COMMENTARY

Is There Macroprudential Policy without International Cooperation?

Fabio Ghironi and Lawrence Schembri

Cecchetti and Tucker have written a very interesting and thought-provoking paper that asks and answers three questions in the process of giving a resounding "no" answer to their title question.

1 Does global finance require a common prudential standard? Yes, a common, minimum prudential standard is needed to treat similar risks in a comparable manner for all parts of the financial system and across countries. The intuition is clear. The highly mobile, innovative, and adaptive nature of global finance makes financial stability a common resource subject to negative externalities. A common standard is needed to avoid fragmentation and balkanization and prevent potentially destabilizing regulatory arbitrage.[1]

2 Does global finance require international cooperation in overseeing the system's safety and soundness? Yes, exposure to risk across sectors, institutions, and borders requires cooperative transparent information exchange. Immense volumes of financial transactions are conducted by global financial institutions across international borders. No one supervisor can collect all of the necessary data to aggregate exposures and accurately assess vulnerabilities.

3 Finally, does global finance require coordination of dynamic policy adjustment? Once again, the answer is yes. The adjustment of national prudential policies will need to be coordinated to preserve the common resiliency standard under evolving conditions.

Therefore, some minimum degree of international cooperation and coordination is a necessary condition for effective jurisdiction-specific macroprudential policy because such a policy can best target and mitigate national systemic risks if it is based upon the foundation of a common global resiliency standard.

Means to an End, the Institutional Framework, and the Financial Stability Board

The paper argues that a common prudential standard, cooperation in oversight, and coordination of policy adjustments are all necessary means to an end: "The financial system as a whole should be 'sufficiently' resilient to ensure that the core services of payments, credit supply, and risk transfer and pooling can be sustained in the face of large shocks." Furthermore, the paper suggests that the existing institutional framework needs to be strengthened to accomplish this goal. But why? And are questions 1–3 really new?

The global financial crisis of 2007–09 prompted the creation of a new international institution. In 2009, the G-20 transformed the Financial Stability Forum into the Financial Stability Board (FSB) largely with the objective of achieving the development of and monitoring the consistent implementation of the common prudential standard. Given the overarching goal of global financial stability, the view was that the FSB is needed precisely because of the reality of "integration" and the consequent requirement for "coordination": The current global financial system is "integrated" across countries, and not just across the advanced ones; across sectors (banking, insurance, investment funds, and other financial entities involved in financial intermediation—like shadow banks); and across financial institutions and financial markets (as institutions and markets compete to intermediate between savers and borrowers).

Given this pervasive integration, the FSB was deliberately designed to provide "coordination" across member countries, standard-setting bodies, and other international financial institutions. In fact, the FSB was established with a broad mandate to identify and address financial system vulnerabilities; coordinate the development and implementation of regulatory, supervisory, and other policies; and promote reform through transparent peer review of implementation of global standards. The FSB crucially relies on peer pressure and transparency to foster compliance to common minimum global standards. Importantly, it has the "democratic pedigree" derived from the support of the G-20 leaders.[2]

Thus, the issues and ideas that shaped the creation and functioning of the FSB echo those in this paper. However, the paper would benefit from being more concrete or explicit on the issue of institutional design. In particular, it should address the following questions clearly: What are the shortcomings of the FSB as focal point for success on questions 1–3 in the paper? Can these shortcomings be addressed without creating a new institution? How?

Cooperation versus Coordination

The paper makes frequent use of the terms "cooperation" and "coordination" without defining them more clearly. For instance, what exactly is the difference between cooperation and coordination?

