paper asks which causal factors account for variation in the levels of financialization of regional economies. This implies that I am specifically looking at whether different independent variables exert significant causal effects on my outcome of interest. In order to provide an answer, the article casts the net widely and extracts key causal factors out of a broad literature dealing with financialization and regional economies. The corresponding hypotheses are then subject to an empirical test by OLS regression analysis. The search for underlying causal mechanisms that actually link xn and Y by building on power, interest, legitimacy or function (Engelen 2008) is not part of this paper and thus up for future (case oriented) research.

Before delving further into the theoretical foundations of the argument, it is necessary to render more precisely how the sometimes-fuzzy concepts of "financialization" and "regionalism" are understood. Regarding the former, I largely draw on structuralist and regulationist accounts (Brenner 2000, 2004b; Stockhammer 2008; Krippner 2011; Lapavitsas 2011, 2013; Palley 2013). Yet, for the purpose of a feasible operationalization, I make use of an empirical simplification and conceptualize financialization as the increasing importance of the financial sector for the economy. Concerning regionalism, an equally manifold arsenal of concepts prevails, each with its distinct view of what a region actually is (Keating 1998, 2017). In this paper, I confine the region as an intermediate object of analysis to a political-administrative territorial unit that is situated between the state and the local level within a national political economy. The main argument of this paper states that in order to understand the driving forces behind the financialization of regions one has not just to look at general financial market indicators but instead focus more closely on various forms of indebtedness. Of course, stock markets, financial assets and related services play a more and more important role for both economy and society. Central features of this development are for instance the shift of corporate profits toward the financial sphere, as well as the general run into financial investments during times of negative real interest rates. Nonetheless, what seems to be lying at the core of the financialization process and is thus (now) its main driving force is the explosion of corporate, household and government debt within the last decades.

The remainder of the paper is structured in the following way: the next section discusses the literature on financialization and clarifies why it is important to specifically look at the regional economic level. In addition, it defines the outcome under interest as the dependent variable based on the macroeconomic assessment of financialization as a structural phenomenon. The proceeding section three then elaborates on the centrality of debt for financial profits and thus also financialization. Consequently, the different causal hypotheses are derived from the literature and the controls are explained. Afterward, section four presents the operationalization of the theoretical predictions, briefly explicates the method and data at hand and finally presents and discusses the empirical results. Eventually, section five concludes with some recapitulating remarks on the implications for future research.

2.2 Financialization and regions

In recent years, scholars have been referring to the concept of financialization when analyzing the crucially influential role of finance for contemporary capitalism. The common denominator that unifies this new paradigm is a holistic view of finance. This means that financialization is about broadening the notion of finance beyond its mere role of allocating savings and channeling investment. Instead, a central argument is that the entire financial sector, including its actors and logics, keeps permeating other parts of the economy and society (van der Zwan 2014, pp. 99–100). Very often, individual studies take Gerald A. Epstein's wider definition of financialization as "the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies" (Epstein 2005, p. 3) as a first step. From there on, they usually develop more specific concepts in order to apply them to their respective cases. Despite the large diversity of the financialization paradigm, one can identify four distinct

branches that make up the field. Research focuses either on individual firms, households, state actors or the economy as a whole (Christopherson et al. 2013; van der Zwan 2014).

In this paper, I adopt a macrostructural stance and therefore mainly refer to the literature dealing with the financialization of the economy as a whole (Boyer 2000; van Treeck 2009; Krippner 2011; Lapavitsas 2013; Lapavitsas and Powell 2013). From this follow three important consequences that guide my analysis. First, and in a broader context, I regard financialization as the key dynamic of a finance-led accumulation regime (Boyer 2000). This implies that after the end of Fordism, contemporary political economies are characterized by the fact that "profits accrue primarily through financial channels rather than through trade and commodity production" (Krippner 2005, p. 174).

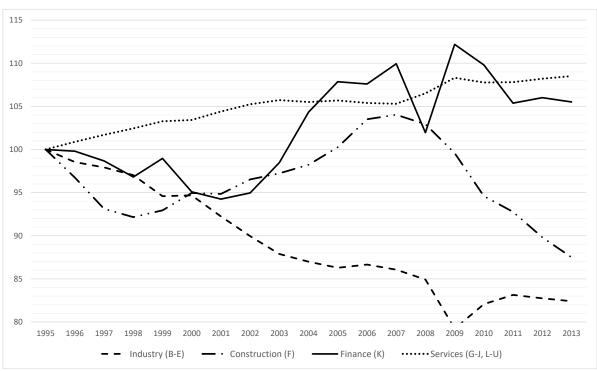


Figure 1: GDP shares of different economic sectors in the EU-18, 1995–2013

Research stemming from heterodox macroeconomics underpins this fact by highlighting the crosscountry importance of financial profits for different economies and the distributional consequences, which arise from a regime of high risk and increased liquidity but overall stagnating growth (Orhangazi 2008; Stockhammer 2008; van Treeck 2009; Palley 2013). Second, I constitute financialization in relation to other economic sectors. This means that financialization is conducive to some, such as real estate and insurance activities or construction, while at the same time potentially harmful to others as in the case of manufacturing or agriculture (Crotty 2005; Aalbers 2008, 2009). Third, I view financialization as a forceful and procedural phenomenon that unfolds over time and

Source: Eurostat (2015d), own illustration

is constantly reinforced. As it is the case with many other grand concepts in the social sciences (like globalization or neoliberalism), making an empirical argument about financialization bears the danger of mixing up dependent and independent variables, a problem that is known as analytic error of the first degree (Engelen 2008). For the purpose of this analysis, I treat financialization as my dependent variable (or my outcome) defined as the share of finance and insurance activities in the gross domestic product.

In order to get a feeling for the financialization at work, Fig. 1 displays the relative importance of different economic sectors in the 18 EU countries that are analyzed in this paper.¹ Before zooming in on regions, it is useful to get a first overview of the aggregate share of finance and insurance activities in national gross domestic product. What stands out concerning its development over time vis-a'-vis the other relevant GDP contributors of industry, construction and services, is the unparalleled ascendency starting in the early 2000s. Before the start of the new millennium, "services" were the only economic sector with an actual increase in its GDP share compared to the mid-1990s. However, given its ample range covering personal and retail services, science, communication, commerce, real estate and many more (G–J, L–U), anything but a rising share would have been irritating for developed capitalist economies. In contrast, the industrial economic core of mining, pharmaceuticals, chemistry, metalworking, textiles and others (B-E) has witnessed a constant decline by losing more than 15% of its initial importance. On the other hand, finance and insurance activities (K) took off after 2002 and quickly surpassed the service sector to become the most dynamic economic sector until the outbreak of the global financial crisis in 2008. In addition, three supplementary observations further illustrate this dynamism. First, albeit interrupted by a brief slump, finance exploded again before ultimately cooling off recently while still being at an almost equal pace with services. Second, the corresponding boom of construction occurs at a similar pace to finance, since financialization connects the inflation of property and real estate prices with financial products and profits (Smart and Lee 2003; Aalbers 2008, 2009; Rolnik 2013). Third, Fig. 1 might thus actually underestimate the real importance of finance for the economy since financialization also boosts certain real estate activities (L) and finance-related services (parts of M) that are included in the broad services category of the graph.

In addition to financialization, the second crucial trend in the development of contemporary capitalism has been a new regionalism. Prior to its academic recognition, regional differences were widely perceived as vanishing relics, soon to be leveled out by neoliberal catch-ups and homogenizing globalization. However, as it was the case with financialization research and its critique of the mainstream concept of financial intermediation, the tide has turned. Issues like uneven regional development, the centrality of city regions, new transnational (cross-border) regions and an increasingly fierce inter-regional competition for capital and growth have revitalized the interest in regional analyses (Agnew 2000; MacLeod 2001). Surprisingly though, political economy as a discipline has yet to fully appreciate this promising research area. Regions, it seems, by and large still constitute a terra incognita in this regard. Nonetheless, important studies have made inroads into this field. They have dealt with role of cities in the global economy (Le Gale`s and Harding 1998), new forms of regional or structural policies favoring internationally competitive areas at the expense of others (Crouch and Le Gale`s 2012) and the importance of sectoral systems of production as regional "varieties of capitalism" (Crouch et al. 2009; Schro¨der and Voelzkow 2016).

Yet, when it comes to finance, political economic contributions with a regional focus remain sparse. A notable exception has been Richard Deeg's (1999) seminal work on the role of banks for German capitalism in which he differentiated between the regional systems of Baden-Wu[¬]rttemberg and North Rhine-Westphalia. On the other hand, economic geography has been more vivid in this respect, dealing with questions of how to systematically incorporate finance (Pike and Pollard 2010; Sokol 2013, 2017), avoid "fetishizing the national scale" (Christophers 2012) or trace the geographical spread of finance as essential component of its development (Leyshon and Thrift 1997). This has produced a number of interesting case studies scrutinizing the geographical distribution of risk, locational specificities of distinct financial actors, such as pension funds and investment banks, or the spatial connection of different areas via profit-seeking practices of mortgage funds (Corpataux et al. 2009; Wainwright 2012; Zademach and Musil 2014).

Despite all progress, there are still many blind spots given the centrality of both regions and finance for contemporary capitalism. This is where the paper at hand comes in and seeks to address some of them. By linking the macrostructural political economic literature on financialization to the regional geographical dimension, I strive to shed light on some important aspects of the financialization process as a whole. First, I aim at widening the still limited country focus. Although there are some remarkable extensions (Lapavitsas and Powell 2013; some studies from heterodox macroeconomics or a 2015 special issue of Socio-Economic Review), most of the scholarly contributions concentrate on the USA or the UK. Second, I seek to overcome the methodological nationalism by analyzing regions within political economies. Third, by providing a systematic account for the driving factors behind financialization, I supplement our empirical understanding of this important phenomenon. In accordance with my argument elaborated above, I define the financialization of regions as the share of finance and insurance activities in regional GDP. I am aware that this narrow and relatively simple way is prone to critical discussion as it cannot capture the entire complexity. However, I argue that for the sake of analytical clarity and large-n comparability this simplification is indispensable. One reason is that data are still scarce when it comes to the regional level, especially in connection with finance. Moreover, potential future analysis might draw on my findings and provide more in-depth and case-based knowledge on how regional financialization actually unfolds.

Before I turn to the theoretical elaboration on potential causal factors of regional financialization, it makes sense to first become familiarized with the existing variation of the outcome. Figure 2 maps the empirical landscape of the EU18. It illustrates the share of finance and insurance activities in regional gross domestic product for the year 2013 in relation the average of 3.32% for the sample. The color of each region depends on its financialization level. While both white and light gray colorings denote lower levels of financialization, dark gray and black depict highly financialized regions. The map reveals several interesting characteristics. First, variation within national political economies differs from country to country. While some economies like the Netherlands (high) or Finland (low) are relatively homogeneous, others like Poland consist of many heterogeneous regions. Second, there is no clear connection between the number of highly financialized regions within a country and its economic wealth, measured as GDP per capita in 2013 (Eurostat 2017). On top of the spectrum, Sweden and Finland possess high GDP per capita values (45,400 € and 37,400 €) but feature only one highly financialized region each (Stockholms la"n and Helsinki-Uusimaa). In the bottom half, Spain and Italy score low on GDP per capita (22,000 € and 26,500 €) but are home to several regions with (very) high financialization levels (such as Comunidad Valenciana, La Rioja, Friuli-Venezia Giulia or Liguria). Third, many of the most highly financialized regions are either those of capital cities (Wien, Bruxelles-Capitale or Attiki), established financial centers (Hessen, London or Lombardia) or other urban economic hubs (Hamburg or Porto). Fourth, however, there are a number of fascinating cases that break up this geographical trinity of finance. These cases deserve special attention and a closer look. They can be largely grouped into three distinct categories, each unveiling interesting insights into the multifaceted geography of regional financialization.

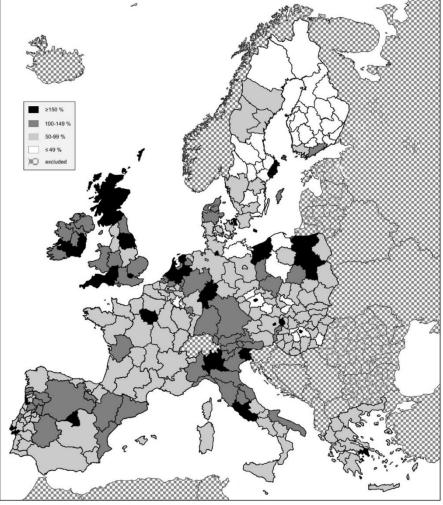


Figure 2: The Financialization of European regions in 2013 (NUTS)

Source: Eurostat (2015d), own illustration

The first category covers regions with access to large oil or natural gas reserves. Prime examples of this are Scotland in the UK and the Dutch province of Groningen. On a smaller scale, one might argue that these two highlight the importance of rentier income for financialization since the extraction and refining of hydrocarbons not only requires huge capital investments, but also creates immense surplus value that has to be channeled and diversified into other profitable sectors. Financial actors like investment banks, insurance companies or (sovereign) wealth funds play an important part in this process (Haberly 2011; Wang 2015).

