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The domestic sources of macroprudential policy divergence: Financial regulation and the politics of housing in Germany and the UK

Abstract

What role do domestic institutional and structural factors play in the emergence of national macroprudential regimes? So far, the literature on macroprudential policy has mainly focused on transnational processes of knowledge production. We therefore still know very little about what causes the observed differences in macroprudential regimes at a country level. The paper addresses this issue by way of an examination of housing sector related macroprudential policies in the UK and Germany. It finds that part of the reason for the observed differences is to be found in the fact that macroprudential authorities in the two countries tend to construct the intermediate goals of their macroprudential interventions in somewhat different ways, with the UK paying much greater attention to broader macroeconomic outcomes. These differences themselves, however, can only be properly understood in relation to the wider institutional and structural context (including different types of growth models) within the two countries, which create different links between their housing sectors and the real economy.

Keywords: Macroprudential policy; housing finance; growth models; financial regulation

Introduction

Among the buzzwords that emerged in regulatory forums in the aftermath of the financial crisis of 2007, probably none was as prominent than that of "macroprudential policy" (Freixas, Laeven and Peydró, 2015). With its promise to replace a methodologically individualist view on the regulation of financial markets with a broader "systems perspective", macroprudential policy also received considerable attention among scholars of political economy, many of whom highlighted the relative novelty of this approach when compared to the previously dominant ideas, and the radical potential

that it possesses (Baker, 2013; Helleiner, 2014). Much of this scholarship has focused either on the development of the macroprudential approach in what Andrew Baker (2018: 310) called processes of "transnational knowledge production" among experts (see also Baker, 2013; 2014), or alternatively on the interactions between IOs (in particular central banks) with academia in a similarly national context independent way (Thiemann, 2021). However, as macroprudential approaches have increasingly become incorporated into national policy regimes, it has also become clear that there are as many differences in the understandings and practices of macroprudential policy in different countries, as there are shared beliefs (Thiemann, 2018).

So far, little attention has been paid in the political economy literature to the nature of, and reasons for these national differences. We therefore so far know very little about which aspects of the national context shape macroprudential approaches at the country level, and how they do so. This paper seeks to address this issue, by looking comparatively at the different macroprudential policy regimes as they relate to housing finance, in the UK and Germany. As shown in more detail below, these differed significantly in the two countries. While the UK in many ways was an enthusiastic early adopter of macroprudential policy, Germany has generally been reluctant to follow in the same footsteps. The Bank of England was given a relatively comprehensive macroprudential mandate backed by a proper set of macroprudential instruments early on – which officials did not hesitate to use once they were available (Bank of England, 2015). In the case of Germany on the other hand, even when public authorities finally created a macroprudential authority, they failed to equip it with the same policy tools. Even those tools that were finally created, they decided not to activate, in spite of increasing international pressure to do so (FSB, 2020).

Housing finance has been one of the most discussed areas of macroprudential policy so far, given the crucial role that this sector has played in the 2007 crisis, as well as in previous crises (He, Nier and Kang, 2016; Schwartz and Seabrooke, 2008). Indeed, even beyond the narrower literature on macroprudential policy, it is increasingly acknowledged that the housing sector is one of the most important factors in explaining financial crises, while simultaneously playing an important role in mediating the real economic and distribution outcomes that usually follow financial turmoil (Fuller, 2016; Schwartz and Seabrooke, 2008). Understanding the determinants of regulatory policy in this area should therefore be of interest well beyond the narrow circle of macroprudential experts. Importantly, the housing sector is also one of the areas of macroprudential policy where most progress has been made (Knot, 2014; Houben et al., 2014; Hartmann, 2015), and it therefore forms an excellent entry point into understanding which national factors influence macroprudential policy development.

In a nutshell, this paper argues that to understand the shape of macroprudential interventions in the housing market in the UK and Germany, we should try to understand the broader context given by the different growth models in the two countries. These growth models form a broader "enabling" context, that introduces a unique set of challenges and opportunities, within which change agents such as central banks have to operate. In the UK, the importance of its (debt-fuelled) consumptionbased growth model for the issues faced by financial regulators is particularly stark. In Germany, on the other hand, a much more restrained financial system has meant that different considerations have dominated debates on the best approach towards housing markets. It will therefore be argued that in Germany key features of its domestic financial and housing system (especially those discouraging the growth of the mortgage market and the move towards a more owner-occupier focused society) have prevented policy makers from focusing on the same issues that were so dominant in the UK. While some of these features clearly pre-date the exclusively export oriented growth model that took hold in the 90s (Fuller, 2016), the paper argues that at the current time, these features stand in a symbiotic relationship with the overall growth model. At the same time that change agents such as central banks are interacting with the constraints put on them by these wider structures, they are themselves shaped by proximate institutional constraints (such as the respective mandates and traditional roles of the central banks in the two countries), which therefore also have also have to be taken into account if we want to understand the specific ways in which they have reacted to this broader context. In paying attention to these interactions, the paper builds on an "agents in context" approach as first proposed by Bell and Feng (2014).