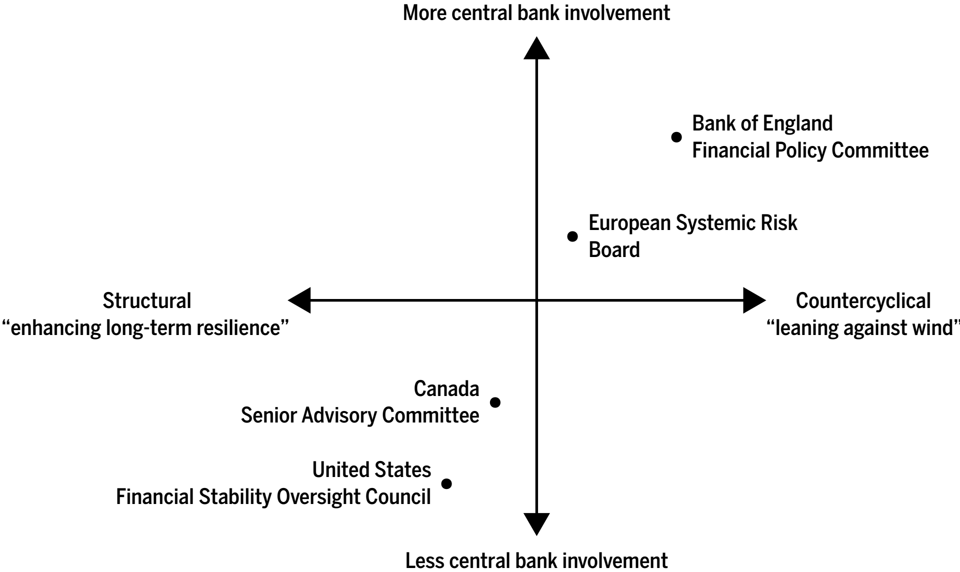
In the 1980s literature on policy interdependence—say, Horne and Masson (1988)—"cooperation" was typically used to refer to exchange of information so that national authorities could make better-informed policy decisions, whereas "coordination" referred to joint policymaking in which national authorities acted together to set their policy instruments to optimize an average of the respective objective functions (for instance, see Canzoneri and Henderson 1991). Canzoneri and Edison (1990) showed that, in the presence of multiple Nash equilibria, cooperation in the form of information exchange that would achieve the best Nash equilibrium could generate most of the benefits of coordination.

Cooperation, as information exchange, is an important theme in the paper. But how should we think of coordination? Should we think of it as joint optimization of objective functions—as is standard in the 1980s literature on policy interdependence (and even in the most recent literature on dynamic, microfounded models of policy interactions)—or, say, as synchronization of policy actions? The paper provides a formal framework to define the desired resiliency standard. It may be useful to define also the relevant notion of coordination in relation to that framework.

This is not just an issue of semantics: We need to define clearly what players are involved and what we envision for their behavior (cooperation vs. coordination) because the "global financial stability game" cuts across multiple dimensions. For instance, countries (or jurisdictions) differ in the extent of central bank involvement in macroprudential policy—as well as in the objectives that macroprudential policy is pursuing—as Figure 1 illustrates. Macroprudential policy goes from being more focused on "structural" issues and long-term resiliency—which seem to be the main focus of the paper's analysis—to leaning against financial cycles as we move from left to right along the horizontal axis. Central bank involvement increases as we move up along the vertical axis. The figure illustrates that across jurisdictions, central banks have different macroprudential roles. A similar illustrative diagram could be drawn for other financial regulatory and supervisory institutions to highlight that their roles in macroprudential policy differ widely across jurisdictions. Given this heterogeneity across prudential authorities, the paper should be clear on what form coordination would take.

Continuing with the role of central banks in financial stability and macroprudential policy, there is a growing consensus that central banks cannot ignore the implications of monetary policy for financial stability and, at the same time, that macroprudential regulation can affect monetary policy by affecting the environment in which the latter operates (Kryvtsov, Molico, and Tomlin 2015). Moreover, monetary policy can affect the incentives for implementation of regulatory reform by affecting the environment in which these should be implemented. Reforms may be perceived as more or less beneficial (or costly) at the

FIGURE 1
Stylized Representation of Different Macroprudential Frameworks



time when they should be implemented depending on economic conditions that monetary policy can affect. For an example of this argument in the context of the discussion on structural reforms of product and labor markets in the euro area, see European Central Bank President Mario Draghi's speech in Sintra last May (Draghi 2015) and Cacciatore, Fiori, and Ghironi (2016).

More generally, it is useful to understand where macroprudential policy fits into the overall framework for promoting financial stability through increasing resilience and mitigating systemic vulnerabilities and risks. Like preventing a serious car accident, preventing a financial crisis rests on a combination of factors or "lines of defense" working in tandem. Own risk management of the lender or borrower is the first line of defense, followed and reinforced by market discipline, traditional microprudential regulation and supervision (which this paper may be more about than "macroprudential" policy), macroprudential policy, and monetary policy—with a question mark on the latter, as the debate on its role is not quite settled yet.[3] Importantly, these lines of defense operate within but also across countries, in the sense that each country is characterized by similar lines of defense, and integration implies that lines (and actions) are not segmented by national borders.