The second category comprises former industrial regions that were hit hard by the crisis of Fordism and its symptoms of urban decay, job losses in manufacturing, depopulation and—as a result fiscal dead ends. Some of these regions were able to turn toward new economic models of tertiarization, albeit with polarizing side effects as employment in low-killed services is usually the flipside of financial, IT and creative settlements (Moulaert et al. 2005; Carter 2016). Instances of this are regions like Yorkshire and the Humber in the UK including Sheffield and Leeds, the province of Antwerpen in Belgium, the German Saarland or Zachodniopomorskie in northwestern Poland with the city of Szczecin. The third and last category contains regions that are economically lagging behind and have low levels of GDP per capita in 2013 (Eurostat 2015c). While Puglia in Italy $(17,200 \ e)$, Extremadura in Spain $(15,200 \ e)$, Terras de Trás-os-Montes and Douro in Portugal $(12,500 \ e)$ and $11,800 \ e)$ and Warminsko-Mazurskie in Poland $(7300 \ e)$ belong to the poorest group in the sample with GDP per capita values between two-thirds and less than a third of the median EU region $(25,500 \ e)$, they all reach (very) high financialization levels. This seems puzzling at first sight, but makes sense if one considers the centrality of debt for financialization processes—the main causal argument of this paper. Furthermore, some scholars have already begun to conceptualize and analyze the center-periphery divide and uneven geographical development through the lens of financialization (Becker et al. 2010; Rodrigues et al. 2016; Sokol 2017). Dynamics between more developed (dominant) and less developed (dependent) economies do not just unfold on the national scale but are also clearly at work on the regional level, as Fig. 2 hints at.

2.3 What drives regional differences in financialization?

Before turning to the empirical analysis, this section deduces the main factors that are supposed to exert a causal effect on the financialization of European regions and the variation of the dependent variable as illustrated in the previous paragraph. Following the main argument of this paper, various forms of debt are hypothesized to be driving forces behind regional financialization. In order to generate profits financial actors can engage in different activities, all related to the credit-debt nexus. I subsume these activities under the simplified labels of interest, investment and income and will briefly elaborate on each by focusing on the centrality of debt for financial profits (Lapavitsas 2013, pp. 138–68; Christophers 2015; Sokol 2017).² The first activity has the purpose of generating interest gains and involves lending money to others. This is for example the case when a financial institution, like a bank, makes a commercial loan to a business or a mortgage loan to a household. In its simplest form, this activity expresses a direct credit–debt relationship with the bank as the unmediated beneficiary. The second activity aims at realizing investment gains. Here the financial institution makes a financial investment such as buying shares, bonds or real estate. However, in many cases this is done as part of an investment fund alongside other financial institutions. The fund then invests into a portfolio of financial assets and distributes realized profits among its contributors. As a result, the investing financial institution is the mediated beneficiary of various indirect credit-debt relationships that the fund has vis-a'-vis third parties. The third and last activity has the aim of generating fee income. This can be the case when a financial institution either takes investment decisions on behalf of other private investors or designs and sells a derivative product

based on underlying assets like car loans or credit card payments. In both instances, the financial institution is the mediating beneficiary and is paid a fee for its service. In his sophisticated discussion of the origins and form of financial profits prevalent in the era of financialization, Costas Lapavitsas (2013) not only traces their underlying social character, but also stresses their crucial commonalities. Summing up, whether one considers simple loans, investment in equity or complex derivative products resulting from securitization: In the end some are always obliged to pay a share of expected future profits or revenues—such surplus value, labor compensation or taxes—to others who claim entitlement rights. Because this logic is essentially inscribed into the contemporary accumulation regime, financialization represents a unique phenomenon based on the centrality of debt for financial profits. This becomes especially clear when investigating the evolution of private and public debt in the EU18. Figure 3 depicts this development for the three levels of governments, (nonfinancial) corporations and households from the base year 1995–2013.

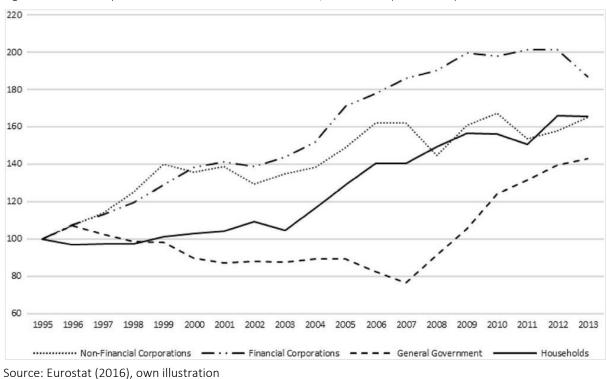


Figure 3: Public and private debt as GDP ratios in the EU-18, 1995–2013 (1995 = 100)

In general, it becomes immediately evident how the overall level of indebtedness has skyrocketed across the board. The only temporary exception has been the government sector, which, prior to the global financial crisis, reduced its debt level by 31 points (1996–2007), but then almost doubled by reaching 143 at the end of the period. Whereas in the beginning it was mainly the corporate sector that recorded substantial increases in debt, within the last ten years especially household debt has risen drastically from 105 (2003) to 166 (2013). Finally, there is another interesting peculiarity:

While in the first eight years (1995–2003) debt of financial and nonfinancial corporations (NFC's) evolved simultaneously, later on the growth rate for NFC's slowed down and its supporting role was substituted by households. This seems in line with general long-term findings for the EU, which state that it is now mainly consumer credit and mortgages—as opposed to low borrowing levels by NFC's—that accounts for the majority of lending by monetary financial institutions (ECB 2017: C5, C6). Following this overview, I now dissect all three sectors individually and deduce the corresponding hypotheses.

2.3.1 The role of sovereign, corporate and household debt for financialization

Starting with the first, I look at the effect of sovereign debt on variation in regional financialization. Notwithstanding the ambivalent development sketched above, sovereign debt is crucial for financialization processes. Historically, the change from the tax to the debt state in the 1980s was accompanied by financial liberalization and the deregulation of capital markets (Streeck 2014). Although interrupted by stints of consolidation and the spread of austerity policies in major capitalist economies, sovereign debt and the development of financial profits have been inextricably intertwined. The influence of financial markets on state institutions can be grasped as a financialization of the state (Pacewicz 2013; Kirkpatrick 2016; Lagna 2016; Fastenrath et al. 2017). This includes the use of financial instruments and private sector risk models when managing sovereign debt, the window dressing of public balance sheets or even designing complex financial products to fund projects that were formerly subject to tax financing. Also global financial advisory organizations like the IMF stress the importance of government bonds for deepening and widening financial markets (Chami et al. 2009). Others highlight its function as collatoral for money and credit creation (Gabor and Ban 2016). Therefore, sovereign debt is an important source of financial profits and hence contributes to financialization. First, bondholders may directly cash in on interest payments. Moreover, holding sovereign bonds as collaterals enables financial institutions to engage in riskier, potentially more profitable deals, while selling securitized bonds can also generate additional fee income. Accordingly, (H1) reads: The higher the ratio of sovereign debt to GDP, the higher the share of finance and insurance activities.

The second level deals with corporate debt and its effect on regional financialization. While it is clear how the financial industry influences financialization, also non-financial corporations contribute to this process. Following the crisis of Fordism, modes of corporate governance have fundamentally changed. What has emerged is a new "finance conception of control" (Fligstein 1990, p. 226) that permeates the corporate field with the ultimate aim of maximizing the shareholder value

of the firm (Lazonick 2010; Styhre 2015). On the asset side, NFCs nowadays generate an increasing share of their profits through financial activities (Krippner 2005; Lapavitsas and Powell 2013; Alvarez 2015; Soener 2015). On the liability side, corporate funding has shifted from bank loans to financial markets, for example through the issuance of shares. Both trends epitomize and fundamental transformation of the non-financial corporate sector toward a new strategy of downsize and distribute (Lazonick and O'Sullivan 2000). This implies the adaption of the short-termism inherent to many profit-generating, and sometimes speculative, financial market practices. In contrast to the previously prevalent procedure of retain and reinvest, NFCs very often seek to increase their corporate value via stock buybacks, financial outsourcing and attracting international investors. As a consequence, the involvement of NFC's in financial markets for instance by holding financial assets, generating dividend and interest income or spending revenue on financial payments has been increasing (Orhangazi 2008). Here, similar to sovereign debt, corporate debt affects financialization. When NFCs pay interest or dividends to bondholders and shareholders, they generate income for financial investors that are usually large banks or investment funds. In addition, paying interest on classic long-term bank loans has the same effect. Therefore, (H2) states: The higher the ratio of corporate debt to GDP, the higher the share of finance and insurance activities.

The third and final level covers the role of household debt for financialization. As we have seen, this has especially been on the rise since the early 2000s. Financial markets influence households in many ways since they have multiple options to participate in financial activities. Akin to the transformation of non-financial corporations, families and individuals have been more and more enmeshed by an everyday culture of finance that encourages them to evaluate their own financial situation against the portfolio background of assets and liabilities (Martin 2002; Langley 2008b; Fligstein and Goldstein 2015). Regarding assets, households are integrated into pension fund capitalism, which they hope will allow them to mitigate risks like old-age retirement via successful financial investments (Clark 2000; Dixon 2008). Regarding liabilities, credit-based consumption has become more and more important to stabilize domestic demand as a form of privatized Keynesianism (Crouch 2009). Both can have transformative repercussions on political economic institutions (Mertens 2015), but it is the latter where the effect of household debt most obviously visible. On the one hand, the growing involvement of private households in retail estate through mortgages is an important vehicle of financialization (Aalbers 2008, 2009). On the other hand, the general expansion and booming appreciation of credit cards fuel private consumption as well as financial profits (Langley 2008a, b). Hence, (H3) assumes: The higher the ratio of household debt to income, the higher the share of finance and insurance activities.

2.3.2 What else? Controlling for other factors

In addition to different forms of debt, I include a battery of ten controls that also might cause variation in the financialization of regions. I grouped them into general financial market indicators, economic sectors and politico-demographic context. The first group accounts for five of the standard proxies that are commonly used in studies of financialization, financial globalization and financial market integration. I expect all of them to correlate positively with my outcome. They are (1) the banking leverage of the economy understood as the total percentage of bank assets in equity, (2) the volume of foreign direct investments measured as inflows in percent of GDP and (3) the degree of stock market capitalization relative to the gross domestic product of an economy. The final two financial market controls are both dummies and play a specific role regarding my case selection of European regions. While (4) measures if the region is home to a global financial center as a hub of the finance and insurance industry (Kindleberger 1974; McGahey et al. 1990; Cassis 2006), control (5) asks whether the region is in a country that has a global lead currency, another decisive factor for financialization (D'Arista 2005). For the case of the Eurozone for instance, Rossi (2013, p. 397) notes that "the merging of national currencies into a single-currency area has introduced a further factor of financialization." The second group of controls covers two additional economic sectors that are connected to finance and insurance. As some of the seminal structural accounts on the rise of finance have elaborated (Brenner 2000, 2004b; Krippner 2011), I assume a negative correlation between control (6) manufacturing and the level of regional financialization. In contrast, control (7) real estate activities acknowledges the amplifying role of the housing business in facilitating financialization (Smart and Lee 2003; Aalbers 2008, 2009; Botzem and Dobusch 2012). The politicodemographic context composes the third and final group of controls. This seems important since regions vary substantially concerning both their levels of autonomy and population density. On the one hand, control (8) measures regional political autonomy as institutional depth, judicial and political competences. On the other hand, control (9) covers regional financial autonomy in borrowing, spending and raising taxes. I assume both autonomies to be ambiguous regarding the direction of their causal effects. While a more autonomous region for example could voluntarily choose financialization as a perceived path toward sustainable growth, regions facing financial and political constraints could also feel forced to turn toward financial markets as their last resort. The final control deals with the presumably positive correlation between financialization and (10) population density. This relates to the important function of cities and city regions for economic development in contemporary capitalism (Brenner 1998, 2004a; Sassen 1990, 2001; Le Gale's and Harding 1998; Crouch and Le Gale's 2012).

2.4 The financialization of regions: empirical results

For my empirical analysis, I used a standard OLS regression model without interaction terms.³ In order to account for the hierarchical structure of my data I calculated robust standard errors along country clusters. I refrained from applying multi-level modeling since the number of cases on level II (countries) is too small in relation to the number of independent variables on the same level (Maas and Hox 2005). The analysis includes 274 regions on the NUTS 1-3 levels of 18 European countries (Eurostat 2015e) with a selection based on three criteria: (1) membership in the EU, (2) the existence of a genuinely regional level with political competences⁴ and (3) comprehensive data availability. These countries are: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, the Netherlands, Poland, Portugal, Slovakia, Spain, Sweden and the UK (for details, see "Table 3, Appendix"). For the metric variables (all except financial center and lead currency), I used standard ways of operationalization and calculated three-year means for the 2011-2013 period (for details, see "Table 4, Appendix"). Political and financial autonomy are based on the Regional Authority Index (Hooghe et al. 2016). Regarding my causal argument, (H1) is operationalized by two variables (sovereign debt and sub-national debt). While the same applies to (H2) (debt of non-financial firms and debt of financial firms), the operationalization of (H3) only includes one variable (household debt).⁵

Table 1 reports the standard descriptive statistics and gives a good overview of the sample. Some regions that stand out are for example Bruxelles-Capitale as the most densely populated one with more than 7200 inhabitants per km² vis-a`-vis the most northern region in the sample, Lappi in Finland with only 2 inhabitants per km². Political Autonomy is relatively high in federal states like Germany or Austria with a score of 10 in both, compared to countries such as the UK or Ireland with scores of 4 and 3, respectively.

Manufacturing is still decisively important in many eastern European regions like Koma'rom-Esztergom in Hungary with a share of more than 40% in regional GDP or Zl'insky' kraj in the Czech Republic where it contributes around 36%. While household debt is highest in Denmark with more than three times the annual personal income, Slovakia scores low with only 50%. Finally, the most financialized region in the sample is London with its famous City as global financial center and a GDP share of finance and insurance activities of 16.64%. On the bottom end of the distribution is the Polish region of Wielkopolskie with only 0.47% in regional GDP.