More specifically, this paper shows how the particular (debt) finance-led growth model in the UK constitutes an environment in which problems in the housing sector quickly spill over into the broader economy, not least through the impact that they have on the consumption capabilities of households (Peydró et al., 2020). This broader environment combined with a particular institutional context in which the Bank of England in general, and the macroprudential Financial Policy Committee in particular, were already given greater responsibility for supporting the governments growth strategy. All this provided a fertile ground for members of the Bank of England, who from the very start were much more keen on developing and using innovative macroprudential policies than their peers in Germany. The result was the early use of macroprudential tools aimed at the housing sector, whose use was justified by reference to the positive effect that they would have on the smoothing of consumption patterns, as much as by their effects on the banking system itself. In Germany on the other hand, debt fuelled consumption played a much smaller role in its economy in the first place, making the issue of stabilising demand through "privatised Kevnesian" methods much less appealing. Crucially, the German financial system is largely dominated by banks organised in a very particular "three pillar" structure, in which housing finance plays out in ways which are characterised by lower volatility and cyclicality, and a reduced link with patterns of overall consumption. These features, while in some ways preceding Germany's current economic model, currently stand in a strongly symbiotic relationship with the country's export oriented growth model. Combined with the relative reluctance of central bankers in the country to become involved in the economic growth strategies of the government, so far there has been no move to use macroprudential policy in the ways advocated by British central bankers.

The rest of the paper is structured as follows. The next section briefly reviews the core ideas behind the macroprudential approach, and how it relates to the housing sector. This is followed by a discussion of the two main approaches that inform the rest of the analysis in the paper: the "agents in context" approach, and the "growth models" literature. With regards to the latter, it is argued that in particular when combined with insights on the importance of housing finance for the stabilisation of demand in a "privatised Keynesian" framework, this literature goes a long way towards understanding the broader context that has shaped the actions of the central banks in the two countries. The next part then turns towards the empirical analysis of my two case studies. In particular, after briefly outlining the key differences that have emerged in the policy approaches of the two countries, it looks at each of the "levels" outlined in the previous part (the broader structural context, "proximate" institutions, and individual agents), to demonstrate the necessity of focusing on the interactions between these levels for understanding the specificities of the macroprudential policy regimes in my two case studies as they have emerged over time.

What is macroprudential policy?

In a nutshell, the aim of the macroprudential approach is to replace an excessive focus on the stability of individual institutions that is said to have characterised the regulatory landscape of the pre-2007 era, with a broader "systemic" view of the financial system (Baker, 2013). As such, macroprudential thinking in many ways mirrors the arguments of a much older tradition of post-Keynesian thinkers such as Hyman Minsky and Charles Kindleberger, which had been completely ignored by those involved in regulatory and central banking circles in the two decades preceding the financial crisis (Baker, 2018). A famous example of the utility of the "new" macroprudential approach found in the writings of early advocates, is that of correlated investment strategies (Borio, 2003). Previous "microprudential" approaches in this example, would have investigated the models

and investment strategies at individual financial institutions to judge their relative "riskiness" and thus determine the required capital levels. Macroprudential thinkers on the other hand highlighted the inherent flaws of this approach by showing how the riskiness of these strategies cannot be determined by only gathering information on an individual institution, but crucially depends on the extent to which the same strategies are also pursued by other institutions (Crockett, 2000). If it turns out that many financial institutions use the same strategies/models (i.e. their exposures and action scripts are "correlated"), then this in itself makes the strategy risky, as increased volatility in one asset class could lead to the simultaneous sell-off of these assets by all institutions, setting in motion a positive feedback loop. Since then, macroprudential theorists have moved on to investigate a broad variety of ways in which a lack of attention of dynamics in the system as a whole can lead to suboptimal policy prescriptions. Particular attention has been paid to the issue of "contagion" that arises due to the interconnectedness of institutions that results from excessive inter-linkages, the "pro-cyclicality" that is evident in a number of financial markets, and the "systemic importance" of certain financial institutions, which means that trouble in just one institution risks immediately impairing parts of the financial system or the provision of crucial financial services more generally (Schoenmaker, 2014).