In turn, this implies that strategic interactions cut across lines, across prudential authorities (where different authorities within a country are in charge of policies that affect each other's objectives and tradeoffs), and across borders. And this raises an important question: Who is supposed to cooperate in the form of information exchange and who is supposed to coordinate in the form of (possibly) joint setting of policy instruments? There is a well-known result in game theory: Coordination limited to a subset of players can be counterproductive. This result is behind Rogoff's (1985) finding that monetary policy coordination can be counterproductive, as it can exacerbate time inconsistency in monetary policy if price or wage setters are not part of the coordinated arrangement. If we think of financial stability, how do we deal with players "left out" (or who choose to remain out) of the "global resiliency coordination game" envisioned by this paper and the possible responses of these players to coordination by a subset? Is this a dimension where the FSB's hand needs to be strengthened? Are peer pressure and transparency sufficient to unite all the relevant authorities and achieve the necessary degree of coordination?

Capital Controls, Emerging Economies, and the Global Financial Cycle

The issue of cooperation, coordination, and "fragmentation" of the game is connected to the issue of capital controls. Some analysts view capital controls as an instrument of macroprudential policy, rather than as one of exchange rate management, chiefly in the context of an underdeveloped financial sector. (See, among others, Benigno et al. 2013, Jeanne 2014, and Korinek 2010, 2013.) But capital controls can also be an instrument that—by segmenting markets—alters the incentives for participation in the "all-inclusive" cooperation/coordination that the paper appears to espouse: Regardless of whether or not we view capital controls as a macroprudential instrument, they may provide a device through which players can de facto choose to "opt out" of full involvement in other macroprudential cooperation/coordination. But this raises the following question: How should we think of the consequences of capital controls in the context of the paper's three questions and answers?

Capital controls and their implications for global cooperation/coordination and resiliency must be kept in mind also because the paper makes no distinction between advanced economies and emerging market economies (EMEs). While a strong case can be made for having common financial regulatory standards across both sets of countries, EMEs generally have less developed financial sectors, thus their markets and institutions are less able to manage risks. The first-best solution to this problem would be to develop EMEs' financial sectors. In the absence of stable and efficient intermediation of capital flows, capital controls provide a different set of policy tools to help manage these potentially vulnerable external exposures that EMEs have been using—in recent years, with the "blessing" of the International Monetary Fund. How do we ensure that use of capital controls does not imply that key players essentially opt out of the cooperation/coordination envisioned by the paper? And if players do opt out (for example, by not implementing common prudential standards on a consistent and timely basis), what will ensure that their noncooperative response to coordination by a subset will not make the outcome unfavorable for everyone?[4]

Dynamic or Responsive Macroprudential Policy?

The paper raises and endorses the concept of dynamic macroprudential policy. The use of the word "dynamic" is potentially misleading in this context because it seems to imply that macroprudential policy can be easily fine-tuned to be time-varying in an effort to be financially countercyclical. Discretionary policies that attempt to "time" the cycle are problematic. Although there are some examples of "automatic" macroprudential policies, such as dynamic provisioning, the evidence of their impact on the financial or credit cycle is not clear. Their main effect seems to be to build buffers within the financial system and thereby increase resilience, rather than meaningfully attenuate the financial cycle per se. Resilience is enhanced by mitigating two types of systemic risk: time series (procyclical behavior) and cross-sectional (interconnected and common exposures). Appropriate through-the-cycle macroprudential measures include increasing minimum buffers for capital and liquidity in financial institutions, controlling their leverage, increasing transparency, and addressing structural financial vulnerabilities (e.g., too big to fail). Given these arguments, "responsive" might be a better adjective than "dynamic" because macroprudential policy should be able to respond quickly to emerging systemic vulnerabilities.

Conclusion

The paper is organized around answering three key questions that address the necessary conditions at the global level for macroprudential policy at the national level to be effective. In the effort to answer these questions the paper raises many other questions, some of which we have highlighted, about how to achieve these necessary global conditions, but it does not fully answer them. As such, the paper is the beginning of an auspicious research program, and we look forward to reading future work that answers and raises more questions.

