Perfect partners or uncomfortable bedfellows? On the nature of the relationship between monetary policy and financial stability

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The first annual Chief Economist Workshop, organised by the Bank of England's Centre for Central Banking Studies (CCBS), brought together economists from over 30 central banks. It marked a changing path for the CCBS as it increases its role in providing a forum where central bankers and academics can exchange views on central bank policies and share specialist technical knowledge. The topic for the inaugural meeting was the interplay between monetary policy and financial stability, an issue that has risen to prominence in international debate in recent years.

Introduction

The first annual workshop for central bank economists was held at the Bank of England in February this year. At the workshop, experts from within and outside the Bank of England presented different aspects of the relationship between monetary policy and financial stability and the participating chief economists expressed their views in the ensuing discussions and, on particular issues, in small groups. The programme started with an overview of some of the main economic issues, the policy framework and definitional differences. The group then moved on to debate the case for a proactive monetary policy response to asset price bubbles and financial imbalances. The international dimension of the interplay between monetary and financial stability was later drawn out through the discussions on whether the nature of the relationship is the same for developed and developing countries, with a particular focus on the issue of currency mismatches and the choice of exchange rate regime. This led to a debate on the various institutional and regulatory aspects of the relationship and the optimal level of coordination and co-operation between monetary policy and prudential regulation.(1)

This article presents a synthesis of the main themes that emerged from the workshop and highlights some of the conclusions from the discussions.⁽²⁾

Monetary stability and financial stability: definition and measurement

Workshop participants first considered the intrinsic nature of monetary stability and financial stability. How are they defined and measured? What instruments can be used to achieve the two goals?

On the one hand, the central tenets of monetary policy were considered to be widely accepted. Since the high-inflation decade of the 1970s, central banks around the world have focused monetary policy on achieving price stability, which is often thought of as an environment where inflation does not materially enter into economic decisions.(3) Such an environment promotes efficient allocation of economic resources and has led to more stable macroeconomic conditions in many countries. Price stability refers not to individual prices, but prices of an aggregate 'basket' of consumer goods and services that can be summarised in a single index. In this respect, price stability—whether or not it is formalised in an explicit inflation target was considered to be relatively well understood, transparent and measurable. Nonetheless, participants noted the practical difficulties central banks face in pursuing price stability, including the conduct of monetary policy in the presence of uncertainty and when operating close to the zero bound on nominal interest rates.

⁽¹⁾ Presentations were given by Charlie Bean, Nigel Jenkinson and Patricia Jackson from the Bank of England. External presenters were: Claudio Borio (BIS), Michael Foot (Financial Services Authority), Morris Goldstein (Institute for International Economics), Marvin Goodfriend (Federal Reserve Bank of Richmond), Charles Goodhart (London School of Economics) and Eduardo Levy-Yeyati (Universidad Torcuato Di Tella, Argentina).

⁽²⁾ All discussions were conducted under the Chatham House Rule whereby comments can be recorded, but not attributed to individuals.

⁽³⁾ See King (2002) for a further discussion.

Transparency and accountability of the monetary policy process are enhanced by the relative clarity about the instruments used and the institutions responsible for price stability. In many countries it is the responsibility of the central bank, which has direct control over short-term interest rates which, in turn, influence other financial prices and, with a lag, economic activity and inflation.

By contrast, the concept of financial stability was considered to be more nebulous, with no commonly agreed definition. Indeed, financial stability is often thought of as the absence of financial instability—such as a banking crisis or extreme financial market volatility-which, as history has shown, can have severe macroeconomic consequences for countries that have experienced such episodes.(1) Other definitions focus more directly on the links between the financial system and the real economy, recognising the importance of the financial system in allocating economic resources from savers to borrowers. (2) A proposed definition along these lines was 'A financially stable system is one in which shocks emanating from or propagated by the financial system do not materially change agents' optimal savings and investment plans.'

The challenge in reaching agreement on a workable definition is exacerbated by the difficulty of measuring financial stability. Unlike price stability, it cannot be summarised in a single measure; a financially stable system depends not only on the health of individual financial institutions, but also on the complex links between those institutions, and the interplay between the financial system, the real economy and financial markets.

As a consequence, the instruments and institutional arrangements that are used to pursue the financial stability objective are also more varied than for monetary policy. In most countries, financial stability policy consists of a number of elements designed to improve the resilience of the financial sector to unexpected developments and to respond should they spill over into a financial crisis. These policies often include: prudential regulation; promotion of sound payments and settlement architecture; appropriate corporate governance and accounting standards; and a robust legal framework. But the nature of these instruments means that they are often difficult to

adjust in a timely manner in response to a shock, an issue that is further complicated by these instruments often being the responsibility of a number of different authorities.