Table 1 Descriptive statistics of all variables Source: own illustration

Variable	Obs.	Mean	SD	Min.	Max.
Outcome					
Regional financialization	274	3.32	2.31	.47	16.64
Debt					
Sovereign debt	274	94.56	30.04	54.04	153.14
Sub-national debt	274	11.00	7.82	1.59	32.52
Debt of non-financial firms	274	506.97	170.19	235.23	817.32
Debt of financial firms	274	5.58	3.66	1.36	15.32
Household debt	274	124.40	58.64	53.92	314.52
Financial market Banking lev-					
erage	274	1686.71	800.06	686.38	3488.80
Foreign direct investment	274	2.64	2.86	-0.63	13.39
Stock market	274	43.18	24.97	4.77	102.25
Financial center	274	0.07	0.26	0	1
Lead currency	274	0.72	0.45	0	1
Economic sectors Real es-					
tate activities	274	9.22	2.90	1.15	21.34
Manufacturing	274	15.72	8.08	1.95	53.14
Politics and demographics					
Political autonomy	274	6.83	2.64	2	11
Financial autonomy	274	2.21	2.01	0	6
Population density	274	277.85	719.40	2	7234.73

To estimate the effects of the different forms of debt on regional financialization, I calculated five models (M1–M5) that all underwent standard post-regression diagnostics. Data showed some outlier cases (London and I^le-de-France) causing modest non-normality in the distribution of residuals. Since they might distort the estimators due to my relatively small sample size, I ran separate models without them. However, this did not substantively change the regression results, so I opted to keep them. Furthermore, running a robust regression with country-clustered standard errors helped me to address the problem of heteroscedasticity. Multiple checks for multicollinearity showed no signs of concern. Although I sought to model the influence of debt on regional financialization as careful and parsimonious as possible, the complete model (M4) still contains 15 variables, which, due to the relative small sample size of N = 274, limits the possibility of significant causal effects.

In order to obtain robust results, I decided to calculate a separate model for each form of debt (M1–M3) while keeping the other variables as controls. All variables with a significant effect in either model were then also included in the simplified model (M5). Table 2 displays the results.

Table 2 Regression results

Variable	M1	M2	M3	M4	M5
Debt					
Sovereign debt	.009 (.009)			.009 (.009)	
Sub-national debt	015 (.025)			025 (.025)	
Debt of non-financial firms		.001 (.002)		001 (.002)	
Debt of financial firms		027 (.095)		001 (.071)	
Household debt			.012*** (.003)	.013*** (.002)	.012** (.004)
Financial market					
Banking leverage	.000 (.000)	.000 (.000)	.001* (.003)	.000 (.000)	.000* (.000)
Foreign direct investment	.029 (.083)	.047 (.092)	.083 (.063)	.060 (.059)	
Stock market	.013* (.005)	.006 (.007)	005 (.006)	.002 (.007)	005 (.008)
Financial center	3.855*** (.631)	3.886*** (.654)	3.745*** (.576)	3.720*** (.595)	3.658*** (.533)
Lead currency	.626 (.686)	.539 (.662)	.260 (.541)	.380 (.510)	
Economic sectors					
Real estate activities	109 (.112)	076 (.096)	017 (.048)	030 (.060)	
Manufacturing	000 (.034)	005 (.032)	.003 (.027)	.008 (.027)	
Politics and demographics Political autonomy	.028 (.090)	.012 (.142)	.078 (.095)	.090 (.124)	
Financial autonomy	.001 (.151)	019 (.174)	038 (.140)	.011 (.156)	
Population density	.001** (.000)	.001** (.000)	.001** (.000)	.001** (.000)	.001*** (.000)
Constant	1.343 (1.274)	1.627 (1.763)	202 (.754)	457 (1.067)	.662 (.608)
N	274	274	274	274	274
R2	.576	.574	.627	.634	.612

Level of significance: * p\0.05; ** p\0.01; *** p\0.001

Concerning both public and corporate debt, the findings are ambiguous. While the effects of sovereign debt on the national level and debt of non-financial firms follow the assumption of a positive relationship, interestingly, sub-national debt and debt of financial firms possess a negative algebraic sign. Nevertheless, neither effect is statistically significant. The opposite holds true for household debt. In all models (M3–M5), there is a highly significant positive effect that is also larger than that of the other debt variables. Regarding the controls, first, it is important to note that only stock market capitalization (M1) and banking leverage (M3) have comparatively small and statistically weak effects, which also become less impactful or even insignificant in the simplified model. In contrast, having a financial center exerts a strong effect on regional financialization as is expected, while the large coefficient is due to its binary character. Finally, population density is highly significant and across all models. This seems small, but results from its operationalization. All other sectoral and political factors are clearly non-significant.

Regarding the coefficients of determination, it stands out that all models, which include household debt, have a higher R^2 value. Even the simplified model (M5) with $R^2 = .612$ has substantial explanatory potential. Finally, it is worth having a closer look at the strengths of the three significant effects (financial center, population density and household debt). For a better exemplification, it makes sense to empirically illustrate the marginal effects of each variable. For the case of financial centers this is straight forward since it is either present in a region or not. Still, this makes a difference of roughly 3.7 percentage points regarding the share of finance and insurance activities in regional GDP. When dealing with population density, the ceteris paribus effect at first sight seems to be rather minor. However, in the long run it might substantially contribute to an increase in financialization as the following simple and cautious example illustrates: The Spanish region of Comunidad Valenciana already has an above-average level of financialization (Fig. 2) and is – according to official EU projections – expected to experience a population growth of more than 30% or almost 1.5 million people from 2008 to 2030 (Eurostat 2010). Under the given conditions, this increase in population density by 63.57 inhabitants per km² would account for a rise in regional financialization by 0.063 percentage points, equaling another € 62.5 million. Lastly, and potentially even more severe could be the effect of growing household debt. As Fig. 2 shows, between 1995 and 013 household indebtedness has risen by almost 70%. If we now assumed a slower but steady growth by 30 percentage points until 2030, this would entail an increase in regional financialization by around 0.36 percentage points. Other things being equal, for the median region in the sample this would result in an additional contribution of € 58 million by finance and insurance.

2.5 Conclusion

In this paper, I have analyzed the financialization of regions in the European Union and thus contributed to a broader understanding of one of the crucial political economic dynamics in contemporary capitalism. My main objective was to extend the political economic literature on financialization by combining a structural framework with a large-n comparison on the regional level. The main results show that, in addition to common financial market indicators, especially household debt is a major driver of regional financialization. This finding opens the door to a more complex argument about both financialization in Europe and regional development. In this regard, there seem to be three central implications.

First, as we can draw from the map of regional financialization in the EU, there are puzzling cases, which are focal points for finance. Many of them are located in traditional financial centers or economically powerful areas of the core member countries. Still, some are scattered throughout peripheral economies or can be found in regions that have been lagging behind. Also, there are a number of emerging financial centers and interesting territorial units in Southern and Eastern EU members, sometimes as "islands of financialization" that are surrounded by lessfinancialized regions. Therefore, one might argue that financialization has led to a new form of uneven development within Europe through of form of asymmetric (financial) integration (Agnew 2001; Becker and Ja" ger 2012; Becker et al. 2013). Furthermore, we can also turn the table and look for reverse causality. This means that preexisting and reinforced asymmetries across regions could then actually contribute to specific forms of financialization. Secondly, already before the outbreak of the recent global financial crisis, numerous commentators had been warning about the perils of rising household debt. Whether one points to the indirect expropriation by financial market mechanisms (Lapavitsas 2013), the partial and temporary substitution effect for stagnating wages as in privatized Keynesianism (Crouch 2009) or the role of mortgages in different "varieties of residential capitalism" (Schwartz and Seabrooke 2008; Wood 2016), private debt indeed fuels financialization. These aspects then also relate to questions about different political economic growth models (Baccaro and Pontusson 2016) and their sustainability. Household debt can generally spur domestic consumption, but also mitigate lower wages in export-oriented economies. Hence, it might contribute to intra-European macroeconomic imbalances and have a destabilizing effect (Horn et al. 2010). Thirdly, we can look at the bigger picture of European integration and its consequences for regional financialization. For the EU, financial market integration with its goals of harmonization and global competitiveness has been a key project since the 1990s (Bieling 2013). In this context, policy makers are linked to large financial actors with transnational interests (Mu"gge 2006), which might lead to a concentration of market power and attacks on alternative forms of banking (Seikel 2014). As a consequence, European integration shapes regional financialization and can have widespread implications for strategic investment decisions, like capital flows, or everyday financial infrastructure, as it is the case with retail banking.

Despite the contribution of the paper, there are also clear limitations. However, they might animate the discussion on finance and regions and encourage future research. Here, there are at least four promising desiderata. The first would be to broaden the empirical scope by including other relevant economies and making use of most recent data. Acknowledging the importance of the regional dimension and financial indicators, statistical offices keep improving availability and accessibility. Secondly, backing up quantitative findings with structured and focused case studies would enhance our understanding of regional financialization processes. This would enable to analyze different causal mechanisms and paths toward financialization, especially regarding the interplay of institutions, ideas and power and the regional level. Speaking about causality, we could thirdly take a step backward in the causal chain and for example ask why and under which circumstances households become more indebted. Drawing on the main finding of this paper, such an approach could single out regional specificities of finance–debt dynamics. In this context, one could also focus on regional financial actors, like savings banks, and their role in promoting or inhibiting financialization (Mertens 2016). Last but not least, a fourth target for future studies might be the interaction of financial actors across different regions. In this regard, the "financial chains" that link economic spaces (Sokol 2017), for instance via credit, investment and networks, could be a point of departure. Since financial, political and economic distortions continue to be pressing issues, the financialization of regions remains relevant for academics and politics alike.

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Notes

- Industry sectors are according the official Eurostat classification of NACE Rev. 2 (European Communities 2008) with abbreviations in parentheses. The analysis includes 18 member countries of the European Union, referred to as the EU-18 (for details regarding case selection and data composition, see "The financialization of regions: empirical results" section and "Table 3, Appendix"). The period of analysis ends in 2013 for the sake of consistency throughout the paper as comprehensive and comparable data have been available up to this point.
- 2. Christophers (2015) actually differentiates between fees, gains, premia and spread. However, I argue that for the purpose of this paper I can rightfully subsume all four of these under my trichotomy of interest, investment and (fee) income.
- 3. All mathematical operations were calculated with STATA 14.1.
- 4. This excludes the two levels of Local Administrative Units (LAU 1-2) that are used in EU statistics and were formerly known as NUTS 4-5 (Eurostat 2015e).
- 5. I initially included residential loans as an additional variable for (H3), but decided to drop it because of its too strong correlation with household debt.

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Appendix

Country	NUTS	Territorial unit	Cases (of total)
Austria 2		Länder	09 (09)
Belgium	2	Provincies/Provinces	11 (11)
Czech Republic	3	Kraje	14 (14)
Denmark	2	Regioner	05 (05)
Finland	3	Maakunnat/Landskap	19 (19)
France	2	Régions	22 (27)
Germany	1	Länder	16 (16)
Greece	2	Περιφέρειες (Periferies)	13 (13)
Hungary	3	Megyék	20 (20)
Ireland	3	Regional Authority Regions	08 (08)
Italy	2	Regioni	21 (21)
Netherlands	2	Provincies	12 (12)
Poland	2	Wojewo´dztwa	16 (16)
Portugal	3	Entidades Intermunicipais, Região Autónoma dos Açores y Região Autónoma da Madeira	30 (25)
Slovakia	3	Kraje	08 (08)
Spain	2	Comunidades Autónomas, Ciudades Autónomas	17 (19)
Sweden	3	Län	21 (21)
UK	1	Scotland, Wales, Northern Ireland, Government Office Regions of England	12 (12)
Total			274

Table 3: Case selection, territorial units and NUTS levels

Source: Eurostat (2015d)

For some countries, the number of selected cases differs from the actual number of the respective NUTS level. For France, the five overseas territories (*Guadeloupe, Martinique, Guyane, La Réunion* and *Mayotte*) are left out. The number for Portugal is actually higher, because case selection is based on the former classification of NUTS 2010. Since the political-administrative reform and the territorial rearrangement related to the current NUTS 2013 division have entered into force in 2015, it would not have been compatible with the other data used in this analysis. Finally, in the case of Spain, the two autonomous cities of *Ceuta* and *Melilla* are excluded.

Group	No.	Name	Operationalization
(I) Debt	01	Sovereign debt	Consolidated in % of GDP
	02	Sub-national debt	Percentage of GDP
	03	Debt of non-financial firms	Liabilities in % of GDP
	04	Debt of financial firms	Liabilities in % of GDP
	05	Household debt	Debt in % of income
(II) Financial market	06	Banking leverage	Assets in % of equity
	07	Foreign direct investment	Net inflows in % of GDP
	08	Stock market	Percentage of GDP
	09	Financial center	Yes/no
	10	Lead currency	Yes/no
(III) Economic sectors	11	Real estate activities	Gross value added in % of GDP
	12	Manufacturing	Gross value added in % of GDP
(IV) Politics/demographics	13	Political autonomy	Regional Authority Index (0–11)
	14	Financial autonomy	Regional Authority Index (0-7)
	15	Population density	Inhabitants per km ²

Sources: AK VGRDL (2015), GUS (2015), ECB (2016); Eurostat (2015a, b, c, d, 2016); Hooghe et al. (2016), IMF (2016), OECD (2013), Quandl (2016), Z/Yen Group (2014).

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Chapter 3

Leading by Example?

Abstract

To identify changes in financial systems is fundamental for understanding political economies. Dealing with the financialization of savings banks in Germany this paper contributes to filling a gap regarding two crucial yet underappreciated topics: the financialization of banks themselves and the role of alternative and public monetary financial institutions in time of global finance. Hence, the paper first develops a two-dimensional concept of the financialization of banking, before conducting a cross-temporal description of two diverse cases as a structured, focused comparison. Building on rich empirical evidence, I argue that we can find ample proof for a process of a *differentiated financialization* in terms of both a shift towards market-based banking and the adoption of a financial logic. Challenging conventional notions of savings banks, my findings provoke a renewed discussion about capillary percolations of financialization and the pitfalls they pose to alternative banking in public and regional finance.

