Macroprudential policy in the EU – Policy reflections on institutional contexts and governance arrangements

Elias Bengtsson

Executive summary

In response to the lessons of the global financial crisis, macroprudential policy is now firmly established as a financial policy area to prevent excessive risk taking in the financial sector and mitigate its effects on the real economy. It has become thoroughly integrated in the work programmes of global standard setters and international organisations (FSB, BCBS, IOSCO, IMF, BIS etc.) and in financial regulation at the regional and national levels.

However, for macroprudential policy to fulfil its role in curbing systemic risk, it needs to manage several challenges relating to its political sensitivity and institutional context. This policy note discusses these challenges, and maps the current policy debate on the most appropriate governance arrangements to manage them. Thereafter, it provides an overview of macroprudential policy in the EU, both in terms of EU-wide law and regulation, and at the national level. The policy note continues by discussing how institutional contexts and governance arrangements appear to have influenced the exertion of macroprudential policy across EU countries in the post crisis period.

Drawing on these findings, the policy note ends with a presentation of a number of policy conclusions and contrast them with the current international policy debate on macroprudential policy:

- Macroprudential policy makers' inaction biases appear to be best counteracted by appointing a single macroprudential authority with strong transparency requirements. Single authorities display generally more intense policy stances, and are associated with stronger independence and accountability arrangements. Transparency matters since openness and transparency reduce political or other influences

- Both accountability and independence arrangements appear to have weaker power to explain policy outcomes. This does not suggest they are unimportant, but rather that their interaction may matter more than individual effect. However, independence may also lead "self-interest capture" at the expense of public interest.
- Policy frameworks that are multi-layered and complex pose conundrums on how to ensure sufficient institutional autonomy and policy capacity among macroprudential authorities. One such example is the Euro zone area, where the ECB has an overlay function in domestic macroprudential policy.

- It is unlikely that there is panacea to the policy problems surrounding macroprudential policy. Additional debate, research and policy development in the field of macroprudential policy is especially warranted; not least given its distributional consequences and since it redefines the role of public authority over private interest.

JEL Classification: F59; G18; G28; P16.
Key words: Political economy; Macroprudential policy; Banking regulation; Government policy and regulation; Financial institutions and services.

Macroprudential policy in the EU – Policy reflections on institutional contexts and governance arrangements

1. Introduction: The ascent of macroprudential policy

The global financial crisis offered a stark reminder on how excessive risk taking in combination with weaknesses in the financial system can lead to detrimental consequences for financial stability and the real economy. An important lesson was that prevailing regulatory and supervisory regimes were not properly equipped to identify and curb systemic risk.[i]

In response to this, macroprudential policy has emerged as a key area in economic and financial policy, complementing those of microprudential and monetary policy.[ii] In essence, macroprudential policy seeks to prevent and mitigate the effects of excessive risk taking in the financial sector. In the broad sense, macroprudential policy includes both the wider institutional frameworks and regulation for policy enactment; the analytical tools and processes to identify and assess system risks; as well as the set and use of macroprudential measures to address them.

This policy note provides an overview of and discusses key macroprudential policy issues with a particular focus on the EU. It seeks to highlight differences and commonalities between EU Member States; how these relate to international best practice and policy recommendations; and discuss implications thereof for the effectiveness of macroprudential policy in fulfilling its role in economic policy.

The following section provides an overview of the international policy debate on macroprudential policy, with a particular focus on policy issues relating to institutional factors and governance arrangements (”macroprudential set-up”). Section 3 covers macroprudential policy stances in the EU. It begins by providing an overview of the legal foundations of macroprudential policy in the EU, including how European law/Directives has been transposed across the Member States. Thereafter it presents some stylized facts on macroprudential policy stances across countries and over time. Section 4 illustrates – in a non-technical manner - how institutional factors and governance arrangements have influenced macroprudential policy stances across Europe. Section 5 concludes by discussing these findings in the light of the international policy debate on macroprudential policy; and presents a number of policy conclusions.

2. The international policy debate on macroprudential policy

Macroprudential policy is now firmly integrated in the work programmes of global standard setters and international organisations (Financial Stability Board (FSB), Basel Committee of Banking Supervision (BCBS), International Organization of Securities Commissions (IOSCO), International Monetary Fund (IMF), Bank for International Settlements (BIS), European Central Bank (ECB), European Systemic Risk Board (ESRB) etc.) and in financial regulation at the regional and national levels.

Inaction bias and macroprudential policy

Part of this policy work, and related debates and discussions, are centred on how to address the various difficulties facing macro-prudential policymakers in the concrete exertion of policy. This includes how to identify and assess systemic risk, the choice and calibration of instruments, domestic and international policy coordination, and policy evaluation (ESRB 2015; Bengtsson et al. 2018). But there are also important policy work that relates to the incentives of policy makers and related stakeholders that arise as a consequence of institutional and governance structures in the policy context. Within this field of policy work, the discussion and debates tend to revolve around finding solutions to the risk of inertia among responsible authorities and policy makers. Such *inaction biases* are compounded by a number of interrelated factors - *time inconsistencies; distributional effects;* and p*ath dependencies and cognitive constraints* -and tend to be reinforced by other important stakeholders than the policy maker themselves:

- *Time inconsistencies* are well documented in the literature on monetary policy (Persson et al. 1987), but also in the literature on microprudential regulation (Taylor et al. 2005; Quintyn et al. 2007). They imply that policy measures are likely to have direct impact on the real economy, and tends to reduce its (near term) future growth prospects. The benefits, on the other hand, are future and uncertain, and may in any case be difficult to explain to the public. Such time inconsistencies are perhaps even more pronounced in macroprudential policy than in other policy areas; one of its key objectives is to “take the punchbowl away” in the risk accumulation phase, when conditions seemingly appear benign but vulnerabilities may be growing. For instance, increasing capital requirements for mortgages to fend of future events with a relatively low probability, is likely to face opposition from mortgage associations and perhaps also the general public if it increases interest rates on mortgages. For this reason, time inconsistencies can make macroprudential policy prone to criticism and opposition (Baker 2015; Brunnermeier et al. 2009).

