

# Key issues for the success of macroprudential policies

Ignazio Visco<sup>1</sup>

## 1. Macroprudential objectives and tools

While the objectives of monetary and fiscal policies are clearly defined, and often precisely quantified, the situation is less clear in the case of financial stability. A broad consensus has emerged on the idea that “macroprudential” policies directed to preserving financial stability should limit systemic risk by addressing both the cross-sectional dimension of the financial system, with the aim of strengthening its resilience to adverse real or financial shocks, and its temporal dimension, to contain the accumulation of risk over the business or financial cycle. The first dimension seems to me to be of paramount importance. The second dimension emphasises the need to contain the procyclicality of the financial system, ie to “lean against the financial cycle”.<sup>2</sup> Other authors argue that policy should be assigned more specific objectives, such as combating fire sales and credit crunches.<sup>3</sup>

A key problem is that, whether a broad or a specific mandate is chosen, we are still far from an operational definition of these objectives. We do have an ample array of indicators and early warning signals, but we still lack a coherent framework to interpret them, to assess the need for macroprudential intervention, and to measure the success of the policies adopted.

While the notion implicit in all definitions of macroprudential objectives is that what warrants a macroprudential regulatory intervention is systemic risk (a negative externality), systemic risk presents a number of challenges to the policymaker. First, it is hard to measure, because of its various dimensions: procyclicality; network or contagion risk – the spillover effects of a single institution’s distress on the rest of the financial system; correlation risk, which reflects the common exposures of all financial institutions to the same risk factors; and concentration risk, due to the presence of a few dominant institutions in key financial markets and activities. Second, systemic risk may be extremely difficult to spot *ex ante*. For instance, in the late 1990s, the hedge fund industry was considered a main source of systemic risk, and a candidate for regulation, but this risk did not materialise. By contrast, the recent crisis provides several examples of triggers that did have systemic consequences but were not seen as crucial *ex ante*: the behaviour of certain insurance companies; the supposedly safe mortgage market of the world’s financially most developed system; the European sovereign debt market.<sup>4</sup>

These difficulties in measuring systemic risk have important implications for the practical implementation of macroprudential policy and for the accountability of the macroprudential authority. As the new authorities start working, they will have to base their decision-making on operational arrangements. The year that has just begun will be very important in this respect.

---

<sup>1</sup> Governor, the Bank of Italy. At the time the conference was held, Ignazio Visco was Deputy Director General, the Bank of Italy. I would like to thank Paolo Angelini and Sergio Nicoletti Altimari for highly useful discussions and assistance.

<sup>2</sup> See, for example, Bank of England (2009) and Borio (2003), (2010).

<sup>3</sup> See Hanson, Kashyap and Stein (2010).

<sup>4</sup> See Carosio (2010).

Similar difficulties emerge in the definition of the appropriate macroprudential tools. Financial crises are often associated with wide fluctuations in credit and asset prices. Recent analyses indicate that such tools as countercyclical capital requirements or loan-to-value ratios can dampen both the volatility of credit and asset prices and the procyclicality of the financial system, helping to reduce the likelihood of financial crises.<sup>5</sup> At the same time, because systemic financial risk can emerge from many sources, different instruments may be required, to be chosen case by case. Furthermore, instruments may be under the control of different authorities, for example those responsible for microprudential, fiscal or other economic policies. This might significantly add to the complexity of the policy process, reducing its timeliness and hence the likelihood of success.

In Europe, responsibility for macroprudential policies has been assigned to a new body, the European Systemic Risk Board (ESRB), within the context of a comprehensive reform of the European supervisory architecture approved by the European political authorities in the autumn of 2009 following an in-depth analysis conducted by the De Larosière Committee and the European Commission. The reform also introduces a European System of Financial Supervision (ESFS) comprising, besides the macroprudential authority, three new European Supervisory Authorities (ESAs) for the banking, securities and insurance sectors. The new authorities started operating in January 2011.

Regulation No. 1092/2010 of the European Parliament and of the Council assigns a broad mandate to the ESRB, charging it with macroprudential oversight of the financial system within the European Union in order to contribute to the prevention or mitigation of systemic risks to financial stability in the Union.<sup>6</sup> To this end the ESRB is to conduct analyses of the European financial system, issue risk warnings and, when called on, make recommendations that it will submit to one or more member states or national supervisory authorities, the EU Council, the European Commission and the newly established ESAs. It will decide, after consulting with the Council, whether to make its recommendations public and will monitor follow-up, informing the Council and the ESAs where it finds the action taken to be inadequate.