(Paper submitted to World Politics, 26 March, 2018)

3.1 Introduction

"Since unification the German financial system broadly has moved to a significant degree away from a bank-based towards a market-based financial system" (Deeg 2010a: 117-118).

Very often, defining trends and developments in the world of finance, like the one expressed in the introductory quote, are associated with big players such as international commercial banks, investment banks or hedge funds. Consequently, a large part of the academic literature puts them at the center of attention. However, if we assume the entire financial system to gravitate towards a globally integrated, interdependent and intertwined cosmos, understanding how the whole variety of monetary financial institutions (MFIs) evolves seems mandatory. In the aftermath of the global financial crisis, the political economy debate about the role of special banks and other MFIs gained momentum. A number of contributions took up the challenge and have investigated building societies (Marshall et al. 2012), Landesbanken (Seikel 2014; Trampusch et al. 2014), central banks (Braun 2016; 2018), shadow banks (Ban and Gabor 2016; Helgadóttir 2016) or development banks (Mertens and Thiemann 2017; 2018). Looking for analyses of savings banks in this stream of literature, it becomes clear that they usually approach the topic differently. Studies either ask in which way national sectors have transformed in the long run (Italy and France) (Butzbach 2015; 2016), how savings banks have been transmission belts or fire accelerants of the financial crisis (Spain) (Ruiz et al. 2016; Portas 2017) or in how far they are affected by EU regulation (Deeg and Donnelly 2016; Howarth and Quaglia 2016; Semenyshyn 2017).

Notwithstanding the important insights previous research on savings banks has generated, I depart from this route in some ways and aspire to supplement the existing debate with a new perspective. By connecting different dots from strands of political economy, economic geography, sociology and banking and finance, I develop a comprehensive concept of a *financialization of banking* as a major phenomenon within the financial gearbox of contemporary capitalism. Since it is necessary to first empirically validate any phenomenon before testing causal claims, this paper presents a theory-driven descriptive analysis that seeks to identify fundamental change over time. I follow Caramani's (2010) pronounced accentuation of the importance of cross-temporal description for political science, which "allows us to *assess the empirical balance* between similarity and dissimilarity, (...) to *get dependent variables right* (...) (and) to *discover phenomend*" (Caramani 2010: 43, italics in original). Focusing on savings banks in Germany then permits me to amend the work on changes in national financial systems and the role of public banks with both a financialization perspective and a systematic case study. Given the crucial position that thrifts still occupy in the German political

economy, identifying financialization would challenge their image as providers of patient capital via traditional banking. I aver that this view is actually too lopsided and that digging deeper helps us to get a more nuanced understanding of what is really going on in the world of German savings banks. Consequently, the two research questions of this paper read: *Does the financialization of savings banks in Germany exist and, if so, how does it present itself*?

Tackling these questions also implies disaggregating the sector and refining case selection. Albeit usually discussed in their entirety, German Sparkassen are independent institutions. They are organized in 12 regional associations, each with a separate support fund and deposit protection scheme. On the national level, every regional association is a member of the German Savings Banks Association (DSGV), a complex network organization that also accommodates other institutions like the Landesbanken, building societies or insurance companies. As of 2016, there are 403 savings banks in Germany, of which 398 operate under public law (DSGV 2017).¹ As public banks, Sparkassen are either operating within the boundaries of cities, districts (Landkreise) or associations of districts (Zweckverbände). To factor in this enormous heterogeneity, I draw on Gerring and Cojocaru (2016) and narrow down my selection to two *diverse cases*, that represent typical subtypes of the distribution. Since previous research has emphasized the difference between small and large savings banks (Seikel 2014; Trampusch et al. 2014), I apply a standard criterion for bank size, the balance sheet total, as the descriptive feature that is excluded from my case study but serves as the basis for case selection (Gerring and Cojocaru 2016). Figure 1 illustrates the distribution as a box plot. With a median of 1.86 billion Euro, the landscape is fragmented and dominated by small and mediumsized savings banks. On the other end, notable players possess balance sheet totals that are multiples of the median, ranging from ten billion (Dortmund or Düsseldorf) to up to twenty billion (Frankfurt) and more.

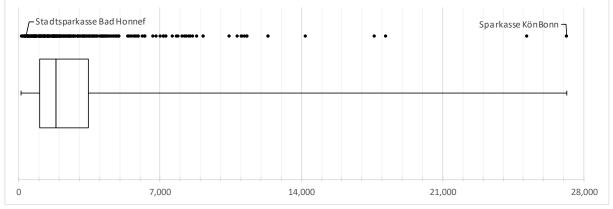


Figure 8: Balance sheet totals of German savings banks, 2016 (in MEUR).

Source: DSGV (2017), own illustration.

Out of this bandwidth I select the *Sparkasse KölnBonn*, Germany's biggest savings bank under public law with a balance sheet of 27.1 billion Euro, and the *Stadtsparkasse Bad Honnef*, number 368 and on the bottom end of the first quartile with less than 0.5 billion Euro. Both are members of the same association, the Rhenish RSGV, which further enables to control for the regional context. With reference to the basic methodology of a structured, focused comparison, I apply the same analytical framework to both cases (George and Bennett 2004). To empirically validate my concept, I have collected, extracted and analyzed an extensive amount of primary source data from annual reports, press releases and local newspapers. Furthermore, I have conducted five expert interviews with high representatives from different savings banks. I focus on the time period of 1986-2016, thereby setting the year of the 'Big Bang' as starting point, and the year of most recent data availability as the end of my analysis.

To answer my research question, the remainder of the paper is structured as follows. In the next section I connect the literature on the political economy of banking with the work on financialization and develop my concept. Section three elaborates on measurement and operationalization from the dimensional to the indicator level. This is proceeded by section four, which situates the two cases in the general context of savings banks in Germany and the Rhineland. The main section five then presents the actual case study and investigates the development of the *Sparkassen* over time. Finally, the concluding section six discusses the results and reflects on the broader implications of my findings.

3.2 Financialization and the political economy of banking

In the academic literature on banking, traditionally two streams stand out. One stems from comparative political economy (CPE) and the other from economics. Despite many differences, both place banks in the dichotomy of market-based vs. bank-based financial systems. While the former are characterized by the prevalence of capital markets as major channels of investments and savings, the latter rely more on bank loans and patient capital. From an economics perspective, the debate centers around what determines the development of a certain type of financial system (Demirgüç-Kunt and Levine 1999; Ergungor 2004) and which one is preferable in terms of economic growth (Levine 2002; Chakraborty and Ray 2006). In CPE, the usual point of departure is John Zysman's (1983) seminal contribution on national financial systems and governments' ability to shape industrial policies. There, he singles out "three models of finance" (Zysman 1983: 69), each characterized by a distinct relationship between financial institutions, non-financial firms and state bureaucracies. Although Zysman puts no explicit focus on banks as such, as he is more interested in structural interactions of different actors, his study highlights central aspects of banking, like the roles of commercial, public and investment banks, the importance of long-term versus short-term credit or the influence of states and (capital) markets on bank behavior (Zysman 1983).

For many years, much of the institutionalist CPE literature dealing with banks and finance has been deep-seated in the Varieties of Capitalism (VoC) framework, and has thus, by and large, maintained the ideal-type dichotomy between bank-based and market-based systems (Hardie, Maxfield and Verdun 2013). In addition, studies guided by VoC rarely dealt with finance on its own, but regularly asked how financial systems institutionally complement Liberal or Coordinated Market Economies. Therefore, changes in finance were usually looked at according their impacts on corporate governance and coordination mechanisms within the economy (Vitols 2005). Despite essential insights such as the unraveling of the former *Deutschland AG* in Germany (Beyer and Höpner 2003; Deeg 2010a), different patterns of (non-)change across countries (Culpepper 2005) or internal differentiation regarding firm size and strategy (Deeg 2009), it seems that banking and finance have been mainly treated in relation to non-financial firms, if not merely as add-ons. Yet, all these findings are crucial. They form the starting point on which my study builds, but also, from which it departs.

Since "all financial systems in advanced capitalist economies have changed substantially over the last two decades (...) and many see them converging on a market-based system" (Deeg 2010b: 315), the question remains what these dynamics mean for banking. In general, one would assume a decline in traditional relationship banking, the increasing reliance on capital markets for funding and investment, the acceptance of a higher degree of risk and, finally, a decreasing provision of patient capital (Deeg and Hardie 2016). While many observers point out to the leading role of large commercial banks and investment funds, special banks are usually victimized or seen as innocent and unaffected. In order to fully comprehend what has been going on in banking, I argue that it is promising to reflect the aforementioned wide-ranging developments as the *financialization of banking*.

As an interdisciplinary framework, financialization stresses the role of financial actors, institutions and logics and their influence on the economy, politics and society as constituents of present-day capitalism (Epstein 2005; van der Zwan 2014). Following Lapavitsas (2011), one can point out three fundamental elements of financialization: the acquisition of financial capacities by large non-financial corporations, the expansion of financial market mediation by banks and the increasing financial involvement of households as both creditors and debtors. In addition, a fourth element concerns the financialization of the state and its institutions on different levels of government

(Fastenrath *et al.* 2017, Lagna 2016, Peck and Whiteside 2016). For all these elements, banks hold a central position. Whether directly or indirectly involved, they not only function as important transmitters of financialization but are equally affected by these very same processes. First, when NFCs increase their financial capacities, relationship banking is challenged. Second, when households become more integrated in financial markets, this opens up new business areas in banking. Third, when governments issue bonds via primary dealers or use tools like tax increment financing, bank loans as a traditional means of public funding become less important. Eventually, a combination of these aspects then in the end fosters the expansion of and reliance on financial market mediation on the side of banks.

Although financialization research has established itself within both comparative and international political economy, there is still a long and rocky road ahead. In this regard, analyses covering the financialization of banking in general and the role of public or special banks in particular, largely remain a path yet to be traveled. Consequently, before trying to measure the financialization of banking it must be singled out as a stand-alone concept. I suggest to capture via two-dimensions, the intensification of *market-based banking* and the adoption of a *financial logic* as guiding principle for corporate reorganization and a changing business model.

The first dimension, market-based banking (Hardie et al. 2013a; Hardie and Howarth 2013b), allows to overcome to persistent dichotomy in the political economy of finance. By avoiding to squeeze the entire national financial system into either category, market-based banking (MBB) acknowledges the fundamental, yet heterogeneous, change going on in finance. In contrast to a narrative that interprets common trends across financial systems as moves towards a disintermediated, capital markets-based ideal type, market-based banking continues to highlight the importance of banks as key actors (Hardie and Howarth 2013b). Therefore, it is able to capture developments, which differ in degree but point into the same direction. In their concise analysis of eight Western economies, Hardie et al. (2013a) carve out the main components of market-based banking. Rather than possessing financial power over credit and interest on their own, the general dynamic stems from the banks' fortified integration financial markets and their dependence on them. This means that on both the assets and liabilities side banks increasingly enter market transactions. Two stylized examples can illustrate this trend. First, regarding liabilities, banks shift away from traditional deposit business. Instead, they more and more tap on direct market sources for funding, for example by issuing bonds or engaging in credit relationships with other financial institutions. Secondly, concerning bank assets, both the composition and importance of conventional loans alter. On the one hand, a rising share of the money banks lend goes to other financial institutions, as inter-bank loans, or households, as consumer or mortgage credit. On the other hand, banks also directly look for other profitable financial investments more openly. Examples of this are increased securitization activities or portfolio trading (Hardie *et al.* 2013a).² To a large extent, these changes have especially affected the classical business of many retail banks. A fact that is exposed by the importance of fee income compared interest gains. However, this "retail revolution" (Ertürk and Solari 2007: 378) would not be complete without taking the redesign of banks as broad financial service providers, their very own rebranding and, ultimately, the deep-rooted changes in their business model into consideration. This is where the second analytical dimension of my concept comes into play.

Complementing MBB, the adoption of a *financial logic* is the flipside of the financialization of banking. Although scholars from different disciplines have picked up aspects of what I want to stress with this dimension, there is no coherent use of the term. Broadly speaking, financial logic (FL) refers to many intangibles of economic activity, such as culture and cognition. They affect business models, strategies, behavior and organizational structures. Mirrored by households, corporations and organizations, a financial logic for instance reflects the attitudes and practices of everyday borrowing and credit (Fligstein and Goldstein 2015; Langley 2008), changing business models (Almandoz 2012; Botzem and Dobusch 2017; Froud et al. 2017) or sense-making frameworks within organizations (Fastenrath et al. 2017; Fligstein et al. 2017). Despite the manifold reception of FL characteristics, I argue that we can distill two central anchor points as a recurrent theme: first, the notion of risk and its management, and second, the recalibration of the various bank-stakeholder relationships by prioritizing certain groups over others. A defining characteristic of globalized financial markets is not only their growing complexity, including the construction of the products sold in them, but also the luring promise of quick and high returns. As a consequence, economic actors that participate in financial markets have to take into account the varying degrees of risk inherent to the transaction they engage in. Therefore, over the course of the deepening and widening of these markets, different techniques have been developed to cope with this problem and move 'from uncertainty toward risk' (Carruthers 2013) as the history of credit rating agencies exemplarily demonstrates. If the risk-return dichotomy is constituent to financial markets and financialization implies their increasing importance, we can assume risk management to become integral to this process. This is in line with what Fligstein and Goldstein (2015: 578) discern as a 'deepening culture of risk-taking' as part of an overarching emergence of a 'finance culture'. In their study on the financialization of sovereign debt management, Fastenrath et al. (2017) make a similar case by pointing to the fact that financialization carries with it a shift towards financial economics in the way how the economy is perceived. For them, one of the decisive features is the establishment of risk identification and management structures within debt management offices. Complementary to

the centrality of risk is the association of a financial logic with the more general trend of changing corporate business models, as "the collection of organizational actions taken to meet the organization's primary objectives" (Froud et al. 2017: 2). The substantial issue here is that a business model not only informs about what a company does to create value and in which way this is executed. It furthermore gives us insights on the ecology of the firm, namely its relationship to different stakeholders. Identifying a trade-off between financial viability and stakeholder credibility, Froud et al. (2009) distinguish a public from a private sector business model. Subsequently, this is amended by analyzing financialized business models of UK retail banks (Froud et al. 2017). Having emerged after the 1986 Big Bang, this model privileges one key stakeholder group, shareholders as investors, over others such as the government, employees or customers. In order to maximize the return on equity (ROE), a given bank is eager to cut costs, close branches, develop new property lending schemes and reduce traditional savings and loan activities. Concentrating on shareholders at the expense of other stakeholders, I argue, expresses not only a shift towards a financialized business model, but rather unveils the more fundamental consolidation of a financial logic. However, since savings banks fall into the category of 'alternative banks', which spans from public banks over cooperative banks to postal savings banks and others, we have to put certain restrictions to the applicability of a simple shareholder-value orientation. As Butzbach and von Mettenheim (2015) highlight, alternative banks share common characteristics regarding their goals, governance and business model that differ from private banks. Moreover, as public-law institutions, German savings banks are not allowed to sell equity to private investors.³ Thus, for the purpose of my analysis, I emphasize that the translucency of a financial logic in the business model has to be captured as a stronger pronunciation of cost-return calculations at the expense of maintaining a tight stakeholder relationship vis-à-vis the local public or community. In other words, "doing business" becomes more important while the provision financial inclusion takes the backseat.