- *Distributional effects* are also likely to increase the risk of inaction bias. Again, that distributional effects may dampen the appetite of policy makers to take action is well documented in the literature on monetary policy, but some claim that the distributional effects of macroprudential policy are more explicit and conspicuous (Baker 2015; Haldane 2013). Although the former has distributional consequence by influencing values of assets and debt, macroprudential policy may introduce measures such as limits and requirements on particular types of transactions, exposures or market actors. This in turn is likely to influence prices and credit flows from particular sectors to others, and may reduce access to credit for particular population cohorts or economic sectors at certain times. Such distributional effects are likely to strengthen inaction biases, even in situations when it may be in the public interest to pursue active and appropriate macroprudential policy stances.

- *Path dependencies and cognitive constraints* are well documented in the financial governance strand of the literature on political economy. It highlights that path dependencies and cognitive constraints among financial regulators and supervisors are powerful explanatory factors behind inaction bias. A reluctance to adapt to new circumstances and a tendency to continue to follow established routines, interpretative frameworks and cognitive modes, are likely to make macroprudential regulators fail to take sufficient action to curb systemic risk (Tarullo 2008; Buiter 2012; Bengtsson 2016). Haldane (2013:7) has described this as the “*risk of disaster myopia, of ignoring worrying dots on distant horizons, of being “information-rich-yet-attention-poor”, of forgetting fat tails*.” Such cognitive constraints are likely to be compounded in contexts where there is shortage of embedded knowledge of the past or with little institutional memory (Haldane 2013). This implies that in cases when a country has not experienced serious financial stress or a significant financial crisis within a long time period, the preferences among key actors are more likely to favour inaction compared to countries with more recent and/or more substantial financial crises.

Private interest and macroprudential policy

Time inconsistencies, distributional effects and cognitive constraints do not merely affect macroprudential policymakers. They are also likely to induce key stakeholders, such as industry associations within and outside financial services, consumer groups and politicians, to voice their concerns to influence policy makers; either directly or by influencing each other and/or the general public to strengthen their message. Facing such opposition, policy makers are more likely to remain inactive in their policy stance.

Such political or private sector capture are often highlighted in the international policy debate due to time inconsistencies and distributional effects of macroprudential policy (Borio 2011) . Political tenures typically range between 3-5 years (the time between parliamentary elections), whereas financial cycles tend to have prolonged upturns which typically last a decade or more (Adrian and Shin 2008.) This compounds issues relating to time inconsistencies, since it may tempt politicians or political decision-*takers* to pursue their own interests (such as re-election or re-appointment) at the expense of society's long term interests. For instance, a potentially destabilizing financial boom could be allowed to persist in order to harness popularity (Tucker 2014b). A parallel reasoning is easy to apply on distributional effects, where politicians (or authorities they directly or indirectly control) may wish to avoid distributional consequences that would result from public interest policies. This, in turn, could please particular voter groups and thereby increase chances to remain in office.

Naturally, politicians' preference formation is influenced by constituents and key stakeholders. This also implies that private interest – such as industry or consumer groups - may pressure macroprudential policymakers into inaction, both directly and indirectly through the political sphere. Although regulators and politicians may face competing demands from voters and – for instance - banks (Oatley and Nabors 1998; Mattli and Woods 2009), this implies that commercial interests and political interest often become intertwined. For instance, both mortgage lenders and home owners may oppose increasing capital requirements for residential real estate exposures, if this is believed to lower profitability and increase mortgage interest rates. Another example is the concept of institutional memory discussed above, which by nature is a shared characteristic among actors within a particular shared context.

In particular, the literature contains ample evidence that the financial industry – and banks in particular - has considerable powers in influencing economic policymaking (Bengtsson 2013, 2016; Tarullo 2008). These powers appear to have been compounded by a number of social trends and conditions. One are larger and more concentrated banking systems that are the results of increasing internationalization and consolidation of banking in recent decades. This, in turn, has reduced collective action problems relating to influencing regulatory outcomes (Verdier 2013). These structural characteristics - such as the size and/or concentration of a particular banking system - can also make banking more important in providing services, generating tax revenues, or contributing to employment and growth (Bengtsson et al. 2013).

But there are also other factors that may strengthen the power of the financial system and banks. One is the presence of institutional arrangements that grant financial sector actors privileged access to regulators. This provides opportunities to informally influence regulatory processes (Pagliari and Young 2014), which in particular enables the financial industry to provide input in the initial and important agenda-setting phase of policy processes (Verdier 2013). Privileged access and repeated interactions also tend to reinforce "cognitive alignment". This implies that discourses, concepts and terminologies of both the regulators and the regulated become institutionalised. It also means that these terminologies and concepts become less accessible or understood by the public or other stakeholders, which thereby limits their abilities to influence (Mattli and Woods 2009). Mosley (2009) argues that the interests of politicians and regulators tend to particularly aligned with those of the domestic financial sector when regulatory issues are highly technical. High levels of technicality is a prominent feature of many macroprudential policies, such as those that imposes limits and restrictions based on technical standards (such as risk weights, exposure limits, funding and liquidity ratios etc.).

Macroprudential set-up

The inherent risk of inaction bias in macroprudential policy has spurred an intense international policy debate with many contributions by various policy bodies. As in most policy debates, there are also many disagreements on what constitutes the most appropriate set-up for macroprudential policy. This also relates to the fact that there are many ambiguities on the effects of various institutional and governance arrangements. Unlike other areas of financial policy, research is in its infancy and tends to be largely theoretical (Bengtsson 2019). Goodhart (2014:281) notes that there is "*little assessment of the institutional impact of macroprudential policy […], despite the strong likelihood that regulated entities will resist tighter regulation and that conflicts over macroprudential policy will be politically mediated".*

This said, there is at least tendencies for an emerging consensus on how various institutional and governance arrangements relating to macro-prudential policy should be structured. In other words, it appears that an increasingly shared policy view is underway on issues such as independence, accountability and transparency requirements of macro-prudential regulators; and on issues relating to which authorities should be involved in policymaking. The various arguments and counterarguments put forward on the design of various key dimensions of macroprudential policy set-up are discussed below. The discussion largely reflects the positions of relevant international bodies, such as the International Monetary Fund and Bank for International Settlements, or central banks. In the subsequent Section 3, an account of the choices European Member States have made in terms of their macroprudential set-up is provided.