The ESRB itself does not have direct enforcement power; it will act mainly through other (European or national) authorities, essentially via an “act or explain” mechanism. Its lack of direct enforcement powers is a key difference with respect to the arrangement in the United States, where the new macroprudential body, the Financial Stability Oversight Council (FSOC), is assigned direct intervention tools, including at the micro level. As the new authorities begin working, it will be important to monitor how this difference influences the policy outcomes. A key challenge for the ESRB is to ensure that its recommendations have teeth, that the “act or explain” mechanism produces a good balance between the “act” and the “explain”. A second important challenge for the ESRB will be to ensure that country-specific and/or sectoral warnings or recommendations, when required, are adopted in a timely fashion. The European experience of the last three years suggests that recommendations of this type would probably have been more effective than general recommendations to counter developments that turned out to have implications for European financial stability. The complexity of the ESRB’s structure might make it difficult to reach a consensus on national recommendations. A third challenge for the ESRB will be to ensure

---

<sup>5</sup> See Angelini, Neri and Panetta (2010) and Lambertini, Mendicino and Punzi (2011).

<sup>6</sup> Article 3(1) of the Regulation: “The ESRB shall be responsible for the macro-prudential oversight of the financial system within the Union in order to contribute to the prevention or mitigation of systemic risks to financial stability in the Union that arise from developments within the financial system and taking into account macroeconomic developments, so as to avoid periods of widespread financial distress. It shall contribute to the smooth functioning of the internal market and thereby ensure a sustainable contribution of the financial sector to economic growth.”

effective cooperation with the authorities of the new European System of Financial Supervision.

## 2. Interaction between macroprudential and monetary policies

The objectives of macroprudential policies should be kept separate from those of more traditional policies. There is a consensus that there is no need to change central banks' current mandate of preserving price stability over the medium term. The benefits of a sound monetary framework have become more – not less – evident during the crisis. Had central banks failed to control inflation, and inflation expectations, monetary policy would have had much less room for manoeuvre.

However, the increasing emphasis on financial stability and macroprudential policies poses challenges to monetary policy. Central banks should not have to stand by idly until a crash occurs before intervening. There is evidence that a loose monetary policy can stimulate excess risk-taking and leverage, or liquidity transformation, thus increasing systemic fragility and ultimately putting price stability itself at risk.<sup>7</sup> Just how this should affect the conduct of monetary policy is still unclear. At the very least, however, we have learned that monetary policymakers should be aware of these channels and monitor a broad range of indicators, such as buoyant credit growth, increasing leverage of financial institutions and, in general, leading indicators of financial instability. Some authors argue that monetary policy should react to financial variables and more generally to leading indicators of financial distress.<sup>8</sup>

Over longer horizons there is no evident trade-off between price stability and financial stability objectives – indeed, there are probably synergies. We need to lengthen the horizon of monetary policy by taking into account the interactions and feedbacks between the real and the financial sectors and the non-linearities that emerge especially during crises. Many of the effects associated with financial and asset price imbalances are likely to be highly non-linear and complex. The reaction of monetary policy should then also be non-linear and respond to asset price misalignments and financial imbalances. When the probability of a crisis becomes non-trivial, the interest rate path towards ensuring price stability might be different than in normal circumstances. These aspects are not well captured in the empirical models currently used to support monetary policy decisions, or, I would argue, in the prevailing flexible inflation targeting framework.<sup>9</sup> There is a great need for further research to overcome these limitations.

---

<sup>7</sup> Borio and Zhu (2008) argue that such a channel exists. Altunbas, Gambacorta and Marqués-Ibáñez (2010), Maddaloni and Peydró (2010) find empirical evidence consistent with this channel.

<sup>8</sup> See Woodford (2010), Cúrdia and Woodford (2010), and Lambertini, Mendicino and Punzi (2011), among others.

<sup>9</sup> On the contrary, it is generally accepted that a flexible inflation targeting (FIT) approach, if sufficiently forward-looking, should (perhaps informally) take account of the fact that “significant financial instability invariably will also have a significant impact on activity and inflation” (Bean, 2003, p 18). In practice, however, in the design of monetary policy actions it might be very difficult to take account of developments that are subject to considerable uncertainty and may materialise with long lags due to the cumulative and non-linear effects of financial imbalances. Since “the real world is generally complex and non-linear, [even] within a well specified FIT framework, the *implicit* monetary policy reaction function would then also be non-linear (and possibly very complex, as it would not be possible to rely on certainty equivalence)” (Visco, 2003, p 24). Indeed, considering a Taylor rule as a description of the normal conduct of monetary policy, I argued that for some purposes a linear rule with the interest rate expressed as a function also of asset price misalignments could be a simple and linear approximation (a Taylor “approximation”, after Brook Taylor the mathematician, within the Taylor “rule” introduced by John Taylor the economist!) of how central banks would behave (or perhaps should have behaved) in a non-linear and complex environment.