3.3 Measuring the financialization of banking

Based on the aforementioned theoretical elaboration I now turn to my operationalization. Following Goertz (2006) Table 1 untwines the concept of a financialization of banking, the phenomenon on the basic level. Its two dimensions, MBB and FL form the secondary level, before the indicator level specifies the precise measurement. As the first dimension covers market-based banking as a reinvention, I include revenues, assets and liabilities of banks, three distinct categories related to this development (Erturk and Solari 2007; Hardie *et al.* 2013a; Hardie and Howarth 2013b; Hardie and Macartney 2016).⁴ While traditional banking is largely based on generating *interest income* via loans, their role diminishes in the market-based counterpart. There, in comparison to classic credit business, other sources of income such as fees and securities become more important. Fees are realized via an array of very different contractual and advisory activities of which investments on behalf of clients and insurance sales are the most prominent ones. For example, Allen and Santomero (2001) argue that rising shares of fee income have been a crucial part of financial sector changes during the 1990s, while Lepetit et al. (2008) connect this trend to declining interest margins for banks across Europe. Complementing the revenue trinity, income from securities occurs via proprietary trading, a characteristic once nearly exclusively ascribed to large investment banks (Erturk and Solari 2007). From an accounting perspective, the assets side of balance sheets informs us about the future benefits a company can expect based on the use of its economic resources. Assets can be tangible, such as actual buildings, or financial, like loans and securities. I break down the balance sheets into loans and securities, while splitting the former into money lent to nonfinancial borrowers (companies, individuals, public authorities) and credit granted to monetary financial institutions. In addition to trading activities, such a differentiation allows me to identify a potential increase in volume of interbank lending. This is especially the case when we look at a bank's liabilities. They form the verso of a balance sheet and list the economic resources of a company, including the ones it owes to outside parties. In other words, while the composition of the assets side tells us where a bank puts its money, the liabilities side shows where it is coming from. There are mainly three basic types to account for: Liabilities vis-à-vis non-financial institutions cover traditional customer deposits, liabilities vis-à-vis monetary financial institutions report interbank loans and securitized liabilities include obligations and other securities a bank might issue to raise capital. Growing shares of the latter two and a smaller role played by former are another fundamental feature of market-based banking (Hardie et al. 2013a; Hardie and Howarth 2013b).

Concept (basic level)	Financialization of banking		
Dimensions (secondary level)	Market-based banking	Financial logic	
Indicators (indicator level)	Interest income (-) Fee income (+) Income from securities (+) Loans to nonfinancial borrowers (+/-) Loans to MIF's (+) Securities (+) Liabilities vis-à-vis non-financial inst. (-) Liabilities vis-à-vis MFI's (+) Securitized liabilities (+)	Active risk management Changing staff structure Outsourcing Downsizing Internationalization Brand building	

Table 1: The financialization of banking: dimensions, categories and indicators.

Source: own illustration. Note: Signs in bracket indicate a positive or negative trend regarding financialization.

The second dimension deals with the specifics of what I call *financial logic*. Although German savings banks continue to be a special MFIs which are territorially bound and not solely for-profit, I argue that it is necessary to also focus on developments which are mostly not directly reflected in balance sheet numbers. As formulated in the preceding section, a specific notion and handling of risk as well as the percolation of a financialized business model are crucial. Part of the general trend in international banking has been the addition of a "new market portfolio" to the traditional "credit portfolio" (Aglietta and Breton 2001: 441). However, making use of new instruments and investment opportunities requires the complementary implementation of an active risk management, the first indicator of my second dimension. Examples are for instance the application of credit-scoring techniques (Leyshon and Thrift 1999) or the use derivatives to hedge against price volatility (de Goede 2004) as a characteristic of intensified integration into global capital circulation (LiPuma and Lee 2005). This goes hand in hand with a changing staff structure, very often associated with sharper separation between front and back offices. An illustrative example is the hiring of specialized mathematicians or physicists to carry out complex modeling techniques (Fastenrath et al. 2017). This is connected to my next indicator, outsourcing. It highlights the significance of hiving off certain tasks or sometimes entire departments of a firm. Concerning banking this includes most prominently IT and information systems (Baldwin et al. 2001). On a larger scale, many of these changes can be ascribed to corporate transformations in the era of global financial markets. Studies of corporate governance have extensively analyzed parts of such restructuring efforts by firms that are now "managed by markets" (Davis 2009) and subdued to a "finance conception of control" (Fligstein 1990) while seeking to maximize shareholder value (Lazonick and O'Sullivan 2000). However, as public-law institutions, German savings banks are, until now, not subject to the intrusion of private (international) investors. Yet, as economic actors, I assume them to be exposed to economic pressure from *financial* market competition. Although they have to fulfill the public task of providing access to credit and supplying broad strata of society with a financial infrastructure, being competitive and increasing their turnover has become more and more important for them (Interviews II and III). Such a potential tension between markets, the public and the community can easily put savings banks in a quagmire. I argue that a reconfiguration of the banks' relationships to various stakeholders has taken place. As a consequence, cutting costs and becoming more profitable and competitive now, ultimately, trumps other objectives. The next indicator, *downsizing*, inter alia reports branch closures, a crucial, and geographically unevenly spread trend in banking (Hackethal 2004; Leyshon et al. 2008). Next, I assume to detect aspects of internationalization, which does not necessarily imply to go abroad and open new offices. Also, fostering international networks and assisting internationally-oriented customers in cross-border activities are emblematic features thereof. Finally, strategies of brand building complete my FL dimension. Superficially yet prominently

exemplified by "the new layout of, and activity in, bank offices" or bank branches "dominated by cubicles and work stations" (Erturk and Solari 2007: 369), banks reinvent themselves to be able to cater the needs of very different stakeholders. Furthermore, central themes or catch phrases like being "modern", "dynamic" or "equipped for the future" can be attributed to brand building.

After having developed the concept and indicators, I now turn my cases. In the next section I briefly recall the role of saving banks for the German political economy and their history in the Rhineland. Following this, I analyze the financialization of the two *Sparkassen* KölnBonn and Bad Honnef.

3.4 Savings banks in Germany: the case of the Rhineland

For a long time, Germany has been characterized as the epitome of a bank-based financial system, due to the prevalence of its Hausbankpringip and the centrality of different categories of banks for credit provision and industrial development (Deeg 2009; Detzer et al. 2017). Although the 1990s sparked substantial change on several levels, the country's banking sector remains more fragmented and universal than those of other developed capitalist economies (Detzer et al. 2017; Hackethal 2004). Part of this fragmentation is the unique structure of the German banking system, in which three distinct pillars of private, public and cooperative institutions coexist. While the former have traditionally been responsible for large industrial development and, especially in recent years, international investment banking, the latter are not strictly profit maximizing. Among them, savings banks, going back to 1801, when the first Sparkasse was founded in Göttingen, have been playing an important role for lending, financial infrastructure and industrial development on the regional and local level. They were the place to go for craftspeople, the evolving urban working and middle class, SMEs or local public entities (Detzer et al. 2017). Demonstrating their resiliency, the Sparkassen have withstood economic and financial crises as well as fierce liberalization attempts by the European Commission and private commercial banks over the course of the past thirty years (Seikel 2013; Thomes 2013). Today, they "(...) have proved to be a stabilizing factor for the German financial system and economy" (Bülbül et al. 2013: 10). Figure 2 depicts their prominent position in the domestic market in 2016. With a share of 27 % in total lending to the nonfinancial sector and a deposit share of 26 % respectively, savings banks battle with their private competitors for the pole position and outperform credit unions easily in this regard.⁵ Although the overall situation of the domestic business in the German banking system seems to have largely stabilized since the new Millennium, we can discern two interesting trends, which might hint at an ultimate reversal: first, savings banks have increased their share in lending to nonbanks by eight percentage points

since 2000, while private banks have stagnated. Second, the deposit share of the thrifts has remained constant, whereas private banks made substantial inroads to this area and have now taken the lead with an increase of ten percentage points in the same period of time (Bundesbank 2018; Bülbül *et al.* 2013).

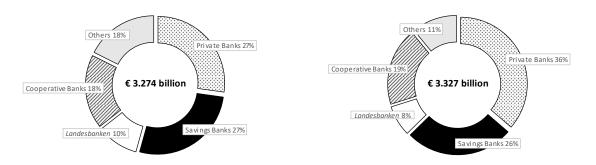


Figure 9: Market shares, domestic transactions with Non-MFIs in 2016, lending (left), deposits/borrowing (right).

Source: Bundesbank (2018), own illustration.

However, since the DSGV serves as a national umbrella organization with strong regional members, we have to study savings banks on the sub-national level to effectively assess their importance and separate changes from continuities. In his in-depth study on the political economy of the German Länder, Deeg (1999) for instance stresses the roles of savings banks for regional economic policy networks in Baden-Württemberg and North Rhine-Westphalia (NRW). In both, the Sparkassen were crucial for more decentralized SME financing and flexible sectoral reorganization. Comparing the rise and fall of two of the most important Landesbanken, the (former) WestLB of NRW and the Bavarian BayernLB, Trampusch et al. (2014) highlight very often contradictory role played by the savings banks and their regional associations. In either case, thrifts were eager to keep the Landesbanken out of the market for SME lending. Additionally, a second line of conflict emerged in NRW, where there was a noticeable divide between large and small savings banks. While the former, which are mainly located in the Rhineland, like Köln, Bonn or Düsseldorf, dominated the RSGV as their regional association, the latter formed the majority in the SVWL, representing the Northeastern part of the state.⁶ Until the WestLB was first split up in 2002, before being finally dissolved ten years later, both savings banks associations regularly clashed over the course of action the Landesbank should take and the priorities it should set in its business model (Trampusch et al. 2014). But these type of diverging interests do not solely come to the fore on between different associations. They have also been existent within the RSGV itself, as there had been many smaller institutions in the past, before their number started to decrease due to mergers or 'acquisitions' by larger thrifts.⁷ As of now, there are currently thirty-one independent savings banks in the RSGV area. Figure 3 maps the geographical spread of its members. It covers the Western part of North

Rhine-Westphalia, that consists of two of the state's five administrative regions, with Köln as metropolis and Düsseldorf as state capital. While thrifts in the Rhineland normally operate in neighboring territories that are larger in rural and smaller in urban areas, some institutions conduct business in non-adjacent municipalities, usually as a result of functional alliances.

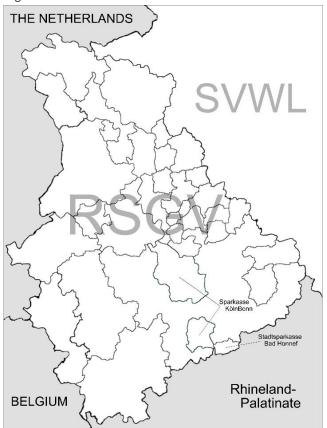


Figure 10: Business area of the RSGV and its members.

Source: RSGV (2018), Wikimedia Commons⁸, own illustration.

Before a long process of sectoral consolidation started, the story of the Rhenish savings banks had been one of expansion and growth. Their roots can be traced back to the 1840s, when the first wave of rapid thrift formations took place (Pohl 2001). This development culminated in the creation of the predecessor to the RSGV in 1881 (RSGV 2006b). Since their inception, the *Sparkassen* played a vital role in supporting economic development. Most importantly, the provided financial services to working class families and small business, encouraging the former to save for the future and granting loans for equipment acquisitions to the latter. In the following turbulent decades, savings banks first went through a long phase of stabilization and solidification, before the Great Depression and World War II, left the entire country, including its financial system, in total devastation. Yet, in the postwar years, the *Sparkassen* were a crucial pillar of economic and financial reconstruction. They participated from the long boom period the same way they contributed to it. Coincidently, around the same time Germany's economy witnessed its first (minor) recession in 1967, the circumstances, under which the savings banks operated, slowly but steadily began to change as well (Pohl 2001).