<u>Institutional set-up</u>

When deliberating on the most appropriate institutional set-up, the policy debate centres on three broad features: whether particular authorities are better suited for shouldering macroprudential responsibility due to the degree of alignment of objectives; due to their availability of resources; and whether a committee structure or a single macroprudential authority is preferable. Unsurprisingly, policy debates typically stress that advantages and disadvantages of specific institutional forms require further analysis (IMF 2014).

- *Alignment of objectives*. A lack of alignment between policy objectives may give rise to tensions for the authorities involved in macroprudential policy.[iii] For microprudential authorities, increasing capital requirements of banks to strengthen resilience may be warranted in financial stress. However, from a macroprudential perspective, such capital increases may be procyclical and deepen financial stress (IMF 2011). For central banks, one important transmission channel for monetary policy is the "risk taking channel". But even though increased risk taking is an intended effect of expansionary monetary policy, it may also lead to unintended and potentially excessive risk taking in particular sectors or market segments. In addition, activation of macroprudential measures may also affect the business cycle (CGFS 2010; Blanchard et al. 2010; Galati and Moessner 2011). These type of tensions may lead to policy confusion, and potentially inhibit decision making and timely intervention (Osinski et al. 2013). Whereas political bodies, such a finance ministries/treasuries, benefit from being able to internalize any goal conflicts between fiscal and macroprudential policy, tensions between policy objectives are clearly linked to time inconsistencies and distributional effects.[iv] These are likely to cause inaction bias due to the lack of independence from other political preferences and processes. For this reason, the international policy debate often emphasise the need for politically independent macro-prudential policy (see further below).

- *Availability of resources* for effective macroprudential policy includes capabilities, experiences and information access. They all tend to benefit from synergies with existing tasks of the relevant authorities. Central banks may have advantages from synergies in analysis and data, especially in analysing business and financial cycles. They also tend to be well informed on financial markets structures and developments through their market operations and payment system monitoring. For microprudential supervisors, synergies may arise through access and experience in analysing granular firm-level data. In addition, microprudential supervisors are also likely to have direct experience of using the macroprudential measures (albeit for microprudential purposes).[v]

Availability of resources seems be an important reason (the other one being independence – see below) for the apparent consensus that central banks should play a key role in macroprudential policy (IMF 2011). Borio, a prominent economist at the BIS, argues that "[…] *we should be bold in designing new governance arrangements. Given their expertise, central banks should play a key role*" (Borio 2011:13). Similar, the European Systemic Risk Board (ESRB) Recommendation (2011) advises countries to designate central banks as the national macro-prudential authorities, based on their expertise and roles in financial stability monitoring.

- *Committee structure or a single macroprudential authority.* The discussion on the choice between mandating a single institution to pursue macroprudential policy, or opting for a committee structure comprising several relevant authorities, also relate to potential tensions between policy objectives and resource availability. The policy debate highlights a number of advantages and challenges relating to joint decision making in committees. In term of advantages, a committee structure may ensure that information is effectively shared among participating authorities. It also increases the pool of human resources generally, but also broadens the analytical scope by including different types of expertise. This may be required to spot systemic risk with diverse root causes and transmission channels (Sibert 2010). Potential challenges relate to prolonged processes due to coordination problems, which may slow decision making, especially when membership is large and the interests of represented authorities diverge. Committee structures may also lead to motivational losses and dilution of accountability (see further below). Also, information sharing may be difficult in practice. People may feel reluctant to speak freely and question assumptions, since this carries a risk of making a fool of oneself in front of co-members.

The US provide an interesting case on institutional arrangements. The US regulatory system is fragmented across several authorities, and a Financial System Oversight Committee (FSOC) consisting of these agencies and the Treasury was set up in charge of financial stability oversight. This in turn, has prompted a political and academic debate on whether this is appropriate, given that this leads to particular political, resource-related and accountability implications (Allen 2015). In policy circles, a neutral stance is often expressed regarding the choice between a single macroprudential authority or a committee structure (IMF 2011; ESRB 2011 etc.).[vi]

Governance arrangements

How best to counteract inaction biases through appropriate governance arrangements remains an unresolved issue in the macroprudential policy debate, but there is an emerging consensus developing the three areas:

- *Independence* from political or private interest is frequently stressed in the international policy debate (Haldane 2013; Borio 2011; IMF 2014 etc.). Also, the ESRB has recommended countries to ensure both operational and financial independence of macroprudential authorities (2011). The preference for independent authorities is buttressed by significant research within the field of monetary policy (Rogoff 1985). Similar arguments are made in the field of microprudential supervision, where Masciandaro et al. (2008) argue that political and industry capture require independent supervisors. Das and Quintyn (2002), Das et al. (2004), Quintyn (et al. 2007) and others highlight the importance of microprudential supervisors being able to pursue objective without fear of dismissal or other punitive measures, even with dissentient views from politicians or other powerful stakeholders. Central banks have typically greater political independence than other authorities in order to protect monetary policy from political influence; central bank governors are usually appointed over a fixed period extending several years, with very little political accountability and limited possibilities of being ousted.[vii] These institutional arrangements generally provides central banks with more independence, which is another reason for the common policy preference for designating central banks as macroprudential authorities.

- *Accountability* is often advocated to reduce the potential pursuit of private (and self-) interests. Among others, the ESRB (2011) has emphasised the need for appropriate accountability mechanisms (including reporting to the national parliament, board meeting disclosures etc.). ESRB further specifies that macroprudential authorities should be explicitly entrusted the tasks to identify, monitor and assess risks to reduce inaction bias. However, the literature also flags that independence is a double edged sword; with more independence, the risks of "self-interest capture" increases (Boot and Thakor 1993). The literature on the governance of financial supervisors (Quintyn et al. 2007; Masciandaro et al. 2008) argues that governance arrangement need to be more complex in financial supervision compared to monetary policy, since the former pursues objectives that are multiple and harder to measure. In addition, supervisors often have multiple mandates and face more difficult conflicts between these mandates (Taylor et al. 2005). Furthermore, supervisors have more stakeholders that are particularly affected by supervisory policies or regulation. Research shows that legislators are less willing to grant independence to financial supervisors and regulators than to central banks (Quintyn and Taylor 2003), which may relate to these conditions.