In relation to housing finance, which is the topic of this paper, macroprudential theorists highlighted the pro-cyclicality of these markets, and the negative effect that problems in the housing market could have on the financial system and the economy more broadly (He, Nier and Kang, 2016). What theorists and policy entrepreneurs have suggested, is to supplement an existing focus on the creditworthiness of individual mortgage applicants, the quality of underwriting practices, as well as the provisioning for losses at individual banks, with a more systemic view that monitors the development of the housing (finance) sector over time, and adjusts policy accordingly, through a set of new policy instruments. Over the past decade, a variety of models and indicators have thus been proposed to conceptualise and monitor "housing cycles" and the relative risk that this sector poses to the financial system and the economy more generally, many of which are used by policy makers, but are usually interpreted in an ad hoc way (Bank of England, 2015). What is important to note in this regard, is that while the link between housing markets and financial and economic crises is quite uncontroversial in the UK, in Germany the issue is much less clear cut (ZEW, 2018). The fact that Germany has yet to experience a housing related crisis, the relatively low level of house ownership within the country, as well the particularities of the relatively conservative German housing finance practices, have led to a vigorous debate on the applicability of findings and models derived from experience elsewhere within the country (Bienert, 2017; Buchmüller and Igl, 2019; IMK, 2020; ZEW, 2018).

Theoretical framework

When considering the importance of national context in determining financial policy, the "varieties of capitalisms" (VoC) literature looms particularly large. There are several reasons, however, why this literature is less useful for the present paper. Most importantly, the variations in the housing (finance) markets, and the importance of consumer debt in fuelling both cyclical distress and aggregate consumption – which it will be argued form the key context for macroprudential interventions in the housing market – do not easily fit into the taxonomies suggested by the VoC literature. Thus, while traditionally both considered a coordinated market economy (CME), Germany and the Netherlands for instance vary radically in the nature of their mortgage and housing systems, with the Netherlands nowadays looking much more like the UK than Germany (Cooper and Kurzer, 2020). Moreover, when it comes to the significance of overall consumer debt levels for aggregate economic demand, countries such as Denmark seem to share more with the UK than Germany (Fuller, 2016). Housing sector divergences in particular have thus led some scholars to suggest the usefulness of a separate division into "varieties of residential capitalisms" (VoRC), which does not necessarily map neatly onto the divisions of the traditional VoC literature (Schwartz and Seabrooke, 2008).

While potentially more useful, the classification suggested by this literature suffers from its own problems. Crucially, its taxonomy, which had largely been based on data from 1992-2002 (Schwartz and Seabrooke, 2008: 244), does not take into account changes that have happened over the past two decades. Updating the data would most likely depict Germany as having moved from being a "corporatist-market" to a "statist-developmentalist" type of VoRC¹, but it is not clear to what extent this shift would actually capture change within Germany (as opposed to change in other countries with which it is being compared), and it thus carries little explanatory power in relation to the dynamics considered in this paper. This paper therefore aims to adopt a theoretical approach that relies less on big generalisable taxonomies, and is more attuned to the ideosyncratic features of the nationally distinct institutional environments in my two case studies. That being said, in relation to the growth models that are the topic of this special issue, it will be argued that there are multiple links that connect the explanations provided in this paper, with the concerns of this wider literature.

The agents in context approach

To make sense of the empirical material, this paper adopts an "agents in context" approach (Bell and Hindmoor, 2015). Aimed at bridging the divide between those studying broader structural transformations and those engaging in more local agent centred investigations, this approach leverages key historical institutionalist and constructivist insights to argue that we should investigate the ways in which agents interact with both broader "structural" or "meta-institutional" contexts, as well as the more "proximate" institutions in which they are situated (Bell and Feng, 2014). In the context of this paper, the broader structural and meta-institutional contexts are

¹ In the classification suggested Schwartz and Seabrooke's article, Germany was classified as belonging to a "corporatist-market" type of VoRC, due to its relatively low level of home ownership, and moderate levels of housing related debt. As Schwartz and Seabrooke (2008: 244) show, in the 90s, Germany and the UK had roughly similar levels of housing related debt as a proportion of GDP. Since then, the paths of the two countries have radically diverged (Fuller, 2016). Given that the classification is based on deviations from the average within the OECD, Germany is likely to be much more of an outlier nowadays in terms of its mortgage debt being well below average (Fuller, 2016), which would place it in the group of "statist-developmentalist" countries according to the original VoRC taxonomy.

crucially shaped by the distinct growth models of the two case studies under investigation, and in particular by the role that credit fuelled consumption has started to play in the UK.

As claimed by the "agents in context" approach, these wider contexts matter in that they provide a broader set of constraints and opportunities within which agents have to work. Most importantly, in the case of the UK in particular, the greater macroprudential significance of (housing) debt driven consumption, makes it possible to think about using macroprudential policies to affect aggregate consumption patterns. However, equally important is the more proximate institutional environment, which includes differences in the formal mandates of the central banks in the two case studies under investigation. In particular, there are considerably more barriers in Germany for the central bank to direct its policies towards certain macroeconomic concerns. Lastly, these differences have become particularly salient because of the relative activism of the Bank of England and its openness towards different macroprudential ideas, which meant that it was more than willing to use any openings for greater policy actions that arose. Crucially, the claim of the paper thus is that we can only explain the specific nature of macroprudential policy in the two case studies by acknowledging the interactions among all three levels (the wider structural context, proximate institutions, and agents).