In that same year, following the decoupling of bank interest rates, which had previously been tied to official Bundesbank rates, "savings banks entered market competition" (RSGV 2006b: 6).9 During the heated discussions in the former Central Credit Committee (Zentraler Kreditausschuss – ZKA) that preceded this decision, the Sparkassen feverishly argued for a deregulation, which they saw as a promising liberation from more than thirty years of political intervention by federal institutions (Hillen und Forndran 2003). Further notable modifications were first, the amendment to the NRW Savings Banks Act in 1970, which fostered a further professionalization by encouraging mergers and establishing new salary structures for board members, and second, the introduction of a series of new investment opportunities for the customers, such as obligations or coupon bonds (Pohl 2001). Overall, a combination of structural changes in the economic context, gradual political deregulation efforts, the introduction of new financial products and a diversification of customer behavior lead to a very different outlook for savings banks. It was this regional expression of a new environment, that had come about on a broader scale in the realm of finance over a span of nearly two decades, which ultimately set the tone for the developments that followed suit from the mid-1980s onwards. Famously exemplified by the 1986 Big Bang, financialization began to take off and turned the world of banking upside down.

3.5 The financialization of savings banks

Starting in the 1980s, many core features of the long-standing activities of RSGV savings banks came under pressure. Most importantly, the mortgage loan and local authority loan business, two former pillars of their day-to-day operations, became less profitable. Due to fiercer competition from *Landesbanken* and mortgage banks, the implementation of municipal budget restraints as early signs of austerity, and a generally slackening construction activity regarding private residential buildings, thrifts had to adjust to new conditions (Pohl 2001; RSGV 1987). In addition, over the thirty-year time span of my analysis, there were further scope conditions one has to consider. First, net yields and bank rates, which, despite two brief steep peaks in 1988-91 and 2000-01, were on a secular decline (Bundesbank 2018b). Second, customers became more sensitive regarding risk, return and duration of their assets. Third, the rising importance of participating in stock market and the corresponding technological change had to be embraced by all banks alike (RSGV 1989). Fourth, further liberalization and deregulation efforts in the context of EU financial market integration as part of the SEM program like the Capital Liberalization Directive (1988), the Investment

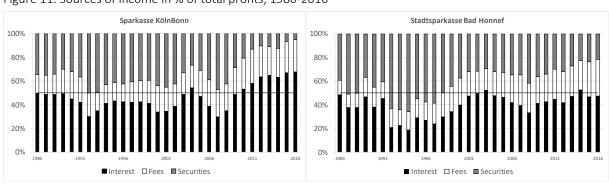
Services Directive (1993), the Markets in Financial Instruments Directive (2004) and, in between, the establishment of the Euro as a common currency in 1999/2001 (Bieling 2003). Fifth, the 1995 amendment to regional NRW Savings Banks Act, which had been lobbied for by the RSGV for years in advance. The new law introduced the so-called *constricted universal banking* ("eingeschränktes Universalbankprinzip"), thereby allowing savings banks more flexibility in conducting their operations by reducing regulations and opening up new business areas (RSGV 1995). Sixth and finally, the German unification offered new market shares to compete for and many possibilities for business expansion through the integration of the DDR savings banks into the DSGV. It is important to note that nearly all these developments were highly anticipated and strongly supported by the savings banks (e.g. RSGV 1988; 1990; 1995).

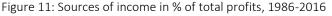
This multifaceted picture forms the background against which I now seek to trace the financialization of Rhenish savings banks according to my indicators. I first put an emphasis on the assumed shift towards market-based banking, before I then deal with the adoption of financial logics in more detail. Recalling my case selection, I specifically focus on the two savings banks of *KölnBonn* and *Bad Honnef* as diverse cases. The former resulted from a merger between the regional savings banks powerhouses of Köln and Bonn in 2005, which themselves date back to 1826 and 1844 respectively and underwent different restructurings throughout their existence (SK KölnBonn 2018a). With a balance sheet total of 27.1 billion Euros, the *Sparkasse KölnBonn* is currently the biggest savings bank under public law in Germany. The latter, the *Stadtsparkasse Bad Honnef*, was founded in 1897. With a balance sheet total of 471 million Euro, it is among the thirty smallest thrifts in Germany. Although the local savings bank has always been overly proud to remain an independent institution that had withstood all trends of mergers and sectoral concentration (Interview I; SSK Bad Honnef 1997), it finally announced in December 2017 to start negotiations to join its much bigger neighbor, the *Kreissparkasse Köln* (General-Anzeiger 2017), which itself is the product of a many of formerly independent thrifts.

3.5.1 Dimension one: market-based banking

Starting with my first three indicators, figure 4 breaks down the earnings reports of the two savings banks into interest income, income from securities and fee income.¹⁰ It becomes immediately clear that with the exception of very few years in the late 1980s and early 2000s, which correspond to the aforementioned brief peaks in net yields, both thrifts realized the majority of their profits as non-interest income. Only recently, after the financial crisis, and only in the case of the SK Köln-Bonn, interest income surpassed the 50 % mark in comparison to the other two sources of revenue.

Overall, we see an increasing importance of fee income for both Sparkassen, which more than doubled from 12-15 % in 1986 to roughly 30 % in 2016. Correspondingly, income from securities always formed a significant part of the revenue structure, with constant shares of 40-50 %, until an observable reduction took place in the same period as interest income started to rise again.





Sources: Annual reports and Bundesbank (2018a); own illustration.

In this respect, a number of peculiarities and additional aspects have to be kept in mind, which clarify the centrality of fees and securities. First, income from securities is partially related to fee income. On the one hand, Sparkassen practice proprietary trading (depot A), and thus realize direct securities income. On the other hand, they perform fee-based retail brokerage (depot B). Second, the other major form of fee income stems from selling real estate and insurance contracts. This is either done directly by the savings banks or via the respective specialized companies of the Finanzgruppe like the Provinzial insurance, the LBS building societies, which are strong players in the regional real estate markets, or the DekaBank, a large investment and asset management firm. Third, savings banks in general as well as KölnBonn and Bad Honnef in particular, have notably closed the gap to private banks regarding net non-interest income as the average difference between them has shrunk from around 15 percentage points to just 5 in 2016 (Bundesbank 2018a; figure A1, appendix). These tendencies are backed up by further evidence from annual reports and interviews. The SK KölnBonn for example mentioned insurance and real estate activities as "becoming more and more important" and "market segments with growth potential" (SSK Köln 1998: 18). The smaller SSK Bad Honnef states that it puts a "main focus" on "transactions on a commission basis" and that it will "push to seize its full potential in the business area of retirement provisions" aiming at a "holistic financial counseling that increases the use of financial products by its customers appropriate to different phases of life" (SSK Bad Honnef 2007: 17). One interviewee remarked that, since the end of the 1990s, for the smaller Sparkasse, retail brokerage was the dominant aspect within the general trend towards a diversified investment strategy that also included product contracts outside the Finanzgruppe with partners such as JP Morgan or Flossbach von Storch (Interview

II). For the bigger *Sparkasse*, interviewee III stressed the need of proprietary trading to "generate revenue via speculation" as compensation for a slackening credit business from the 1990s onwards.

Figures 5 illustrates the development of my next three indicators, all concerning the assets side of the balance sheet. In parts, they reflect the same trends as the composition of the earnings statements, although with some important restrictions. For both Sparkassen we can identify a constant, if not growing percentage of securities in total assets of 20-30 %. Yet, while KölnBonn, in accordance with its decreasing income from securities, finally reduced its share to 12 %, Bad Honnef maintained a high level despite a similar slowdown of profitability. This can be partly understood as a combined result of deindustrialization and the aging demography of its constituency (Interview IV). The other two asset side characteristics of market-based banking, a rise in claims on MFIs with a correlated trend of decreasing loans to non-financial institutions, cannot be confirmed straight ahead. Other than two or three years in the beginning of the 1990s, interbank loans played no role as assets for both savings bank. Their share remained flat or eventually became irrelevant, while claims on non-MFIs constantly oscillated around the 60 % mark. This is in stark contrast to Germany's big four commercial banks, where the same numbers changed from 20 % to 30 % (interbank assets) and 60 % to 20 % (loans to non-MFIs) respectively (Bundesbank 2018a). However, to draw a full-blown picture, we have to unearth specific credit characteristics that are not represented in the balance sheet numbers available. One of them is the rise of private consumer credit in contrast to mortgage or long-term loans. Interview evidence confirmed a huge variation with regards to the socio-demographic environment of each savings bank. Due to the relatively wealthy population of Bad Honnef short-term consumer credit always remained "underdeveloped", because "if somebody wanted to buy a car, he very often paid in cash ... while on the other hand there were savings banks in the Ruhr area where it was absolutely normal to take out a loan for every washing machine" (Interview II). Yet, there were always incentives and concerted initiatives within the entire RSGV to try to expand consumer credit and make it more attractive. Corroborating this assessment, interviewee III further adds that due to the efflux of the classic consumer credit to new offers of direct financing by various retailers such as car sellers, overdraft credit became more and more lucrative for many savings banks. This connection between crowding out and debt entanglement was described as follows: "Consumers took out a loan from their car dealer and payed the monthly installment using the overdraft credit on their checking accounts ... This model was way more attractive for us from a business perspective as interest gains were higher and administration costs, including regulatory standards, substantially lower" (Interview III). Both, consumer credit and overdraft are important aspects of the development I want to trace (Erturk and Solari 2007).

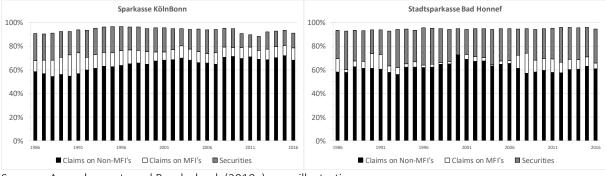


Figure 12: Bank assets in % of total assets, 1986-2016.

Sources: Annual reports and Bundesbank (2018a); own illustration.

In addition to untangling credit characteristics, it also makes sense to fan out the different types of securities held. Figure 6 depicts the composition of the thrifts' securities portfolios. Here, two things stand out. First, in the case of *Bad Honnef*, a complete turnaround from corporate bonds to variable-interest securities took place. In the case of *KölnBonn* it is the other way round. Albeit the share of variable-interest securities initially rose from close to zero to almost 40 %, it subsequently diminished again and was nearly completely substituted by corporate and public bonds. When comparing savings banks to the country's big private banks (Deutsche Bank, Commerzbank, Postbank and HypoVereinsbank/Unicredit), it is at first striking that the percentage of securities in total assets has been constantly higher in the balance sheets of the thrifts. However, this is only one side of the coin. The other is that for the last couple of years, after reporting was made more transparent, the big four have been inflating their balance sheets with derivative assets up to a share of nearly 30 % (Bundesbank 2018a). Yet, even when taking this into account, savings banks numbers concerning total securities remain intriguing, albeit somewhat mitigated.

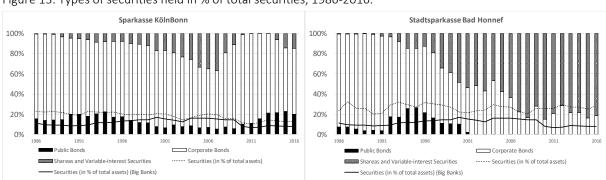
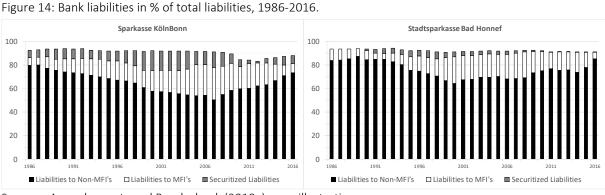


Figure 13: Types of securities held in % of total securities, 1986-2016.

Sources: Annual reports and Bundesbank (2018a); own illustration.

The next three indicators conclude the MBB dimension of the financialization of banking. Figure 7 reports the three main components of the banks' liabilities sides and offers some interesting insights into this dimension. First, we can discern a general trend of a decreasing share of non-

MFIs, which was especially prominent in KölnBonn and less pronounced in Bad Honnef. In both cases it has been eventually reversed after the financial crisis. Before, non-MFI liabilities dropped from around 80-85 % in 1986-90 to lows of 65-50 % in 2006-07. Although this development is not as stark as in the group of big banks, where respective shares continued to shrink, relative numbers are still impressive. Looking only at the thirty-year period since the mid-1980s, reveals a fall by 18 % for the smaller and an astonishing 38 % for the larger thrift, surpassing the 33 % decline of the big four (Bundesbank 2018a). Even more compelling is the concomitant rise in liabilities to MFIs, that highlight the relevance of interbank loans, which, as we have seen above, did not play a relevant role on the asset side, but are of clear importance as means of refinancing. Having been almost non-existent in the beginning, their share rose to 22-27 % before ultimately coming down to 10 % within the last ten years. Again, the comparison to the dominant stags of the private sector is elucidating. We can identify an uninterrupted catch-up process, which cut the gap between Köln-Bonn and the big four in half, before widening again. Even though overall number were more modest in for the Bad Honnef, the growth of interbank liabilities is undeniable. For smaller savings banks, this was usually associated with securing matching maturities on both sides of the balance sheet (SSK Bad Honnef 2000; Interviews II and IV), larger Sparkassen tapped the market to underpin their balance sheet explosion since the second half of the 1990s (figure A2, appendix) and expand proprietary trading activities (Interview V). However, in both cases, albeit to different degrees, Sparkassen were seeking to appeal to a broad array of financial institutions for funding purposes including private big guns such as *Allianz* or other institutional investors (Interview II; SSK Köln 2004). The final indicator, securitized liabilities, reveals a substantial difference between the two thrifts. As mentioned, German savings banks cannot raise outside equity. Yet, they can sell a variety of bonds and obligations. While these instruments played a minor role for the smaller SSK Bad Honnef, with maximum shares of 6 % in total liabilities, the larger SK KölnBonn made extensive use of them with up to 17 % in 2003. It also sought to constantly expand the range of available products, for example via introducing a new money market bond (SK Bonn 1994).