- *Transparency* on the underpinnings of macroprudential authorities' policy decisions is another important and widely debated governance feature. Transparency may manage market expectations and allow market actors to adjust to avoid future measures (largely similar to the "forward guidance" function of monetary policy). This may increase the effectiveness of any particular policy stance. But transparency is also linked to accountability in the sense that substantial transparency requirements would require authorities to disclose the motives for taking particular measures or for being inactive (Osinski et al. 2013). Openness and transparency is often argued to minimize political or other influence (Quintyn et al. 2007). For these reasons, several policy bodies also recommend transparency requirements on macroprudential authorities (ESRB 2011; IMF 2014 etc.).

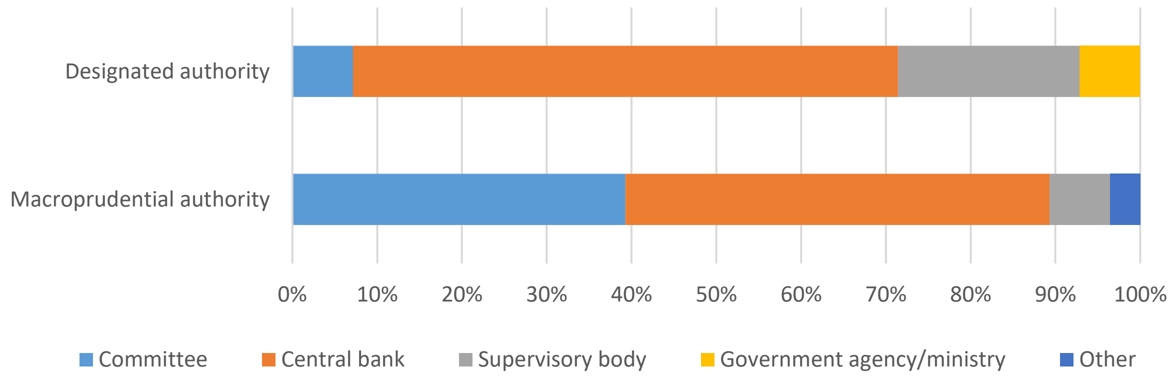
3. Macroprudential policy in the EU

This section elaborates on the set-up and concrete exertion macroprudential policy across the EU Member states. In the EU, macroprudential policy is regulated by the Capital Requirements Directive (CRD) and the Capital Requirements Regulation (CRR).[viii] CRD/CRR provides EU Member States with a common legal framework and a set of macro-prudential instruments to mitigate systemic risk in the banking sector. Among other things it requires national legislative bodies to formally designate macroprudential authorities and equip them with various macroprudential instruments.

In fact, EU law (Art. 136 of Directive 2013/36/EU (CRD IV)) requires Member States to appoint one Designated authority which is responsible for setting the countercyclical capital buffer rates. In addition, the ESRB (ESRB/2011/3) recommends that Member States establish "macroprudential authorities" with at minimum with the tasks of identifying, monitoring and assessing risks to financial stability, and of implementing policies to achieve its objective by preventing and mitigating those risks. This also includes ensuring that the macro-prudential authorities have control over appropriate instruments for achieving their objectives. Capital requirements, funding ratios, liquidity buffers, intra-financial sector and large exposure limits and public disclosure requirements all form part of the EU macro-prudential toolkit.

Figure 1 illustrates the distribution of the institutional set-up of Designated & Macroprudential authorities in the EU. It demonstrates that central banks is the most preferred choice for both the Macroprudential and Designated authority. In fact, for around half of EU Member States, the Designated authority coincides with the Macroprudential authority. When they don't, the macroprudential authority very often takes the form of a cooperative committee structure, while the designated authority is the central bank, the financial supervisory authority or even government agencies (PL; DK). In comparison with Edge and Liang's (2018) study on a larger global sample of countries, EU appears to rely on central banks as macroprudential authorities more frequently. Table 1 below provides additional details on the Designated & Macroprudential authorities across the EU Member States.

Figure 1 Designated & Macroprudential authorities in the EU



Source: The Author based on ESRB (2018)

Thus, interinstitutional cooperation structures are much more frequent choice for Macroprudential authorities. In general, such committees merely have soft powers at their disposal, such as issuing recommendations, opinions or warnings. But in some cases, such as FR, they are also able to take binding policy decisions. These committee structures typically include the central bank, supervisory authorities and government agencies/ministries. In some rare cases are other actors also involved (e.g. of the deposit guarantee agency, resolution agency or accounting body). Central bank often plays a leading role in the committee work, e.g. by either chairing it or providing secretariat and/or analytical functions. In some Member States the Ministry of Finance representative are chairs (AT, DE, LU).

Another feature of macroprudential policy in the EU is that when using macro-prudential measures, national authorities must also comply with particular procedures of coordination with various European bodies. This includes the European Banking Authority (EBA), the European Systemic Risk Board (ESRB), the European Commission, the EU Council and the European Parliament.

Moreover, since 2013 and the creation of the EU Banking Union, the responsibility for macroprudential policy in is shared between the ECB and national authorities in the Euro area.[ix] National authorities retain the power to activate macroprudential measures in their Member States (subject to notification and coordination mechanisms), but the ECB can both object to measures as well as up a number of macroprudential instruments assigned to it through EU legislation.