Monetary policy and financial stability policy interact and influence one another. Monetary policy affects asset prices and credit, whose developments are crucial for financial stability, and the propensity to take risks. At the same time, macroprudential policies will likely react to, and affect, credit growth and asset prices, influencing the monetary policy transmission mechanism. These interactions need to be well understood and taken into account in formulating the two policies.

Two research projects recently carried out at the Bank of Italy have focused on the interaction between monetary policy and macroprudential policy. The first study concentrates on the recent housing bubble in the United States.<sup>10</sup> The results indicate that a tighter monetary policy by the Fed between 2002 and 2006 would have not been sufficient to avoid the bubble. However, by appropriately combining a tighter monetary policy with additional credit restraint by means of an aggressive use of countercyclical macroprudential tools, policymakers could have dampened the housing boom. The second study suggests the need for coordination between monetary policy and countercyclical macroprudential policy to avoid conflicts in the use of their respective instruments (eg interest rates and bank capital ratios).<sup>11</sup> While the benefits of such coordination are small in “normal” times, they can become substantial when the economy is hit by financial shocks that severely impair the ability of the banking sector to provide credit to the economy. In this case, it may be optimal for the central bank to “lend a hand” to macroprudential policy, partly deviating from its primary objective of price stability in order to improve the overall stability of the economy.

To what extent do countercyclical macroprudential policy and monetary policy have the potential to affect the economy independently of each other? Answering this question requires the development of new analytical frameworks. The ideal framework should be simple enough to allow a proper understanding of the basic underlying mechanisms; at the same time, it should be sufficiently realistic to permit the two policies to usefully coexist, at least in principle. Clearly, this would be impossible in a very simple framework. For instance, in a standard AS-AD New Keynesian model, the two policies would be perfectly linearly dependent, as they both end up influencing the only control available to the policymaker, the interest rate, either through open market operations or via the macroprudential instrument.

In one possible modelling of the two channels, suggested by Angelini, Neri and Panetta in the above-mentioned Bank of Italy paper, monetary policy would set the level of the nominal interest rate, as in standard models, while countercyclical macroprudential policy would influence the differential between the interest rate on bank loans and the rate on deposits by setting a capital ratio. Is this channel powerful enough to make a difference? Are there other possible channels? In my view, these issues will require a substantial research effort.

In Europe, consistency between monetary and macroprudential policies should be ensured by the structure of the ESRB, characterised by its close relationship with the European System of Central Banks, which represents the backbone of the new institution.<sup>12</sup> In practice,

---

<sup>10</sup> Catte, Cova, Pagano and Visco (2010).

<sup>11</sup> Angelini, Neri and Panetta (2010).

<sup>12</sup> The ESRB General Board is composed of the president and the vice president of the ECB, the governors of the 27 central banks of the European Union, a representative of the European Commission, the chairs of the three ESAs, the chair of the Advisory Technical Committee (an advisory body made up of the representatives of all institutions participating in the ESRB) and three external members (the chair and the two vice-chairs of the Advisory Scientific Committee, a new advisory body made up of experts), all with voting rights. In addition, the representatives of the national supervisory authorities and the chair of the EU Economic and Financial Committee (EFC) will participate in the meetings without the right to vote. The chair of the ESRB is assigned to the president of the ECB for the first five years (for subsequent mandates, possible amendments to this provision will be assessed by the European Parliament and the Council by December 2013). A Steering Committee is in charge of preparing meetings and ensuring efficient ESRB operations. The Steering

29 of the 37 voting members are central bankers, so central bankers alone can ensure the simple majority required for General Board approval, as well as the qualified majority of two thirds required to adopt a recommendation or to make a warning or recommendation public.

The scope for potential conflicts between policies should also be limited to the extent that the tools and actions of macroprudential policies are normally more selective, sectoral and geographically defined. For example, dealing with house price booms in a region or country in the currency union will be an issue for macroprudential policy; a generalised credit boom, on the other hand, will likely be a matter of concern for monetary policy as well.

### **3. Interaction between macroprudential and microprudential policymakers**

A number of practical examples show that microprudential tools (capital and liquidity requirements, loan-to-value ratios etc) may be appropriately calibrated to serve macroprudential goals as well. If the tools are broadly the same but must serve two purposes and be used by two different authorities, the potential for conflict arises. It is not hard to imagine a scenario of an economic downturn in which the macroprudential regulator would want to run down the equity buffers built up during good times in order to avoid a credit crunch, while the microprudential regulator, concerned with preserving the safety and soundness of individual institutions, might be reluctant to let that happen.

Overall, there are both strong complementarities between macro- and microprudential policies – it is hard to imagine the success of one policy without the success of the other – and potential short-term conflicts and overlaps. Whatever the institutional arrangements, it is crucial to ensure a continuous exchange of information and to set up well defined mechanisms to resolve any conflicts between the two functions.