REFERENCES

Benigno, Gianluca, Huigang Chen, Christopher Otrok, Alessandro Rebucci, and Eric R. Young. 2013. "Financial Crises and Macro-Prudential Policies." *Journal of International Economics* 89(2), pp. 453–470.

Cacciatore, Matteo, Giuseppe Fiori, and Fabio Ghironi. 2016. "Market Deregulation and Optimal Monetary Policy in a Monetary Union." *Journal of International Economics* 99(March), pp. 120–137.

Canzoneri, Matthew B., and Hali J. Edison. 1990. "A New Interpretation of the Coordination Problem and Its Empirical Significance." Board of Governors of the Federal Reserve System *Proceedings*, pp. 399–435.

Canzoneri, Matthew B., and Dale W. Henderson. 1991. *Monetary Policy in Interdependent Economies: A Game-Theoretic Approach.* Cambridge, MA: MIT Press.

Draghi, Mario. 2015. "Structural Reforms, Inflation and Monetary Policy." Introductory Speech, ECB Forum on Central Banking, Sintra, Portugal, May 22. https://www.ecb.europa.eu/press/key/date/2015/html/sp150522.en.html

Horne, Jocelyn, and Paul R. Masson. 1988. "Scope and Limits of International Economic Cooperation and Policy Coordination." *IMF Staff Papers* 35(2), pp. 259–296.

Jeanne, Olivier. 2014. "Macroprudential Policies in a Global Perspective." In *Prospects for Asia and the Global Economy*, eds. Reuven Glick and Mark Spiegel. San Francisco, CA: Federal Reserve Bank of San Francisco, pp. 231–267.

Korinek, Anton. 2010. "Regulating Capital Flows to Emerging Markets: An Externality View." Mimeo, Johns Hopkins University.

Korinek, Anton. 2013. "Capital Controls and Currency Wars." Mimeo, Johns Hopkins University.

Kryvtsov, Oleksiy, Miguel Molico, and Ben Tomlin. 2015. "On the Nexus of Monetary Policy and Financial Stability: Recent Developments and Research." Bank of Canada Staff Discussion Paper 2015-7.

Obtsfeld, Maurice, Jay C. Shambaugh, and Alan M. Taylor. 2005. "The Trilemma in History: Tradeoffs among Exchange Rates, Monetary Policies, and Capital Mobility." *Review of Economics and Statistics* 87(3), pp. 423–438.

Rey, Hélène. 2013. "Dilemma not Trilemma: The Global Financial Cycle and Monetary Policy Independence." In *Global Dimensions of Unconventional Monetary Policy, Economic Policy Symposium Proceedings*. Kansas City, MO: Federal Reserve Bank of Kansas City, pp. 285–333.

Rogoff, Kenneth. 1985. "Can International Monetary Policy Cooperation Be Counterproductive?" *Journal of International Economics* 18(3–4), pp. 199–217.

Schembri, Lawrence. 2013. "Born of Necessity and Built to Succeed: Why Canada and the World Need the Financial Stability Board." Speech delivered to the CFA Society, Ottawa, Canada, September 24. http://www.bankofcanada.ca/2013/09/born-necessity-built-succeed/

Svensson, Lars. 2015. "Monetary policy and Macroprudential Policy: Different and Separate." Mimeo, Stockholm School of Economics.

NOTES

1 The prudential standard should be common in the sense of achieving comparable prudential outcomes.

2 See Schembri (2013) for further information on the FSB.

3 Monetary policy would not be needed as a prudential tool if the other lines of defense worked effectively. The policy interest rate is widely seen as a blunt macroprudential instrument, and its use for financial stability purposes would detract from the monetary policy's primary objective of low and stable inflation. For example, see Svensson (2015).

4 The issue of capital controls is also connected to the recent discussion on a global financial cycle and its implications for exchange rate regimes and monetary policy in the context of Tommaso Padoa-Schioppa's "impossible trinity" (called the "trilemma" since Obstfeld, Shambaugh, and Taylor 2005). Rey (2013) argues that flexible exchange rates in conjunction with a strong macro/financial policy framework may not be enough to shelter a small open economy from a global financial cycle. She recommends that countries, especially those without developed financial markets, rely more heavily on macroprudential tools—including capital controls.