Table 1 Macroprudential & Designated authorities in the EU

Country	Macroprudential & Designated authority
BE	Nationale Bank van België/Banque Nationale de Belgique
CZ	Ceská národní banka
EE	Eesti Pank
IE	Central Bank of Ireland
GR	Bank of Greece
FR	Haut Conseil de Stabilité Financière (High Council for Financial Stability)
CY	Central Bank of Cyprus
LT	Lietuvos bankas
HU	Magyar Nemzeti Bank
MT	Central Bank of Malta
PT	Banco de Portugal
RO	Comitetul Național pentru Supravegherea Macroprudențială (National Committee for Macroprudential Oversight)
SK	Národná banka Slovenska
FI	Finanssivalvonta (Finnish Financial Supervisory Authority)
SE	Finansinspektionen (Financial Supervisory Authority)
UK	Bank of England/Financial Policy Committee

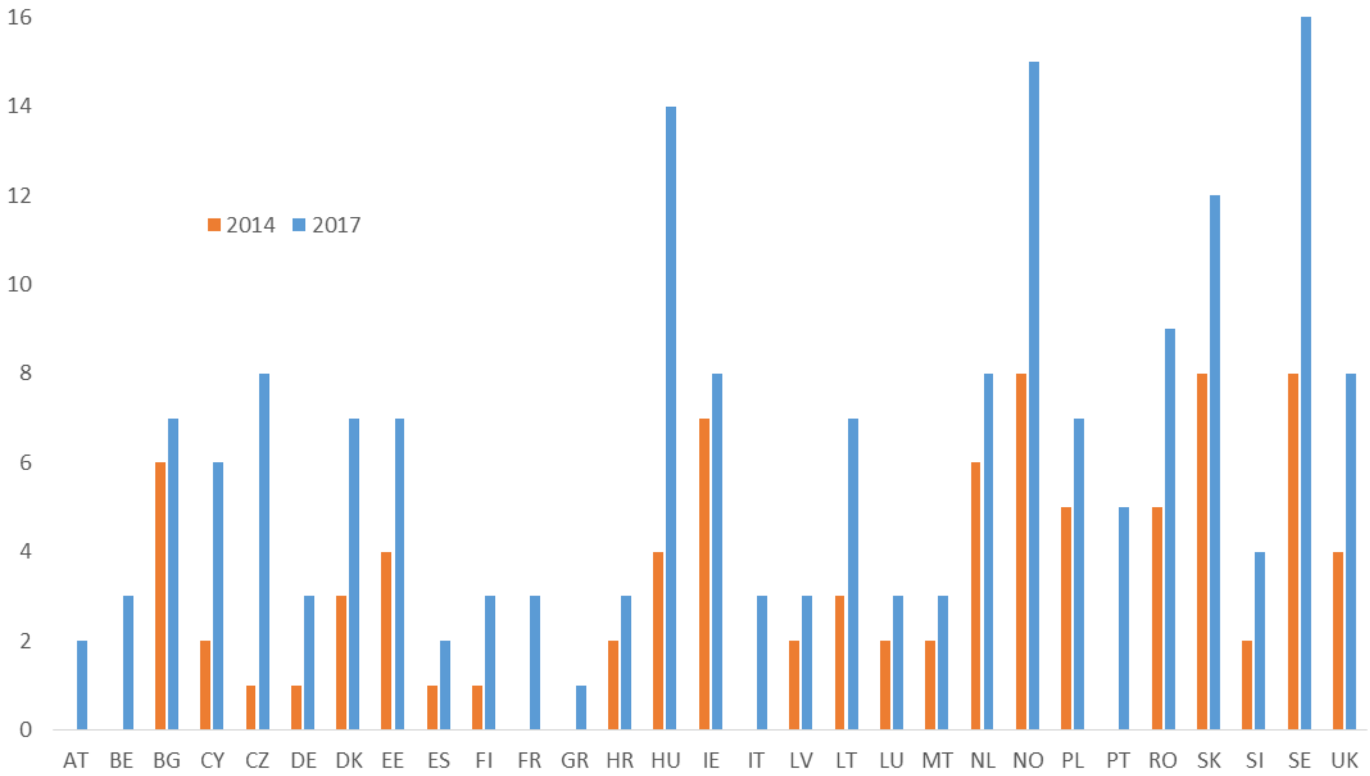
Country	Macroprudential authority	Designated authority
BG	Financial Stability Advisory Council	Bulgarian National Bank
DK	Det Systemiske Risikoråd (Systemic Risk Council)	Erhvervsministeren (Minister for Industry, Business and Financial Affairs)
DE	Ausschuss für Finanzstabilität (Financial Stability Committee)	Bundesanstalt für Finanzdienstleistungsaufsicht (Financial Supervisory Authority)
ES	*	Banco de España
HR	Vijeće za financijsku stabilnost (Financial Stability Council)	Hrvatska narodna banka
IT	**	Banca d'Italia
LV	Latvijas Banka	Finanšu un kapitāla tirgus komisija (Financial and Capital Market Commission)
LU	Comité du risque systémique (Systemic Risk Committee)	Commission de Surveillance du Secteur Financier (Financial Supervisory Authority)
NL	Financieel Stabiliteitscomité (Financial Stability Committee)	De Nederlandsche Bank
AT	Finanzmarktstabilitätsgremium (Financial Market Stability Board)	Finanzmarktaufsichtsbehörde (Austrian Financial Market Authority)
PL	Komitet Stabilności Finansowej (Financial Stability Committee)	Minister Finansów (Minister of Finance)
SI	Odbor za finančno stabilnost (Financial Stability Board)	Banka Slovenije

Source: The author.

Macroprudential policy stances

Turning to macroprudential policy stances in the EU, figure 2 covers substantial macroprudential measures in EU Member States between 2014 and 2017.[x] One observation is the general increase in the number of measures. This is likely a combined result of increased systemic risk due to low interest rates/increasing asset prices, and that macroprudential stances are still in their build-up phase (both from a legal and economic/post crisis perspective). However, there are also large differences between Member States. For some of the larger EU Member States, and for those that suffered greatly in the global financial and EURO crises, more lax policy stances are visible. For many northern, central and eastern Member States, macroprudential policy stances tend to be more intense.