Growth models

Within the growth models literature, the two case studies discussed in this paper – Germany and the UK – are usually seen as representing ideal models of the two major types of growth regimes: export oriented, and consumption based. The type of growth model in turn, is supposed to shape the way in which the government reacts to economic crises. While in consumption based cases governments are likely to resort to policies aimed at ensuring continued stable consumption growth, export oriented economies are just as likely to favour policies that promote continued export growth (Baccaro and Ponthusson, 2016; Baccaro and Benassi, 2017). Importantly for this paper, within the

demand led growth model of the UK, credit fuelled consumption plays a key role in stabilising aggregate demand (Crouch, 2009; Hay, 2009). While the extent to which credit or real wage growth is actually more important to the success of the UK is still being debated (Baccaro and Ponthusson, 2016), it is increasingly accepted within the broader growth model literature that credit as well as particular sectors such as housing and construction can play a big role in certain demand led economies (Johnston and Regan, 2017). For the UK, the crucial role that credit and housing in particular play in more general economic policy and welfare provision has been particularly well documented within the IPE literature.

Much of this literature has focused on the way in which access to credit, as well as the accumulation of assets such as housing has been promoted by the UK government as part of its overall welfare strategy (Brassett, Rethel and Watson, 2009; Watson, 2010). The rationale behind these policies is that to the extent that individuals are able to rely on credit and privately owned assets in the event of an income loss, the government can withdraw from traditional redistributive forms of welfare provision. According to some scholars, this substitution of public welfare provision with private credit has been so great that we should view the UK (or indeed more general liberal Anglo-Saxon) regime as constituting a form of "privatised Keynesianism" (Crouch, 2009). As the "Keynesian" part of this term suggests, the idea is that eventually it is credit that takes on the role that government demand management and automatic stabilisers have played in the post-war settlement. Overall, the explosion of credit that followed the UK liberalisation of credit markets and the promotion of home ownership, has meant that debt fuelled consumption has played an ever greater role in the growth cycles of the UK economy. Thus, in one of the most comprehensive political economy studies on the role of consumer debt in the national economies of the UK and Germany, Gregory Fuller (2016), shows that while debt fuelled consumption (including through increasingly high equity withdrawals) played virtually no role in the German economy, it in fact accounts for most of the economic growth that the UK economy experienced during the 1980s and 2000s. Conversely, deleveraging forms and important part of the explanation as to why the UK saw stagnation outside of these boom periods, which were not experienced to the same extent by Germany (Fuller, 2016: 70). In fact, as far as debt fuelled growth, and the importance of the housing sector for these dynamics is concerned, Germany could be described as the antithesis of the UK. As Baccaro and Benassi (2017) point out, Germany represents the most ideal typical export led economy, which mainly relies on demand from abroad (including from the Anglo-Saxon liberal privatised Keynesian regimes) for its economic well-being, and the absence of credit growth has been important in ensuring the perpetuation of the growth model (Baccaro and Benassi, 2017: 91).

Not only does housing related debt constitute a much smaller proportion of GDP (FRED, 2021a; 2021b), but there also is little evidence that Germany policy makers are interested in following in the British footsteps any time soon. Rather than following a strategy of "asset-based welfare" that would require continued house price growth and private home ownership, German politicians have thus tended to double down on their commitment to prop up the renting sector that currently dwarfs the owner occupier market, and to try to keep house prices down through a variety of policy measures (Cooper and Kurzer, 2020). Overall, the insights from the two sets of literatures discussed in this section suggest that we should expect UK policy makers to be particularly interested in engaging in policies that ensure the stable growth of aggregate domestic demand. Moreover, there should be a strong impetus towards ensuring the stable flow of credit underpinning demand in a "privatised Keynesian" framework. As will be shown below, the housing system in the UK played a particularly important role in this regard, and understanding this role is therefore a crucial first step when trying to make sense of the different ways in which debates around macroprudential policies aimed at the housing sector have unfolded. A crucial point in this regard is that UK policy makers as well as academic economists have been keenly aware of the linkages between the availability of housing finance, and issues of aggregate demand.

To be clear, the argument made in this paper should not be understood as a simple causal story, where the shape of the growth model somehow determines the financial system, and by implication, macroprudential policy. Indeed, it is clear that some of the key aspects of the German financial system that are highlighted in the next section pre-date the emergence of the distinct export oriented growth model in the country (see for instance Fuller, 2016). Instead, and using the language of the original proponents of the growth model literature, it is more appropriate to understand the relationship as one of a symbiotic "co-evolution" (Baccaro and Benassi, 2017). As outlined below, the distinctive features of the German financial system, and in particular the relatively low levels of debt-fuelled consumption that they create, have strong implications for German macroprudential policy, as they reduce the importance of certain cyclical drivers of instability. These distinctive features of the German system in turn complement the export oriented growth model, as a consumer debt fuelled increase in domestic demand that has resulted from the liberalisation of the financial system elsewhere (Fuller, 2016) would clearly undermine the drivers of this growth model, which in the end relies on suppressed consumption (Baccaro and Benassi, 2017).