From this viewpoint, the US system appears well designed. In Europe, the interaction between macroprudential and microprudential authorities may be relatively complicated: the latter include the Basel Committee, the European Banking Authority, the other European supervisory authorities and the national supervisors. Cross-participation in the governing bodies of the different authorities should limit coordination problems, but it is clear that the European regulators will be called upon to make efforts in this direction. Indeed, a proposal for a memorandum of understanding between the ESRB and the ESAs on the division of responsibilities between micro- and macrosupervisors is now being discussed.

Access to micro data may be problematic for the ESRB. Successful analysis will probably require the ESRB and its Secretariat to act as a hub, devising meaningful projects, decentralising much of the analytical work to national authorities, and ensuring harmonisation of the research protocols.

### **4. Coordination among macroprudential bodies**

The new macroprudential regulatory framework will feature a primary role at the global level for four “global” players – the IMF, the Financial Stability Board (FSB), the ESRB and the

---

Committee consists of the ESRB chair and vice-chair, five central bank members of the ESRB, the chairs of the ESAs, the chair of the EFC and the Commission member.

FSOC – and for a number of national macroprudential authorities. Effective action will require a stepped-up interaction and cooperation among these authorities.

The IMF and the FSB are developing a monitoring process (the so-called Early Warning Exercise) that permits a more integrated and comprehensive view of emerging global developments and the corresponding risks. Using an integrated macrofinancial and regulatory perspective, the process should provide a first example of an organised, structural attempt to identify and prioritise systemic macrofinancial risks at global level and to propose policy responses. The ESRB will also conduct a regular assessment of systemic risk and, when necessary, translate it into recommendations for the adoption of mitigating policies. The potential for overlap seems ample. Given the global mandates of the FSB and the IMF, effective collaboration could have these two organisations focusing on the analysis of linkages and contagion channels across the main macro areas and on developing policy options to contain spillover risk. The ESRB, the FSOC and analogous national and regional institutions elsewhere could focus on sources of risk arising within their jurisdictions and devise policy measures to address domestic developments. The coming years will be crucial in assessing the effectiveness of the new framework and in mitigating potential inefficiencies.

## References

Altunbas, Y, L Gambacorta and D Marqués-Ibañez (2010): “Does monetary policy affect bank risk-taking?”, *ECB Working Paper*, no 1166.

Angelini, P, S Neri and F Panetta (2010): “Monetary and macroprudential policies”, mimeo, Bank of Italy.

Bank of England (2009): “The role of macroprudential policy”, Discussion paper”, November.

Bean, C (2003): “Asset prices, financial imbalances and monetary policy: are inflation targets enough?”, *BIS Working Papers*, no 140.

Borio, C (2003): “Towards a macroprudential framework for financial supervision and regulation?”, *BIS Working Papers*, no 128.

——— (2010): “Implementing a macroprudential framework: Blending boldness and realism”, keynote address for the BIS-HKMA research conference on “Financial Stability: Towards a Macroprudential Approach”, Hong Kong SAR, 5–6 July 2010 (available at <http://www.bis.org/repofficepubl/hkimr201007.12c.pdf>).

Borio, C and H Zhu (2008): “Capital regulation, risk-taking and monetary policy: a missing link in the transmission mechanism?”, *BIS Working Papers*, no 268.

Carosio, G (2010): “Central banking after the crisis: responsibilities, strategies, instruments”, paper presented at the Central Bank of the Republic of Austria – 38th Economic Conference.

Catte, P, P Cova, P Pagano and I Visco (2010): “The role of macroeconomic policies in the global crisis”, Bank of Italy, *Occasional Papers*, no 69.

Cúrdia, V, and M Woodford (2010): “Credit spreads and monetary policy”, *Journal of Money, Credit and Banking*, no 42 (6 Supp).

Hanson, S, A Kashyap and J Stein (2010): “A macroprudential approach to financial regulation”, *Journal of Economic Perspectives*, forthcoming.

Lambertini, L, C Mendicino and M Punzi (2011): “Leaning against boom-bust cycles in credit and housing prices”, this volume.

Maddaloni, A, and J-L Peydró (2010): “Bank risk-taking, securitization, supervision and low interest rates. Evidence from the euro area and the U.S. lending standards”, *ECB Working Paper*, no 1248.

Visco, I (2003): "Discussion of 'Asset prices, financial imbalances and monetary policy: are inflation targets enough?' by C Bean", *BIS Working Papers*, no 140.

Woodford, M (2010): "Financial intermediation and macroeconomic analysis", *Journal of Economic Perspectives*, forthcoming.