Figure 2 Macroprudential policy stances in the EU 2014 & 2017



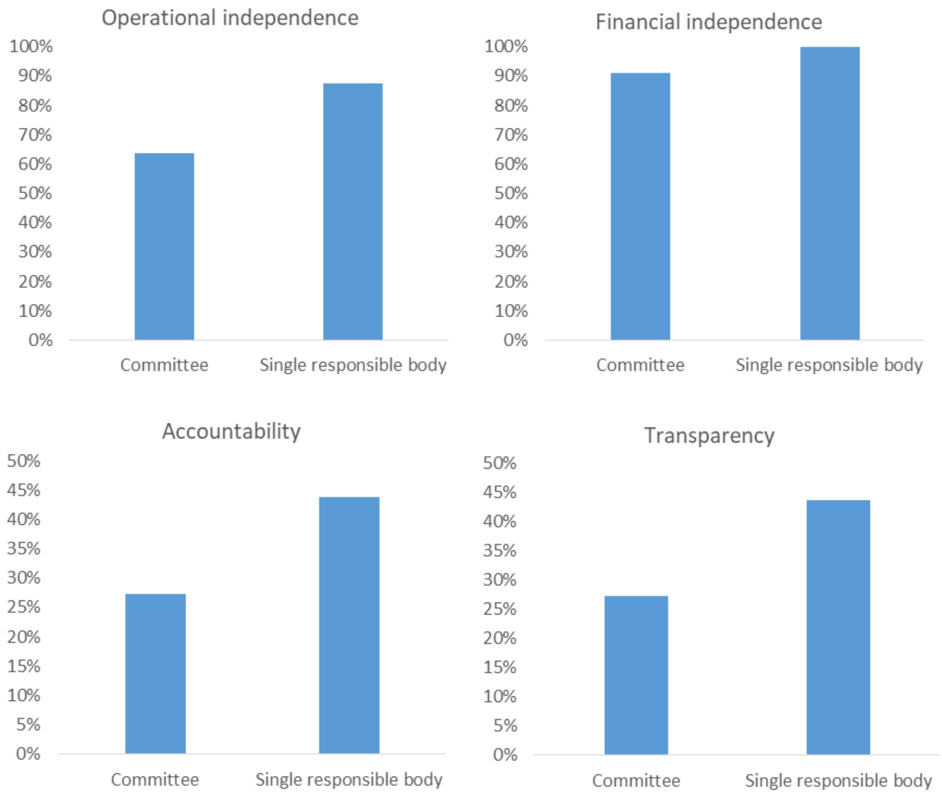
Source: The author

4. Determinants of macroprudential policy stances

Variations in macroprudential policy stances can be due to a range of explanatory factors. Obviously, the degree and nature of systemic risk in a particular country matters, which also may relate to the different phase in the financial cycle in the country finds itself in. Other factors may include differing views as regards the role of macroprudential policy, and the related set-up of macroprudential policy in terms of its institutional and governance structure.

Research on these latter issues is very limited. Some exceptions exist, but tend to focus on ex ante theoretical reasoning (Tarullo 2014) rather than empirical policy manifestations. Edge and Liang's (2018) does not focus on policy stances, but empirically investigates the motivational factors behind the macroprudential set-up across 58 countries within and outside the EU. Regression analysis suggests financial stability committees are designed to facilitate information sharing and coordination across agencies rather than making policy stances more effective. Similarly, cross matching information on governance variables and different institutional structures across EU Member States provides some cues. Figure 3 depicts the percentage of Member States with either a single or a committee-type macroprudential authority that achieve the highest rating in terms of independence, accountability and transparency. A larger share of single macroprudential authorities attain the highest rating for all these dimensions.

Figure 3 Transparency, accountability & independence by types of macroprudential authorities

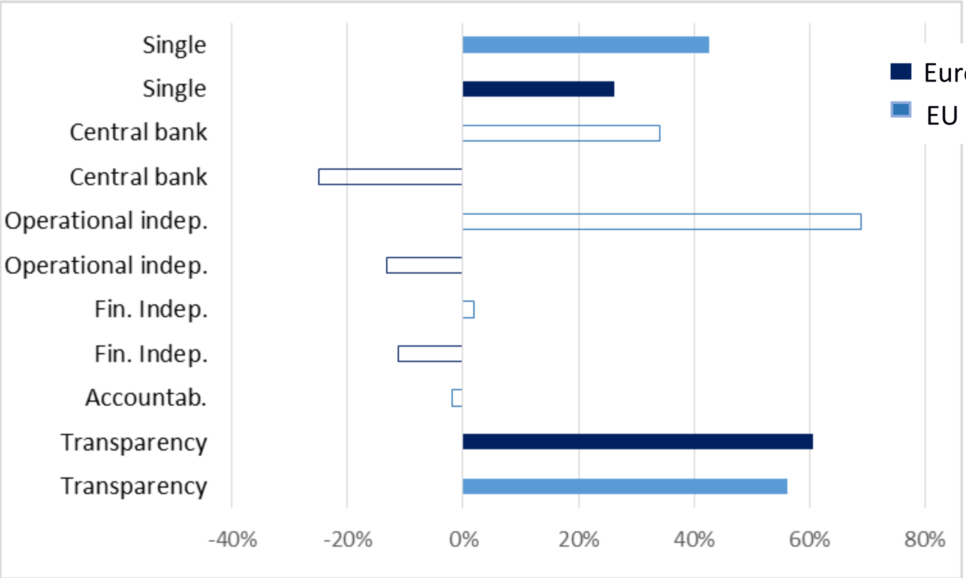


Source: The author based on ESRB (2014).

If single authorities in general are more independent, accountable and transparent, does this reduce their inaction bias and lead to more intense policy stances? Bengtsson (2019) analyses macroprudential policy stances across EU countries, and seeks to understand how institutional and governance arrangement of relevant authorities influence macroprudential policy.
Based on data from common reporting requirements in the EU, the analysis tests whether countries with single macroprudential authorities, and whether countries with central banks in charge of macroprudential policy, adopt more intense policy stances after taking the level of systemic risk into account. Moreover, whether governance arrangements relating to independence, accountability and transparency matter for macroprudential policy stances is also looked into.

Figure 4 provides an overview of the institutional and governance dimensions that were found to influence policy stances or not, including whether the influence was statistically significant or not. It also illustrates the direction and magnitude of the influence, where the latter is measured as percentages in relation to the “control group”. For instance, the bars that displays the effects of having single macroprudential authorities display policy intensity in relation to the group of countries where there is no single authority etc. A general comment is that many of the results differ depending on whether countries are based in the Euro zone or not. For instance, more intense policy stances are associated with countries where a single macroprudential authority is established. But there is no significant effect when single authorities are appointed in the Eurozone. Appointing a central bank does not significantly influence policy stances in any of the samples. Figure 4 also demonstrates that neither formal independence nor accountability arrangements matters, but that there are significant positive effects from transparency arrangements.