As indicated above, these relationships are in many ways reversed in the UK, where the stimulation of consumption through ever higher levels of consumer debt and housing wealth could be seen as forming a symbiotic (even if not necessarily permanently sustainable), relationship with its consumption driven growth model. Overall, the goals driving the Bank of England's macroprudential interventions in the housing market (in particular its emphasis on the economic risks associated with debt driven consumption volatility) are thus closely linked to the concerns of the growth models literature for two reasons. First, by considering these goals in the light of the growth models literature, we can see how they in fact make this growth model more sustainable by lowering cyclical fluctuations in the consumer demand that is driving its success. This is the case independently of the actual intentions of central banks. Second, we could argue that the very issue to which these policies are responding (i.e. the economic volatility caused by fluctuation in house prices and credit provision) would not exist to same degree in a country where economic growth relies less on the stability of domestic demand. As the empirical analysis shows, macroprudential practitioners in the two countries – while not necessarily using the language of "growth models" – seem to share this assessment of the different context in the two countries.

Macroprudential policy and the housing sector in the UK and Germany

The first thing to note about the history of housing related macroprudential policy in the UK is that it has been a very fast mover, losing no time after the financial crisis to implement a solid policy regime that enables the Bank of England's Financial Policy Committee (FPC) to take swift and decisive action in response to developments in housing markets. More specifically, key legislation passed in 2012 endowed the FPC with powers of direction over two of the main macroprudential tools in this area: "loan-to-value" (LTV) ratios, and "debt-to-income" (DTI) requirements². These tools were implemented in a flexible way, allowing the FPC to either prohibit lending above these caps or alternatively putting other restrictions (in particular regarding the value or volume of lending above these caps) in place (Bank of England, 2015). Additionally, the FPC was empowered to set sectoral capital requirements for either residential or commercial property (Barwell, 2017). Once equipped with these powers, the Bank of England did not lose much time in activating them. As early as 2014, it decided to mandate a restriction on the DTI ratios. This was in spite of the fact that the UK housing market at the time was still very much in turmoil, and the fact that according to the Bank of England's own calculations, self-imposed limits on lending at higher LTV ratios had already led to a significant decrease in the demand of residential property in the UK, with potentially long lasting effects on the relative attractiveness of owner occupied housing and the

^{2 &}quot;Loan-to-value" ratio requirements aim to influence the amount that banks can lend as a proportion of the total value of the house. "Debt-to-income" requirements on the other hand regulate the amount that banks can lend relative to both the pre-existing debt and the income of individual borrowers, with the aim of capping the debt servicing burden of households relative to their income.

demographics of home-ownership (Miles, 2011). Moreover, in 2016 the British government decided to extend the powers of the FPC, to allow them to put restrictions on buy-to-let financing, which came into effect at the beginning of 2017.

The situation in Germany could not look more different. It wasn't until 2014, that the government there started to take legislative action. However, when it did, it decided to refrain from giving its macroprudential authority – the *Ausschuss für Finanzstabilität* (AFS) – the same tools as the UK FPC, but instead only allowed the AFS to impose restrictions on amortisation requirements. Amortisation requirements are not usually listed among the most common – or indeed the most effective – macroprudential policies (IMF, 2020), and in failing to equip the macroprudential authority with LTV ratios, DTI limits or similar tools, Germany certainly stuck out among European countries. As a result, it continued to face international criticisms for failing to implement the same tools as other countries, until it finally decided to reopen the issue and start a new legislative debate in 2016/17, which finally led to the creation of new macroprudential instruments (Buchmüller and Igl, 2019). Even then, however, the German government decided to create an LTV tool only, rather than adding income-based instruments (such as the British implementation of the DTI tool). This omission, combined with the decision not to activate the LTV ratios even as housing prices continued to rise in 2019, led to renewed international criticism (FSB, 2020).

What is noteworthy in this regard, is that house price increases in Germany in the 2010s were among the highest in Europe (Hartmann, 2015), and yet the country was one of the last and most reluctant to create macroprudential tools to address these, let alone activate them (IMF, 2020). This mismatch is all the more puzzling, given that house price increases are generally seen as the single most important indicator for guiding macroprudential action (He, Nier and Kang, 2016). Similarly, the question arises of what explains the relative activism of British policy makers in this area. The next section will argue that to make sense of these differences, we have to understand the different structural and institutional context in these two countries, which encouraged a somewhat different construction of the intermediate objectives of macroprudential in the housing market. At the same time, we should not lose sight of the agency exerted by central bankers. In particular, central bankers in the UK were from the very beginning more open towards a variety of macroprudential ideas, and eagerly pushed for their early adoption when strategic openings arose.