Sources: Annual reports and Bundesbank (2018a); own illustration.

3.5.2 Dimension two: financial logic

Turning to the FL dimension of my concept, the next indicator examines the installment of active risk management practices. Following the substantial changes initiated by the Basel II Accord in 2004, a number of EU directives set the framework for respective adaptions by the member states. In Germany, a fundamental overhaul of the Banking Act (Kreditwesengesetz) passed both houses in fall 2006. Besides new capital requirements regulations, addressing and reporting various sorts of risks were two central aims of this amendment (ZfgK 2006).¹¹ Anteceding this legal prescriptions, both savings banks expanded their annual reports with special sections dedicated to risk management. Throughout the 2000s these sections became longer and more detailed. In its 1999 report, the smaller thrift Bad Honnef states to have "established a risk controlling and management system" (SSK Bad Honnef 2000: 9). Four years later, the Sparkasse further highlights that "exceeding this, we measure and steer interest rate risk on the basis of simulations" (SSK Bad Honnef 2004: 5). The bigger Sparkasse upriver also mentions to have implemented Value-at-Risk (VaR) measurement (SSK Köln 2004) and to apply "standardized credit rating procedures" (SK Bonn 2005: 10). However, it would be shortsighted to interpret these developments only in reaction to stricter regulatory standards. On the one hand every interviewee confirmed that a tighter political grip in this regard played an important role, up to a point, where the often commemorated "gut feeling didn't matter anymore" (Interviews II and IV) and "even leading executives were no longer able to make loan commitments to longtime SME customers, for example help them through tougher times" (Interview III). On the other hand, both smaller and larger savings banks had developed in-house ratings already in the 1980s and made use of derivatives like interest rate and currency swaps way before they were bound to report them (Interview II, III and V). Externally, KölnBonn also went through the costly and time-consuming process of getting an individual rating from Moody's while other Sparkassen were collective rated as members of the DSGV (SK KölnBonn 2006). In recent years, measuring techniques have constantly been refined and expanded. Bad Honnef, for example has been using newly developed retail credit scoring schemes and an early warning system (SK Bad Honnef 2011). Eventually, risk management not only became important for the thrifts themselves. It also opened up new business opportunities by offering municipalities and corporations advice concerning micro hedging (derivatives) and debt management (RSGV 1995; SSK Köln 2004).

To develop, implement and execute the various risk management tools, you need specialized personnel. Together with organizational restructuring processes like the separation between front and back offices within each savings bank, a *changing staff structure* is the next FL indicator. An illustrative example in this regard is the new structure of KölnBonn in the year 2003. There, the Sparkasse formulated the clear functional differentiation between divisions like IT/services, steering, retail, corporate customers, and "individual customers", which usually means wealth management (SSK Köln 2004). Already a couple of years earlier, the savings banks undertook decisive steps in this direction with the opening of a new real estate center in Bonn and a "business consultancy and analysis" department in Köln, where experts in technology, environment and media served customers (SK Bonn 1998; SSK Köln 1998). Another important aspect in this regard is the introduction or variable salary components, which were put in place by the bigger Sparkasse as early as 1994 to "appreciate achievements via a modern system of incentives" (SSK Köln 1995: 30). Evidence suggests that the smaller thrift lagged behind since first hints can only be found more than ten years later (SSK Bad Honnef 2007). Larger savings banks sometimes recruited leading executives from private banks and also hired 'people with skills in abstract thinking like biologists and physicists' (Interview III). Smaller banks put the focus on in-house training and internal HR development (Interview V). Yet, despite this preference for internal recruiting, the scope of everyday activities that were part of a regular thrift banker, changed drastically. While many general and unskilled tasks were rationalized and automated, employees, encouraged to tackle higher fee earnings, "had to make a decision if they were salespersons, or as we used to say, could 'transform from gatherers to hunters" (Interview III).

Very often the following two indicators, *outsourcing* and *downsizing* are intertwined. The first one basically considers the establishment of various joint IT and services firms, which were seen as threefold necessities: to increase efficiency and cut costs, to be able to use computational procedures, which would have been out of reach for most thrifts individually, and to participate in future technological progress (Interview V). One of the first of such service companies was the SDZ Sparkassen-Dienstleistungszentrum that was founded by five savings banks, inter alia Bad Honnef, in 1998 to "realize economies of scale by focusing on payment transactions ... (and) centralized purchasing of hardware" (SSK Bad Honnef 1999: 8). Moreover, even tasks like refilling ATMs or loan processing were outsourced to private service providers (SSK Bad Honnef 1999). A further move towards more centralization was then the creation of the Sparkassen Dienstleistung Rheinland (SDR) on the association-wide level of the RSGV in 2005, which was not only intended to perform call center and back office tasks for the entire region, but also attract other banks outside the savings banks sector as customers (RSGV 2005). Symbolizing the progressing outsourcing trend, today, there is even unitary national provider for all German savings banks, the Finanz Informatik in Frankfurt, which itself is the result of a number of mergers over a nearly forty-year process (Finanz Informatik 2018). Table 2 presents data on *downsizing* as is reports numbers of employees, branches

and banks. Concerning the total number of savings banks in comparison to private banks, we can see that there has been a remarkable decline on the national level. While the overall decrease has been less drastic than the trend in the private sector, still, since 1996 almost one out of three savings banks and one out of four jobs have gone. Zooming in on the RSGV level, numbers on membership shrinkage and branch closure even exceed the federal trend. On the other hand, reduction in employment has been less pronounced. However, data on full-time equivalents are sometimes not available as savings banks introduced part-time and early retirement options in the 2000s and have been using them extensively since then (SK KölnBonn 2006; SSK Bad Honnef 2005). Justifications of these actions on the side of the Sparkassen always refer to rising costs and customers preferring online banking over traditional means of interaction (General-Anzeiger 2017). There, it is interesting that with the end of the 1990s, both savings banks began to explicitly mention the improvement of their cost-income ratios (CIR) as significant goals (SK Bonn 2001; SSK Bad Honnef 2000; SSK Köln 2003). This measure was supported by a nationwide DSGV strategy paper formulating a CIR floor of 60 %. Despite the considerable public outcry that nearly every article on branch closures in the local press reports and reinforces (e.g. Kölner Stadt-Anzeiger 2016b), usually by accusing the thrifts of losing sight of their public service, no interviewee was able answer how profitable a Spar*kasse* actually should be.

Institution	Numbers / Branches			Employees				
	1986	1996	2006	2016	1986	1996	2006	2016
Private Banks	307	277	174	171		246,000	199,850	175,500
Savings Banks	589	607	457	403	218,917	288,445	257,000	224,671
RSGV	60	51	35	31	31,848	36,700	34,404	29,575
SK KölnBonn	176	155	131	106	5,046	5,100	5,189	3,997
SSK Bad Honnef	5	5	5	3	103	109	125	98

Table 2: Members (associations and sectors), branches (banks) and employees, 1986-2016.

Sources: AGV Banken (2017); General-Anzeiger (2002; 2010; 2014); Kölnische Rundschau (2009); Kölner Stadt-Anzeiger (2016a); Annual reports.

The inability to effectively resolve this trade-off between cost efficiency and profitability on the one hand and doing service to the local community on the other, hints at a potential loyalty shift towards different stakeholders. To conclude this section on dimension of a financial logic, I present evidence on the final two indicators, *internationalization* and *brand building*. To some degree they both go hand in hand as highlighting an international business orientation helps building a perceivably modern brand. For both savings banks, various forms of internationalization can be traced back to the late 1980s. In this regard, the smaller thrift *Bad Honnef* relied more on the regional association

RSGV and the *Finanzgruppe*. Intriguing examples were for instance the signing of a Franco-German savings banks cooperation agreement in 1989 and its expansion to Spain in the following year (RSGV 1989; 1990). Throughout the 1990s such intra-European collaborations reached ambitious levels emphasizing export support and investment assistance for Rhenish SMEs, joint corporate finance solutions, enhanced offers for tourists and, finally, real estate services in popular Southern vacation destinations (RSGV 1993; 1994; 1999). The larger *Sparkasse KölnBonn* instead was always able to go beyond the RSGV network and make an international push on its own. While revenues from international business already pop up in the early 1980s, later on the asset of having international representative offices via the states *Landesbank*, and expected increasing rewards from European activities speak an unambiguous language (SK Bonn 1994; 2000; SSK Bad Honnef 1987; SSK Köln 1998).

Eventually, nearly all of the so far elaborated changes culminate in the modernization of the Sparkassen brand, a development that cut across all savings banks. Again, several sorts of empirical evidence can be brought up. For the smaller thrifts, brand building can be summarized by the equation of architectural upgrading plus product diversification within the Finanzgruppe. After modernizing their main branch office with a more spacious "customer friendly interior concept" (1997: 33) in 1993, Bad Honnef also opened a new Real Estate and Insurance Center in 1996 (SK Bad Honnef 1997). A key aim, also for generating fee income, was to bundle a string of different products under one roof and, most importantly, under one brand. The red "S", the symbol of German savings banks, should stand for every sort of service desirable: From the first checking account, over traditional forms of saving, securities trading, real estate finance, life insurance, private pensions, consumption credit, international activities and complex products. Asked if there was a process of re-branding or polishing the image of the savings banks, one interviewee extensively confirmed: "Definitely! This process started in the 1990s. We started to emphasize brand awareness more strongly. (...) Since then there has been an internal contest called '1 AHEAD' (1 VORAUS), to incentivize all savings banks to increase their sales and marketing. (...) A lot of times we were among the best as both securities and insurance business were our strengths. (...) Winners were honored at an annual gala and board members of successful thrifts were promoted to national advisory committees to basically push this business further. (...) We could have done even more in terms of taking over insurance companies or credit card agreements (enumerating many strategic nondecisions) to become even more distinctive as a brand" (Interview II). Other interview partners by and large verified this strategy (Interviews III and V). The larger Sparkassen even went further. Before a unified design was put in place for the annual reports of all Rhenish savings banks, which is itself also a form of corporate identity, KölnBonn presented itself as a trendy service provider for

the modern metropolis on the brink of the new Millennium. Glossy full-size pictures and co-operations with players from the local media and art scene dominated the print products, whereas naked numbers were relegated to the end (SSK Köln 1998-2002). Sometimes, the actual titles of the reports were hidden under vague mottos such as "path-breaking" or "future-oriented" (SK Bonn 2001; 2002). This optical image was then, finally, accompanied by a considerable expansion of both product portfolio and equity holdings. To name some of the most striking examples, KölnBonn developed new investment products like the KölnFondsStruktur, or participated in a variety of media, IT, real estate and consultancy firms. They furthermore assisted several firms in M&As or going public (exemplarily: SSK Köln 2001). One year, the Sparkasse even publicized its eco-audit, signalling to be an eco-friendly and sustainable bank (SSK Köln 2004). While much of this was drastically reduced by KölnBonn after the financial crisis, as the focus shifted again towards more traditional activities (Interview V), it still holds equity in biotech venture firms and real estate developers (SK KölnBonn 2017). Complementing the section of financial logic is the last aspect of brand building, which sits in between PR and charity. By law, Sparkassen are encouraged to spend parts of their annual surplus for sponsoring cultural, educational, sportive or social purposes. Traditionally, this was mainly done by distributing money directly to the municipalities. Over the last thirty years, however, almost all savings banks have created more and more foundations. Circumventing city halls and councils, thrifts can now independently decide how they disseminate their funding. While KölnBonn, referring to its longstanding ethos of "corporate citizenship", now has nine foundations, Bad Honnef set up its only Sparkasenstiftung with the commemoration of its one-hundredth anniversary in 1997 (SK KölnBonn 2018b; Interview II).

3.6 Conclusion

With a history of more than 200 years, *Sparkassen* are the oldest type of banks in Germany. Throughout their existence they have contributed to the specific character of the German political economy in many ways. Yet, as banks and economic actors they do not remain unaffected by changes in the global financial context and sometimes even embrace them. A fact, which is very often overlooked or put aside. This paper has sought to broaden and deepen the perspective on savings banks in Germany and go beyond stereotypical accounts. Its underlying aim has been to shed light on the sectoral transformations which have taken place since the 1986 Big Bang and interpret them in the light of the general financialization trend in contemporary capitalism. Bringing together insights from the political economy of banking and studies on finance, I have developed a two-dimensional concept of a *financialization of banking* including a set of indicators for its measurement. By applying this heuristic to two diverse cases of Rhenish savings banks, I have been able

to excavate evidence that challenges conventional views. On the one hand, savings banks have largely shifted towards market-based banking as fee and securities income, interbank loans and securities-based refinancing all play an important role for them. On the other hand, I argue, that they have also overwhelmingly adopted a distinct financial logic, exemplified by complex risk management techniques, the prevalence of CIR and VaR calculations, significant efforts of downsizing and outsourcing, or, eventually, the creation of an international, dynamic image, which symbolizes a potential shift in stakeholder loyalty. However, going into detail also reveals a more ambiguous picture. Contrarily to the aforementioned trend, German Sparkassen still support non-commercial purposes in their communities. They also secure large parts of SME financing and are present in rural areas where many other banks would to go. Furthermore, the very existence of the savings banks pillar helps to diffuse financial power and mitigate aspects of financialization in the German political economy, an important fact, worked out by Mertens (2017). Nevertheless, to only highlight the problems of *Landesbanken*, when speaking about financialization of public banking in Germany, is not sufficient (Scherrer 2017). Consequently, I argue that it makes sense to speak of a differentiated financialization, if we want to dig deeper and decipher what has been going on in the former poster child bank-based finance and patient capital. Due to their huge heterogeneity, larger thrifts vary in many ways from smaller ones, as do urban from rural ones (internal differentiation). In comparison to private banks, Sparkassen are still embedded in their regional context and confined by stricter political and legal provisions (external differentiation). Eventually, this paper makes a threefold contribution which simultaneously encourages further research: First, transferring the concept of a financialization of banking to other cases could yield in both theoretical refinement and empirical broadening. This, in the end, might help us to separate common trends from context-bound specificities. Second, having focused on savings banks, exemplifies an appreciation of the regional and public sphere of political economies. Despite them being crucial loci of socio-economic change they are very often left out of the equation in political economic research. Specifically, when dealing with financialization, regions and/or the state continue to be promising desiderata (Arestis et al. 2017; Fastenrath et al. 2017; Lagna 2016; Schwan 2017; Wainwright 2012). Third and finally, identifying transformations in the not-sole for profit financial sector in Germany, might help us to conduct analysis on specific mechanisms of change. Also this could help us understand how far and in which way the German political economy has altered its course, as banking and finance have far-reaching consequences for political, economic and societal actors. In any case, the financialization of savings banks poses a pivotal development with an enormous potential for future debates, both academic and political.

