Discussion

1. Patricia C Mosser

I thank the RBA for the opportunity to discuss this paper, which is part of a small, but important, literature on the governance of financial stability and macroprudential policy. In addition to showcasing a newly gathered dataset on financial stability governance structures, the paper provides an empirical analysis of the drivers of the choice of governance structures across economies. Along the way it raises a number of interesting policy questions for the next round of research.

The paper's motivation is straightforward. It aims to identify what factors have been important in determining the institutions and structures that economies have created to respond to financial imbalances, such as those caused by an extended period of very low policy rates. Institution building in this area has been enormous in recent years. A key contribution of the paper is an updated view of the determinants of the institutional settings within which economies identify risks to financial stability and make decisions on countercyclical financial policy.

The core of the paper is a very interesting set of empirical results – plus a puzzle or two – on the determinants of the structure of financial stability committees (FSCs) across economies. The empirical results are focused on the role of the chair of the FSC, which is nearly always either the central bank or the ministry of finance.

An important contribution of the paper is a new and expanded dataset on financial stability governance structures, which was gathered directly from individual government and central bank websites. Previous studies such as Nier *et al* (2011) and Lim *et al* (2013) relied more on survey data from a smaller group of predominantly emerging market economies. The authors' new dataset covers 58 economies, 41 of which have FSCs. The greater coverage reflects in part the large expansion in financial stability institutions, particularly in advanced economies, since the global financial crisis. The authors – and particularly their research assistants – deserve thanks for pulling together this new data, which I believe will be useful for addressing several additional governance and policy research questions, a few of which are proposed below.

Main empirical results and a few puzzles

Central banks are the predominant institutions in financial stability governance. If an economy has an FSC, the central bank always has a seat. In addition, if financial stability is delegated to a single authority, the vast majority of economies delegate that authority to the central bank. However, in economies with FSCs, the most likely chair is the ministry of finance, not the central bank. So what factors determine which entity chairs the FSC? Here is where the puzzles begin.

Puzzle #1: Being a prudential regulator is not important in determining whether a central bank is FSC chair, but the credit intensity of the country's economy is. Central banks are more likely to be chair in credit-intensive economies.

The authors' interpretation of these results is that, for credit-intensive economies, central bank expertise in monetary policy and macro stabilisation is important for financial stability, which makes it more likely that it will chair the FSC. But the particular information advantage of being a regulator is not important in determining the central bank's power in FSCs.

Perhaps, but an equally likely explanation in my view is that the central bank possesses informational advantages as lender of last resort, which are directly relevant to financial stability assessments. The lender of last resort responsibilities of central banks provide insights into credit formation, the quality of different classes of financial assets and a high-level assessment of the soundness of banks across their financial systems. Even central banks without regulatory powers often have large staffs who analyse collateral across asset classes, assess the health of banks and financial institutions individually and in aggregate, and have some ability to gather additional data and information on financial risks. As such, lender of last resort responsibilities also provide central banks with an information advantage that is likely to be particularly important for credit-intensive economies. Under this interpretation, the *additional* information advantage of being a prudential regulator is not important over and above the knowledge gained through lender of last resort activities.

An alternative approach would be to examine more carefully how a country's regulatory structure affects the FSC and its leadership. Is financial regulation highly concentrated (in the central bank or an independent agency) or is it diffuse? How does this affect leadership? The authors show that larger, complex (advanced economy) financial systems are more likely to have the ministry of finance as FSC chair. Is that because of financial system complexity or regulatory structure (or both)? In such a set-up, one could test whether the breadth of a central bank's regulatory powers is important in determining governance structure and which institution is chair. For example, if regulatory responsibilities are concentrated and the central bank has broad regulatory powers – across a broad range of financial institutions or financial markets – then is it more likely to be chair (informational advantages matter) or less likely to be chair (because of concerns about concentration of power at the central bank)? This is an avenue worth pursuing in future work.

Puzzle #2: In contrast to the findings of previous papers such as Masciandaro and Volpicella (2016), the degree of central bank independence does not appear to be important in determining the governance structure of the FSC. I agree with the authors that statistical results with respect to the FSC chair may reflect offsetting governance concerns in different economies. For example, one economy with a strongly independent central bank might be inclined to not have the central bank as FSC chair because it is concerned that adding financial stability to the central bank's mandate will concentrate too much power in an independent agency. Alternatively, in another economy, a central bank might be seen as an attractive FSC chair if it has a history of implementing politically unpopular policies that are beneficial in the long run. I would also add an additional rationale: independent central banks typically have the financial independence to hire and retain senior technical experts on key policy topics with less political interference, and so may have more expertise and, thus, may be seen as an attractive FSC chair.

Future research

In light of the rapidly changing landscape and institutional structures for financial stability analysis and policy, the results in this paper are likely the tip of the iceberg on governance and policy powers. As the authors point out, most economies are moving cautiously with respect to financial stability policy, with some limited experimentation with both tools and governance. This makes it difficult to draw strong conclusions at present. That said, the results in the paper suggest a wealth of potential future research questions that I encourage the authors and others to examine.

The authors offer several ways that they would like to expand and extend their results – for example, by introducing alternative measures of central bank independence. These are good ideas. In addition, I encourage them to include a measure of the breadth (or concentration) of central bank regulatory powers, in an effort to (perhaps) disentangle when and how having the central bank as a regulator is important to the FSC governance structure.

Another avenue of interest is to analyse the factors driving changes to governance. This research may be more of a political science exercise that could involve analysing legislative language and intent. But given the rapid changes that have happened and are likely to continue, this seems an important area to explore to understand how financial stability policy structures might change.