Constructing the "goals" of macroprudential interventions

The issue of housing market related policy has tended to receive a lot of attention in the macroprudential literature, given its centrality to the history of this policy field (Knot, 2014; Houben et al., 2014). One fact that has been generally less well appreciated, however, is that there are two major, and sometimes diverging, goals that can be pursued through these policies: one that is centred around financial stability, and one that centres around macroeconomic stability. In relation to financial stability, the argument for macroprudential policy is very much straightforward. By mandating minimum standards around LTV, LTI, DSTI or DTI ratios, authorities try to decrease the likelihood of defaults that could cause distress on banks' balance sheets, while simultaneously ensuring the availability of higher collateral to cover losses should default occur. This, it is hoped, will increase the resilience of the financial sector. When it comes to the macroeconomic effects of macroprudential policies, on the other hand, the primary mechanism is that of household consumption. The idea is, that highly indebted households are more likely to display pro-cyclical behaviour, as high levels of debt force them to spend a larger amount of their disposable income on debt repayments when their incomes fall, and re-financing becomes more difficult (Svensson, 2020). During phases of economic boom and house price increases on the other hand, equity withdrawals are likely to boost consumption while building up vulnerabilities towards a reversal in house prices.

Intuitively at least, one might expect that macroprudential policy is most likely geared towards financial, rather than macroeconomic stability goals, given the fact that it is usually defined as a policy aimed at reducing "systemic risk" (Borio, 2003; Freixas, Laeven and Peydró, 2015; Schoenmaker, 2014). This, however, is not necessarily the case. In fact, the European country which has so far been the most proactive in its use of macroprudential interventions in the housing sector – Sweden - has tended to justify its interventions mainly on macroeconomic stability grounds (Finansinspektionen, 2017; Svensson, 2020). These interventions have largely met the approval of key international organisations in their assessments of macroprudential policies around the world. The question thus arises of how these goals are constructed in my two case studies, and how we might start to explain the observed patterns. The first thing to note in this regard is that German actors have discussed macroprudential policies mainly with regards to traditional financial stability oriented goals (e.g. AFS, 2020; Buchmüller and Igl, 2019). In other words, the reasons that were considered as potentially justifying macroprudential interventions, were mainly related to the effects that increasing house prices or loan-to-value ratios might have on the stability of the banking system, not on the effects that house prices movements might have on consumption patterns, and thus on larger macroeconomic variables. Those opposed to macroprudential interventions thus mainly pointed at the relative conservative underwriting practices of the local banks dominating the provision of housing finance, at the relative stability of the banking system overall, and at the demographic make-up of those borrowing at high loan-to-value ratios³ among others, to conclude that there were no compelling reasons for an activation of macroprudential instruments at the time (cf. AFS, 2020; Buchmüller and Igl, 2019; Demary and Haas, 2015; IMK, 2020; ZEW, 2018).

In the UK on the other hand, the situation looks very different. As mentioned above, the Bank of England was very proactive in promoting the use of macroprudential interventions, even at a time when its housing sector still had not recovered from the huge shock of the financial crisis yet. In

³ Arguments in this regard include that those borrowing at high LTV ratios tend to be either very wealthy (and thus more likely to be able to repay) or poorer but investing in low value housing (thus limiting the losses banks incur from defaults).

doing so, the Bank of England seems to have been driven by macroeconomic goals as much as by financial stability goals. As Jon Cunliffe of the Bank of England explained when justifying the use of LTI ratios:

The risk that the [Financial Stability] Committee saw was that if the number of high LTI mortgages continued to grow, there would be increasing numbers of highly indebted households very vulnerable to a change in economic circumstances. This would increase both *macroeconomic volatility* and systemic risk (Cunliffe, 2015: 6; emphasis added).

Similarly, in explaining the Bank's decision to complement higher capital requirements with borrower-based instruments in spite of the fact that the Bank of England's stress tests showed that banks could already easily absorb losses in the housing sector, Brazier argued that:

By reducing the risk of debt overhangs and high levels of debt, it makes the economy more stable too. Why use the cure that creates just resilient banks [i.e. capital buffers] when you can use the prevention that gives you a stronger economy too [i.e. borrower based instruments such as LTV/LTI/DTI ratios]? (Brazier, 2017: 10)

Overall, it thus appears that the inclusion of macroeconomic considerations in the construction of the goals of macroprudential interventions is an important part of the reason why central bankers in the UK were more willing to activate these macroprudential instruments. At the same time, however, these differences in the way in which the goals are constructed have to be seen within the wider economic, institutional, and political context, which makes certain debates possible in the first place.