Figure 4 Significance in relationships between macroprudential set-up dimensions and policy stances



Source: Bengtsson (2019).
Note: Filled bars indicate statistically significant relationships below 10% level.

5. Policy conclusions & discussion

A general policy conclusion on macroprudential policy is that appropriate institutional and governance arrangements are needed to safeguard public interest and to counteract inaction biases. Many specific dimensions relating to governance arrangements have been suggested by policy bodies such as the IMF, BIS and the ESRB, although they often provide several suggestions among alternatives, and point to their respective benefits and shortcomings. This policy note seeks to venture further, and outline a number of policy implications that emerge from discussion and arguments outlined above:

- Macroprudential policy makers' inaction biases appear to be best counteracted by appointing a single macroprudential authority. Single authorities display generally more intense policy stances, and are associated with stronger independence and accountability arrangements, as well as stricter transparency requirements. This suggests that the benefits from committee structures (coordination advantages, pooling of resources etc.) appear to be overshadowed by their shortcomings (coordination problems, divergence of interests, contradictory policy objectives etc.)

- There is an international consensus that strong transparency requirements are beneficial for macroprudential policy (ESRB 2011; IMF 2014 etc.). Strong governance arrangements on transparency tend to influence policy stances. Transparency matters since openness tend to reduce political or other influence. But transparency is also linked to accountability in the sense that substantial transparency requirements force authorities to disclose the motives for taking particular measures or not.

- However, both accountability and independence arrangements appear to have weak power to explain policy outcomes. This does not suggest they are unimportant, but rather that they are difficult to rate due to complexity, and that their interaction may matter more than individual effect. However, independence may also lead to unintended consequences, including the of "self-interest capture" at the expense of public interest.

- Another policy implication is that policy frameworks that are multi-layered and complex pose conundrums on how to ensure sufficient institutional autonomy and policy capacity among macroprudential authorities. The differences found among Euro zone and non-Euro zone countries is a telling example. For instance, the benefits of having a single macroprudential authority is not visible in the Euro zone sample. One potential explanation could be that the ECB has an overlay function in domestic macroprudential policy, which implies a very different institutional setting and overarching governance structure.

A final remark is that there is still no agreement on the most appropriate set-ups of macroprudential policy to counter inaction bias. Perhaps it will never be known. Systemic risk is complex and varies over time and place, not least due to the dynamism of the financial systems and its innovative capacity. For this reason, it is unlikely that there is panacea to the policy problems surrounding macroprudential policy. This also points to the need for an ongoing and vibrant policy discussion and debate. Given the distributional consequences of macroprudential policy, and since it redefines the role of public authority over private interest, gaining a better understanding of its political economy is necessary and urgent.

References

Allen, H. J. (2015) Putting the Financial Stability in Financial Stability Oversight Council. Ohio St. LJ, 76, 1087.

Baker, A. (2015) The Bankers' Paradox: The Political Economy of Macroprudential Regulation, *SRC Discussion Paper No 37*, London School of Economics.

Bengtsson, E. (2013) The Political Economy of Banking Regulation – Does the Basel 3 Accord Imply a Change?, *Credit and capital markets*, 3: 303-329.

Bengtsson, E. (2016) *The Political Economy of Basel III,* Working paper, Stockholm University.

Bengtsson, E. (2017) Investment funds, shadow banking and systemic risk, In Shadow Banking (pp. 163-177). Routledge.

Bengtsson, E., Holmberg, U. and Jönsson, K. (2013) Identifying systemically-important banks in Sweden – what can quantitative indicators show us?, *Sveriges Riksbank Economic Review*, 2: 50-76.

Bengtsson, E., Grothe, M., & Lepers, E. (2018) Home, safe home: cross-country monitoring framework for vulnerabilities in the residential real estate sector, Journal of Banking and Finance, *forthcoming*.

Bengtsson, E. (2019). Macroprudential policy in the EU: A political economy perspective. *Global Finance Journal*, 100490.

Blanchard, O., Dell'Ariccia, G. and Mauro P. (2010) Rethinking Macroeconomic Policy, SPN/10/03, IMF Staff Position Note.

Boot, A. W., & Thakor, A. V. (1993). Self-interested bank regulation. The American Economic Review, 206-212.

Borio, C. (2011) Implementing a macroprudential framework: blending boldness and realism, *Capitalism and Society,* 6(1): 1–2.

Brunnermeier, M. and Pedersen, L. (2009) Market Liquidity and Funding Liquidity, *Review of Financial Studies*, 22: 2201–2238.

Buiter, W. H. (2012) *The Role of Central Banks in Financial Stability: How Has It Changed?*, CEPR Discussion Paper.

Committee on the Global Financial System (2010) *Macroprudential instruments and frameworks: a stocktaking of issues and experiences*, CGFS Publications no. 38.

Rochelle M. Edge & J. Nellie Liang, 2019. "New Financial Stability Governance Structures and Central Banks," Finance and Economics Discussion Series 2019-019, Board of Governors of the Federal Reserve System (US).

ESRB (2011) *RECOMMENDATION OF THE EUROPEAN SYSTEMIC RISK BOARD of 22 December 2011 on the macro-prudential mandate of national authorities* (ESRB/2011/3) (2012/C 41/01).

ESRB (2014) *Follow-up Report – Overall assessment: Recommendation on the macro-prudential* *mandate of national authorities* (ESRB/2011/3).

ESRB (2015) The ESRB handbook on operationalising macroprudential policy in the banking sector, European Central Bank, available at: https://publications.europa.eu/en/publication-detail/-/publication/df401d9f-25d0-4587-ad3f-47599f4d29ae/language-en/format-PDF/source-search

ESRB (2018) A Review of Macroprudential Policy in the EU in 2017, April 2018.

Galati, G. and Moessner, R. (2013) Macroprudential policy–a literature review, *Journal of Economic Surveys,* 27: 846-878.