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Notes

- The five remaining private-law savings banks operate as joint stock companies but are not listed. They have a diversified shareholder structure featuring public, private and savings banks institutions. Three are in the Hanseatic cities of Hamburg, Bremen and Lübeck, while the remaining two are both located in the Northern state of Schleswig-Holstein. Dating back to the Second Schleswig War (1864) between Prussia and Denmark, Danish savings banks were largely independent private institutions whereas Prussian ones were public after the Savings Banks Act of 1838 (Hackethal 2004). As in many other countries, today, Danish savings banks are joint stock companies, especially after a new privatization law came into effect in 1990 (Johansen 1994).
- 2. Hardie et al. (2013a) and Hardie and Howarth (2013b) also include the securitization of a banks' loan portfolio and the selling of derivatives (e.g. ABCP) via set up SPVs (shadow banking). I purposefully exclude this from my analysis for three important reasons: 1) MBB is developed from a financial systems perspective that is not completely superimposable on the analysis of individual MFIs. 2) Individual savings banks do not make use of these instruments. However, if taken as the entire Sparkassen-Finanzgruppe (Savings Banks Finance Group, or short: Finanzgruppe), we can detect these activities e.g. via Landesbanken, where the BayernLB collateralized outstanding debt of more than 30 savings banks from 5 different German states as the "Sparkassen Kreditbasket III" in 2006 (Ricken 2008). 3) Only the largest German savings banks are subject to IFRS reporting, whereas most of them still follow the German Commercial Code (HGB) under which certain instruments do not have to be reported in detail. This is also part of an ongoing debate about how to address risk in banking as a conflict between alternative banks and the EU shows (Bösen-Zeitung 2017; Sparkassenzeitung 2016).
- 3. The possibility of a (gradual) privatization of German savings banks has been a heated debate that was regularly initiated throughout the past twenty years (Börsen-Zeitung 2010; 2012; Rheinische Post 2007). Especially in the wake of the feud over public guarantee obligation, savings banks were put under pressure (Seikel 2014). Examples for different routes of reorganization provide France, where savings banks have effectively become cooperative institutions, and Italy, where they exist in name only but are now joint stock companies (Butzbach 2016).
- 4. In the original articles, in which Hardie et al. (2013a) and Hardie and Howarth (2013b) develop their concept of MBB, they do not specifically mention fee income as a core feature, while Erturk and Solari (2007) on the other hand emphasize this particular point, but do not call their concept MBB. In a strict sense, my adoption of MBB thus presents a synthesis of both approaches.

- 5. Measuring the importance of different categories of banks via market shares is not as straight-forward as it seems. Sometimes, Landesbanken and savings banks are counted as the Finanzgruppe. In these cases, they always top private banks in terms of credit (Bülbül et al. 2013). Sometimes, the latter are decomposed into the "big four" (Deutsche Bank, Commerzbank, Postbank and Hypovereinsbank/Unicredit) and all other private banks, which then, of course, underestimates the size of the private sector.
- 6. In fact, NRW is the only state which has two regional savings banks associations. Usually, they are congruent which the political entities of each state, or cover several states such as SGVHT for Hessen and Thuringia or the OSV for Mecklenburg-Vorpommern, Brandenburg, Saxony and Saxony-Anhalt.
- 7. Technically, savings banks cannot buy other thrifts. Formally, such a process is carried out by the smaller savings bank joining the business territory (Geschäftsgebiet) of the larger bank, whose statute is adjusted accordingly.
- 8. Different base maps of German counties and municipalities were used for the creation of this illustration. They are all retrievable via the Wikimedia Commons archive and are subject to the GNU Free Documentations License, version 1.2. Special credit goes to the user "TUBS" for creating all original base maps.
- 9. The quote stems from an interview with Gustav Adolf Schröder, the former longtime chief executive of the powerful Sparkasse KölnBonn. He became notoriously known for authorizing dubious equity and investment deals in the early 2000s with serious financial consequences for the savings bank. He was indicted and is currently still put on trial facing several charges such as bribery and embezzlement.
- 10. I count bond yields as income from securities and not interest income. Commonly, there are ambiguously grouped as securities held on the asset side, but then listed together with interest income from loans in the earnings statement.
- 11. Since the start of the new Millennium, there has been a plethora of legally codified financial market integration efforts from the EU level down to national jurisdictions. Kick-started by the Commission's 1999 "Financial Services Action Plan" (FSAP), they were further fueled by the outbreak of the financial crisis. Notable EU texts were for example: The Single Banking Directive (2000), the Capital Requirements Directives packages (CDR I-III, 2006-2010), the Markets in Financial Instruments Directives (MiFID I+II, 2004+2014). For Germany: several amendments to the Kreditwesengesetz (KWG, 2006 et seqq.) or the Financial Market Promotion Act (Finanzmarktförderungsgesetz) in 2002.

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Appendix

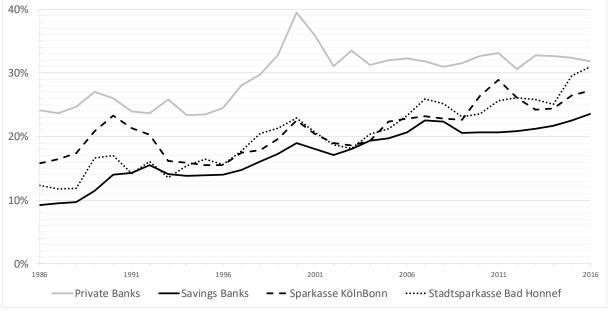


Figure A1: Net non-interest income of different banks, in % of total income, 1986-2016.

Sources: annual reports and Bundesbank (2018a); own illustration. Notes: data excludes yields on bonds.

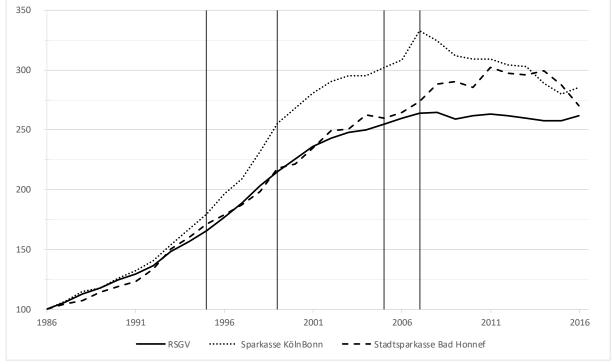


Figure A2: Indexed balance sheet growth, 1986-2016 (1986=100)

Sources: annual reports; own illustration. Notes: vertical line denote important events: liberalization of the NRW savings banks act (1995); introduction of the euro (1999); Brussels agreement between the EU and Germany kicks in, effective abandoning of public guarantee obligations for savings banks and *Landesbanken* (2005); breakout of the global financial crisis (2007).

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This section lists all primary sources, differentiating alphabetically between (1) annual reports, (2) databases, (3) interviews, (4) newspaper articles and (5) others.

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Interview II	Small savings bank	Bad Honnef, December 2017
Interview III	Large savings bank	Bonn, December 2017
Interview IV	Small savings bank	Sankt Augustin, December 2017
Interview V	Large savings bank	Köln, January 2018

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List of abbreviations

ABCP	Asset-backed Commercial Paper
AGV Banken	Arbeitgeberverband des privaten Bankgewerbes
CIR	Cost-Income Ratio
CPE	Comparative Political Economy
DGSV	Deutscher Sparkassen- und Giroverband
	(German Savings Banks Association)
FL	Financial Logic
ZfgK	Zeitschrift für das gesamte Kreditwesen
MBB	Market-based Banking
MFI	Monetary Financial Institution
NFC	Non-financial Corporation
NRW	North Rhine-Westphalia
ROE	Return on Equity
RSGV	Rheinischer Sparkassen- und Giroverband
	(Rhenish Savings Banks Association)
SEM	Single European Market
SK Bonn	Sparkasse Bonn
SK KölnBonn	Sparkasse KölnBonn
SPV	Special Purpose Vehicle
SSK Bad Honnef	Stadtsparkasse Bad Honnef
SSK Köln	Stadtsparkasse Köln
SVWL	Sparkassenverband Westfalen-Lippe
VoC	Varieties of Capitalism
ZKA	Zentraler Kreditausschuss

Ort und Datum:

Eidesstattliche Erklärung

nach § 6.4 der Promotionsordnung vom 9. März 2005

"Hiermit erkläre ich an Eides statt, dass ich die vorgelegte Arbeit ohne Hilfe Dritter und ohne Benutzung anderer als der angegebenen Hilfsmittel angefertigt habe. Die aus anderen Quellen direkt oder indirekt übernommenen Aussagen, Daten und Konzepte sind unter Angabe der Quelle gekennzeichnet. Bei der Auswahl und Auswertung folgenden Materials haben mir die nachstehend aufgeführten Personen in der jeweils beschriebenen Weise entgeltlich/ unentgeltlich geholfen:

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2018	<i>Leading by Example. The Financialization of German Savings Banks</i> . Scheduled paper presentation at the 2018 5 th FinGeo Global Seminar, "European Spaces of Financialization", Global Network on Financial Geography, Vrije Universiteit Brussel, Brussels, Belgium, May 28-29
2016	Which Roads lead to Wall Street? The Financialization of Regions in the European Union, Paper presented at the 2016 CES general conference, Council for European Studies, Philadelphia, April 14-16
	Financialization, Debt and Inequalities in European Integration, Panel organization, 2016 CES general conference, Council for European Studies, Philadelphia, April 14-16
2015	The Financialization of Sovereign Debt Management between 1980 and 2010, Paper presented at the 2015 DVPW general conference together with Christine Trampusch and Florian Fastenrath, German Political Science Association, University of Duisburg-Essen, Duisburg, September 21-25
	The Financialization of Sovereign Debt Management between 1980 and 2010, Paper presented at the 2015 CES general conference together with Christine Trampusch and Florian Fastenrath, Council for European Studies, Sciences Po, Paris, July 8-10
	Inequalities of Integration – Integrating Inequalities, pre-conference PhD workshop, Council for European Studies, Paris, July 7
2014	Financialization, Crisis, Austerity. The Domestic Complementarities of the Irish Troika Negotiations, Paper presented at the annual meeting of the Section of Political Economy, German Political Science Association (DVPW), WSI, Dusseldorf, October 9
	Publications (*peer reviewed)
2018	Leading by Example. The Financialization of German Savings Banks. Submitted for review* (March 2018)
2017	Which Roads lead to Wall Street? The Financialization of Regions in the European Union. Comparative European Politics, 15(4), 661-683*
	Where States and Markets meet: The Financialisation of Sovereign Debt Management (together with Florian Fastenrath and Christine Trampusch), New Political Econony, 22(3), 273-293*
2014	Staatskapitalismus in NRW und Bayern. Der Aufstieg und Fall von WestLB und BayernLB [State Capitalism in North Rhine-Westphalia and Bavaria. The Rise and Fall of WestLB and BayernLB] (together with Christine Trampusch and Benedikt Linden), Zeitschrift für Vergleichende Politikwissenschaft 8(2), 129-54*

Grants and Awards

2017	University of Cologne, IPaK Program, full grant for going abroad as visiting researcher, Boston University, Boston, MA.
	German Academic Exchange Service (DAAD), PhD Research Grant for staying abroad as visiting researcher, Boston University, Boston, MA. (declined)
2016	Winner of the 2016 paper prize competition, jointly awarded by the EIGPE research network of the Council for European Studies (CES) and the journal Comparative European Politics (CEP)
	German Academic Exchange Service (DAAD), Conference Travel Grant, 2016 CES general conference, Philadelphia, April 14-16
2014 – 2018	Cologne Graduate School in Management, Economics and Social Sciences, Full PhD scholarship, granted by the University of Cologne
2009	ERASMUS program for studying abroad, mobility scholarship, granted by the European Union
2009 – 2014	Rosa Luxemburg Foundation, Full Undergraduate/Graduate scholarship, granted by the German Federal Ministry of Education and Research (BMBF)
	Voluntary Work
2016 – 2017	University of Cologne, Faculty for Economics and Social Sciences, PhD Representative for the Albertus Magnus Graduate Center (AMGC)
2014 – 2017	Teaching at vocational training schools in North Rhine-Westphalia, DGB-Jugend NRW
Since 2007	Activities in cultural and youth education with a focus on music, dance and history of Hip Hop culture. Speaker, curator and instructor for various projects, e.g. in collaboration with <i>Sculpture Projects Münster, German Sports</i> <i>University</i> (DSHS), <i>Cologne University of</i> Music (HfMT), OT Werkstattstr. Köln, <i>RheinEnergie Foundation, SK Culture Foundation</i> , City of Monheim am Rhein
2007 – 2011	Member of the students' union executive committee (AStA) and students' assembly (StuPa), Philipps University Marburg
	Skills
Languages Software	German (native), English (C2), Italian (B2) MS Office, STATA 14 (basic), GIMP, Inkscape, Typo3