The importance of the wider structural context

Above I have outlined the broader significance that (debt fuelled) aggregate demand and the housing sector in particular has within the overall growth regime of the UK. How did this play out in the policy debates that led to the (non-)adoption of macroprudential policies in my two case studies? The first thing to note in this regard is that in the UK there seems to have been an almost

universal acknowledgement of the key role that the housing sector plays for the health of the overall economy both among academic economists and practitioners, and a key channel of connection in this regard was assumed to be provided by the effect that house price developments and credit availability have on aggregate demand (see Peydró et al., 2020 for a comprehensive summary of the academic literature on this). In Germany on the other hand, this link was very much contested, given that housing debt plays a much smaller role within the German economy and the fact that debt is more heavily concentrated within more affluent households with a greater propensity to repay (ZEW, 2018). In contrast to the British system, housing finance provision in Germany is also provided on a long-term fixed interest basis, and benefits from much more conservative underwriting practices⁴. Moreover, the provision of this finance takes place primarily through those local banks that have displayed very little procyclicality in their lending practices during previous crises (Hardie and Howarth, 2013). This contrasts with the UK, where mortgage lending mainly takes place through the largest banks, which are particularly prone to cyclical swings due to the increasing "marketisation" of their balance sheets (Hardie and Maxfield, 2013).

As outlined above, the lack of liberalisation of (housing) finance and the reluctance to promote "asset-based welfare" should be seen in the light of the wider economic growth strategy pursued by German policy makers. Importantly for an understanding of the drivers of macroprudential policy in Germany, an acknowledgement of the particular wider structural context within the country has been prominent in the wider policy discourse. In their evidence to the finance committee (*Finanzausschuss*) of the German Bundestag for instance, nearly all expert witnesses and stakeholders who were invited to submit written evidence on the planned expansion of macroprudential powers in 2017 urged caution in assuming that the same links between the housing sector and the real economy that have found to matter in the UK and the US are actually equally

⁴ Especially important in this regard are the valuation practices in Germany, which are among the most cautious in Europe, as well as the rigorous assessments of creditworthiness of potential borrowers.

applicable to Germany⁵. Most importantly, while commentators were divided on the extent to which they thought that there was a need for more macroprudential instruments, not a single one of them cited the need to stabilise aggregate demand in case of a downturn in the housing market as a valid reason for introducing such measures.

The "proximate" institutional context

One last thing to discuss before turning to the ways in which central bankers in the UK in particular have exercised their agency to push for policies that made use of the possibilities of the wider structural context, is the issue of the "proximate" institutional context, which provided further opportunities and constraints for central bankers in the two countries. For the purposes of this paper, the most important aspects of this proximate context are the specific statutes, mandates, and roles of the central bank in each country. Crucially, in the case of the UK both the mandate of the Bank of England (which includes a greater role for the pursuit of economic growth than that of the Bundesbank) more generally, as well as its macroprudential mandate in a narrower sense (which includes the idea of "supporting the economic policy of Her Majesty's Government, including its objectives for growth and employment"), arguably made it possible for the central bank to think about certain macroprudential ideas and goals in a different way, as well as adopting different "frames" and ideas to sell it (HM Treasury, 2013: 3). Not only is the Bank of England required to once a year write a formal letter to the government and parliament that also explains how its macroprudential policies support the specific strategies for economic growth of the government, but in its "Remit and Recommendations to the Financial Policy Committee" the government even encourages the Bank of England to consider using its macroprudential tools for wider economic purposes where this does not conflict with its financial stability mandate (HM Treasury, 2020). According to one of the most prominent macroprudential observers in the UK, the importance of

⁵ A list of all written statements can be found and downloaded here:

https://www.bundestag.de/webarchiv/Ausschuesse/ausschuesse18/a07/anhoerungen/100-sitz--494846.

this dual mandate has, if anything, increased in recent years, as the line defining the appropriate balance between financial stability goals and growth supporting policies by the FPC has become increasingly murky (Aikman, 2021).

This contrasts with Germany, where the statute of the central bank makes it clear that its overriding goal is monetary stability only. Despite increasing post-crisis calls for an expansion of this statute to include either economic growth or financial stability, during the macroprudential policy debates (which increasingly gave the Bundesbank a *de facto* financial stability mandate) policy makers decided to stick with the old statute (see Remsperger, 2012 on the significance of not including financial stability in the Bundesbank's statute). Accountability to parliament is primarily ensured through a financial stability report drafted by the *Bundesbank* which, unlike in the UK, does not require the Bundesbank to comment on how its strategy also supports the governments economic strategy.