Goodhart, L. (2015) Brave new world? Macro prudential policy and the new political economy of The Federal Reserve, *SRC Discussion Paper No 29*, Systemic Risk Centre, The London School of Economics and Political Science, London.

Haldane, A. (2013) *Why institutions matter (more than ever)*, Speech at Centre for Research on Socio-Cultural Change (CRESC) Annual Conference, School of Oriental and African Studies, London, 4 September.

Helleiner, E. (2010) A Bretton Woods Moment? The 2007–08 Crisis and the Future of Global Finance, *International Affairs*, 86(3): 619–36.

Houben, A. C., Kakes, J., & Schinasi, G. J. (2004). *Toward a framework for safeguarding financial stability* (Vol. 4). International Monetary Fund.

IMF (2011) Macroprudential Policy: An Organizing Framework, Monetary and Capital Markets Department, March 14.

IMF (2013) The Interaction of Monetary and Macroprudential Policies—Background Paper, Washington: International Monetary Fund.

IMF (2014) Staff Guidance Note On Macroprudential Policy, 6 Nov, available at: http://www.imf.org/external/np/pp/eng/2014/110614.pdf

Masciandaro, D., Quintyn, M., & Taylor, M. W. (2008) Inside and outside the central bank: Independence and Accountability in Financial Supervision: Trends and Determinants. European Journal of Political Economy, 24(4): 833-848.

Mattli, W., and Woods, N. (Eds.). (2009) 'The politics of global regulation', Princeton University Press.

Minsky, H. (1986) *Stabilizing an Unstable Economy*, Yale University Press.

Mosley, L. (2009) 'Private governance for the public good? Exploring private sector participation in global financial regulation', in Milner, H. V. and Moravcsik, A. (Eds.). (2009). Power, interdependence, and nonstate actors in world politics. Princeton University Press.

Osinski, J., Seal, K., & Hoogduin, M. L. (2013). *Macroprudential and microprudential policies: toward cohabitation,* International Monetary Fund WP No. 13-15.

Pagliari, S and Young, K. (2014) 'Leveraged interests: Financial industry power and the role of private sector coalitions', *Review of International Political Economy*, 21(3): 575-610.

Persson, M., Persson, T. and Svensson, L. E. O. (1987) Time Consistency of Fiscal and Monetary Policy, *Econometrica*, 55(6): 1419-1431.

Quintyn, M., Ramirez, S. & Taylor, M. (2007) The fear of freedom: Politicians and the independence and accountability of financial sector supervisors (No. 7-25). International Monetary Fund.

Rogoff, K. (1985) The optimal degree of commitment to an intermediate monetary target. *The quarterly journal of economics*, *100*(4): 1169-1189.
Shleifer and Vishny (201)

Shleifer, A. and R. Vishny (2011) Fire Sales in Finance and Macroeconomics, *Journal of Economic Perspectives*, 25: 29-48.

Sibert, A. (2010) A systemic risk warning system, VoxEU, 16 Jan, available at: http://www.voxeu.org/index.php?q=node/4495

Tarullo, D. (2008) *Banking on Basel: The Future of International Financial Regulation*, Peterson Institute for International Economics, Washington D.C.

Taylor, M. M., Quintyn, M. M., & Hüpkes, M. E. H. (2005) The accountability of financial sector supervisors: principles and practice (No. 5-51), International Monetary Fund.

Verdier, P.-H. (2013) The Political Economy of International Financial Regulation, *Indiana Law Journal*, 88(4): 1405-1475.

---

i For discussions on the nature of systemic risk, see Brunnermeier and Pedersen (2009) on liquidity spirals; Shleifer and Vishny (2011) on asset fire sales; Minsky (1986) on asset bubbles; Bengtsson et al. (2013) on implications of government guarantees; Brunnermeier et al. (2009) on the fallacy of composition; and Bengtsson (2017) on shadow banking.

ii For an overview of macroprudential objectives, tools, analytical underpinnings, see Galati et al. (2011). Baker (2012) provides a comprehensive overview of the intellectual history of macroprudential policy. For a contrast of the old and new 'Basel consensus', which largely differs in respect to macroprudential policy, see Bengtsson (2013) and Hellenier (2010). It is also noteworthy that while the term "macroprudential" is new, similar objectives and tools has been pursued as part of wider financial stability policy for a long time (especially in Asian countries).

iii It is worth noting that there is very little debate on the implications of providing deposit insurance agencies and resolution authorities' roles in macroprudential policy.

iv Enacting legislative changes that may be required to effectively pursue macroprudential policy is another capacity of many political bodies.

v Microprudential measures are largely or completely similar as macroprudential policy measures, although the objective and calibration may differ (such as capital, liquidity and funding requirements, or limits to leverage and large exposures).

vi A more complex issue is if advantages and shortcomings of committee structures can be exacerbated or mitigated depending on *which* authorities are part of a committee. A committee can avoid damaging the credibility and effectiveness of either authorities' policies by internalising goal conflicts and ensure an integrated approach to policymaking. But committees may also lead to inaction since the authorities involved are not willing to decide on policy actions that may counteract their other policy objectives. This issue may be particularly pronounced in cases where ministries are included. Whereas they may play a mediating role when there are conflicts or differences between other agencies represented, ministries may also delay macroprudential action and compromise the independence of participating agencies (IMF 2013).

vii However, good central bank governance demands clear rules of dismissal that specify ex ante the terms of inadequate performance of his/her statutory functions.

viii REGULATION (EU) No 575/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 ("CRR") and DIRECTIVE 2013/36/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC ("CRDIV").

ix Art. 5 of the Single Supervisory Mechanism (SSM) Regulation: Council Regulation (EU) No 1024/2013 of 15 October 2013 confers specific tasks on the ECB concerning policies relating to the prudential supervision of credit institutions (OJ L 287, 29.10.2013, p. 63).

[x] Recommendations are included, since moral suasion and the treat of formal regulation since the powers of such tools are well-established and part of the prudential toolkit (Houben et al. 2004). Measures that were reported as non-substantial (such as reciprocation of foreign measures or stress tests) are excluded. In addition, due to lack of information, pillar 2-type supervisory measures are not captured in the data.