In light of the relatively small number of financial stability committees that have their own policy tools (only 11 of 58 economies), an important question that is not covered in the paper is the governance structure around the tools themselves. In other words, what drives the governance structure for the elements of Table 2 in the paper? Which policy tools are owned by regulators, by the central bank, by the FSC and what determines this allocation? What are the criteria for using a policy tool – that is, financial stability or individual firm safety and soundness?

Relatedly, if an FSC controls particular macroprudential policy tools, how are they linked to the other policy tools that the regulators and central bank control? Alternatively, one can imagine asking the question: if the central bank or the prudential regulator owns most macroprudential tools, but isn't chair of the FSC, then does the structure of the FSC matter for policy purposes? Finally, are the empirical results from this paper – the wide variety of committee structures, the 'puzzles' regarding FSC governance, the lack of formal policy tools for most FSCs – largely a reflection of fragmentation of control over the tools, rather than clear design decisions about committee governance?

Of course, to do this type of analysis will require even more data gathering, but it seems to me to be critical to understanding the governance issues. Moreover, it could inform the broader debate about governance and the use of regulatory tools versus monetary policy tools for financial stability.

In the paper, the authors provide data and information on three cyclical regulatory tools, but, in practice, the macroprudential tool kit is significantly larger. Reserve requirements, dynamic provisioning, credit limits (concentration), dynamic capital controls, and even tax policy have been employed as macroprudential tools in various countries. Moreover, in case studies where macroprudential tools have been successfully employed, countries have typically had to use several different tools, repeatedly, often over long periods of time and with increasing force (Claessens 2015). This suggests that analysing the governance of financial stability policy may be much broader than the structures suggested by the authors, and that a clear separation between cyclical and structural policy tools may not be possible, or even advisable.

Looking much further into the future, the ultimate policy question is how governance structures affect the use of policy tools and economic outcomes. Obviously it is early days for that kind of analysis given the current state of financial stability institutions and policymaking, but clearly it is what we really want to know. Will the 'right' governance structure lead to good countercyclical financial stability policies to mitigate the kinds of risks we see, for example, due to long periods of exceptionally low interest rates and risk premia? At present, case studies and analysis of individual country experience – for example, Danthine (2015) on the governance and implementation of countercyclical capital buffers in Switzerland – seem to provide some preliminary lessons on governance, but they are not definitive.

It took more than 20 years after the end of Bretton Woods for central banks to develop a monetary policy framework and governance structure – inflation targeting – that works relatively well (most, but not all, of the time, and for many, but not all, countries). In that period, central banks did a lot of experimentation with different models, frameworks and governance structures and, as we know, they made a number of policy mistakes along the way. Financial stability policy has a long way to go by that yardstick, although, with careful research and clear policy goals, we can strive for a shorter time frame and fewer bumps along the way.

References

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2. General Discussion

Discussion began with one participant asking what the best set of governance arrangements for macroprudential policymaking might be. Some participants suggested that there is unlikely to be one 'best' structure and that it is likely to vary depending on the context. Moreover, they emphasised the importance of culture, giving the opinion that it was important to look beyond the architecture and consider factors such as the internal processes for discussion and the interactions between agencies. Nellie Liang suggested that there are still likely to be some commonalities and that a good governance arrangement for an FSC might involve having the ministry of finance as the chair, with a strong role for the central bank. In addition, she stressed that every institution on the FSC should have a financial stability mandate.

More generally, Dr Liang also suggested it was important to have structures and tools set up *ex ante*. One participant disagreed, suggesting that this presumes knowledge about future stresses, but that, in reality, unexpected things always happen. Setting up too much *ex ante* can lead to a false sense of security. Dr Liang responded by noting that policymakers should not take comfort from the setting-up of FSCs themselves, as these committees typically do not have tools to address risks, but rather focus on information sharing. Patricia Mosser added that our understanding of macroprudential tools and frameworks was still rudimentary and that it was important to further discuss and think about these issues.

Discussion then moved on to evaluating the effectiveness of different governance structures. One participant commented that a lack of financial crises makes it difficult to evaluate the effectiveness of different structures. Another argued that this is not a significant issue, as it is more useful to evaluate effectiveness by thinking in terms of continuous and probabilistic metrics rather than binary outcomes. For instance, whether the set of structures leads to a decrease in the probability of a financial crisis is a more useful metric than whether they prevent a financial crisis. One participant suggested that another alternative is to look at ratings agencies' ratings of different countries' institutional arrangements and to use these ratings to identify the characteristics of good governance structures.

Related to effectiveness, Dr Liang suggested that an important avenue of future work would be the relationship between governance structures and the types of tools used, as well as how they are used. For example, it may be interesting to examine whether countries that have a separate prudential regulator use countercyclical capital buffers differently, compared to countries that have the central bank as their prudential regulator. Similarly, it would be useful to examine how jurisdictions conduct stress tests and whether this differed based on the institutional structures. Dr Liang noted that in the course of her research, she had examined loan-to-valuation policies and their correlation with different governance structures, but the paucity of data made it difficult to draw conclusions.

A number of other areas were touched on in the discussion. One participant asked whether governance structures tended to factor in market competition and efficiency issues, which could have tensions with financial stability. Dr Liang indicated that competition and efficiency were not traditionally part of financial stability mandates and that it was unclear at this stage how they would be considered in financial stability-related policies. She highlighted recent money market fund reforms in the United States as an example of a conflict between investor protection and financial stability.

Another participant asked for more information about the output of FSCs, particularly as some committees do not have explicit policy tools. Dr Liang stated that FSCs tended not to produce many formal outputs, though a few had started taking on the responsibility of producing financial stability reports in recent years. Rather, the work of FSCs was more focused on information sharing and coordination. Discussions concluded with a comment that maintaining financial stability will always be a shared responsibility between different institutions and therefore is more complicated than monetary policy, which is left to the central bank.