The agency of central bankers

While the discussion so far has focused on the ways in which the both the proximate institutional, as well as the wider structural context, have made it possible to think about using macroprudential interventions in the housing sector in a certain way, none of this might have mattered if it hadn't been for the agency exercised by actors keen to use the openings thus created to push for these macroprudential policies. In relation to macroprudential policy, the most important change agents identified in the wider literature are central banks (Baker, 2014; McPhilemy, 2016). Crucially, the Bank of England has been particularly proactive in pushing for change right from the start, and it has continued to advocate for stronger policies that many of their colleagues abroad – or indeed the British government – were prepared to endorse (James and Quaglia, 2019). Right after the financial crisis, this took the form of much harsher criticisms of the existing regulatory framework and the

financial system to which it had given rise. Thus, in 2010 the then governor of the Bank of England concluded a speech on the regulatory system with the words "of all the many ways of organising banking, the worst is the one we have today" (King, 2010). At the same time Bank of England officials were already keen on pushing the macroprudential agenda, and repeatedly highlighted the need for radical reform (Gieve, 2008; King, 2009; Tucker, 2010).

German central bankers on the other hand were much less keen on drastic measures. Rather than talking about the need to adopt a new "lens" and transform the governance of the financial system, German officials often talked about specific shortcomings in the Anglo-liberal system, that could be overcome by regulating securitisations and certain other practices more strictly (e.g. Weber, 2009; Zeitler, 2009). Not surprisingly, German central bankers also initially expressed considerable scepticism towards international proposals for specific macroprudential policies (Remsperger, 2008; Zeitler, 2009). While Germany eventually came to embrace the key ideas of macroprudential policy in around 2010-11, interest in the concept seems have waned again after that, while Bank of England officials remained key ideational entrepreneurs for the evolving macroprudential agenda (Baker, 2018).

A quantitative analysis of all public speeches by the Bank of England and the Bundesbank between 2007 and 2020 undertaken by the author, further underlines this⁶. It shows that after the concept started to gain in importance in central banking circles in 2009, the Bank of England was twice as fast at adopting the term (as measured by the frequency with which it occurred in the speeches of central bankers) as Germany. Crucially, this was at a time when macroprudential policy was not yet on the official policy agenda in either country, or indeed part of the mandate of the central bank, thus highlighting the independent agency of these institutions in pushing certain policy debates.

⁶ This analysis was done by webscraping all speeches published between 2007 and 2020 by the Bundesbank and the Bank of England. Overall, this yielded around 1200 speeches in the case of the Bundesbank and more than 900 in the case of the Bank of England. All speeches were then processed (this included extracting the textual material from pdfs) and analysed in python. Numerous manual checks by the author (i.e. by using a random sample of speeches and manually counting occurrences to compare them against the programmatically generated ones) were done to ensure the accuracy of the produced data. For more information please contact the author.

More generally, in the period as a whole, members of the Bank of England were 2 times more likely to use the concept in their speeches⁷. The differences were particularly stark in the time-period between 2014 and 2018, when the term was around 4 times more likely to be mentioned in speeches by British central bankers as compared to their German counterparts. This was also a time-period, when there was deep theoretical engagement with macroprudential concepts in the Bank of England, which was at the forefront of ideational innovation in this regard (Haldane, 2018; Baker, 2018).

Conclusion

Previous scholarship on macroprudential policy had largely focused on transnational processes of knowledge production. As such, its focus was naturally on the internationally shared aspects of macroprudential policy. This paper on the other hand, has demonstrated the importance of also looking at the differences in macroprudential approaches in different countries. In relation to Germany and the UK, these differences were substantial and consequential. Moreover, explaining these differences meant looking at differences in national context in both countries. Here, the different growth models, as well as the differences in their financial systems that stand in a symbiotic relationship to these growth models, have been found to have played a crucial role. As such, the paper has shown that while an academic "politics of expertise" might be important for the development of macroprudential policy in a transnational realm, more traditional political economy aspects become equally important once we adopt a more national focus, and try to explain differences in approaches.

Lastly, by adopting an "agents in context" approach, the paper has shown that a lot can be gained from integrating approaches focused on the local developments within certain forums (in this case

⁷ All comparisons are based on a "mentions per speech" metric calculated by the author, to ensure that the fact that one central bank might have published more speeches in a given year does not affect the comparison.

central banks) with the broader structural environments within which they find themselves. In other words, while agreeing with the thrust of the wider literature that the creativity and radicalness at certain central banks has mattered (e.g. Baker, 2014), it has also shown that it was the wider context which has enabled central banks to take certain actions at certain times and in certain ways. Moreover, by comparing the different stance of the Bundesbank and the Bank of England even before they had secured a macroprudential mandate, the paper has demonstrated the benefits of also differentiating between the stances of individual central banks. This is again easily lost if the focus is only on processes of transnational knowledge production and the *shared* agenda of these institutions.

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