Overall, there was a broad consensus among participants that the relative ambiguity surrounding the concept of financial stability made it more difficult, compared with monetary policy, to formulate appropriate, transparent policies. An advantage of the relative transparency of the monetary policy framework is that it promotes greater accountability on the part of policymakers; whether or not the central bank has been successful in achieving price stability is readily observable (particularly for those with an explicit inflation target). As there is no agreed definition or method of measuring financial stability, the same cannot be said for that goal. As such, developing a coherent analytical framework for financial stability was considered to be a key area for further research.

Asset prices and financial imbalances: is there a case for proactive monetary policy?

Despite the issues highlighted above, participants generally agreed that a better understanding of the links between financial stability and monetary policy was a key element in designing effective policies with which to pursue both objectives. The debate centred on the extent to which financial stability concerns should be taken into account in formulating monetary policy.

As background to the discussion, it was noted that monetary stability and financial stability had typically been thought of as mutually reinforcing, with low and stable inflation considered a necessary, but not sufficient, condition for promoting financial stability. This is because an environment of high and variable inflation can facilitate the build-up of vulnerabilities in the financial system as price signals become distorted. However, some participants noted that, while many countries had returned to an environment of low and stable inflation over the past decade or so, the incidence of financial instability appeared to be increasing.(3) This observation has led some commentators to suggest that monetary policy should respond proactively to the build-up of potential vulnerabilities in the financial system. It was emphasised by some participants that,

⁽¹⁾ See Hoggarth and Saporta (2001) for estimates of the cost of financial instability.

⁽²⁾ See, for example, Haldane *et al* (2004) for a further discussion (3) See, for example, Crockett (2003) and Borio and Lowe (2002).

though the debate often focuses on the appropriate response of monetary policy to asset price bubbles, it was the broader set of imbalances that tended to accompany them that were the main concern for policymakers, rather than asset price bubbles themselves.⁽¹⁾

Some of those in favour of a proactive monetary policy response suggested that, somewhat paradoxically, the success of central banks in reducing, or anchoring, inflation expectations may have introduced stickiness into prices, which might mask the build-up of imbalances in the real economy by taking longer to feed through to consumer prices. It was argued that, under these circumstances, monetary policy may be slower to respond than otherwise and unintentionally contribute to the conditions for financial imbalances to develop in the future. (2) As such, a direct response to emerging financial imbalances may be required to try and avoid the future macroeconomic costs of financial instability should these imbalances unwind; a policy response that could be likened to taking out insurance. (3)

Others argued that such a proactive response to asset price bubbles and financial imbalances was not feasible and monetary policy should instead be directed at alleviating the impact on the real economy should they unwind. The main objections to a more proactive approach rested primarily on practical issues such as the difficulties of identifying financial imbalances and determining the appropriate timing and size of a monetary policy action. A further consideration was that a form of moral hazard may be introduced if market participants expected the central bank to act in response to financial imbalances. Political economy constraints were also thought to be difficult to overcome if monetary policy were to be adjusted in the absence of obvious near-term inflationary pressures.

There was a view, however, that a flexible forward-looking inflation-targeting framework may be able to take into account the potential impact of financial imbalances by recognising the downside risks they posed to the central forecast for inflation and output growth. But, since financial imbalances may develop over a relatively long

period of time, flexibility in the forecast horizon was considered to be important.⁽⁶⁾

Although no consensus was reached on this issue, participants agreed that further work was required, both by central banks and the academic community, on key issues. These included: integrating the financial sector into macroeconomic models; the measurement and identification of financial imbalances; and assessment of the magnitude and sources of the costs of financial instability. Research on these and related issues was thought to be important to inform the debate on how proactive monetary policy should be in responding to potential vulnerabilities in the financial system.

International dimension of the relationship

The importance of the interrelationship between monetary policy and the health of the financial system was further emphasised by discussions of the international dimension of the monetary stability/financial stability nexus. This broadening of the topic led to an increased focus on the situation in developing countries, where currency and exchange rate regime issues have, in the past, been a source of financial stress and a challenge for monetary policy.

The participants debated whether the nature of the relationship between monetary policy and financial stability was the same for developed and developing countries. Their discussions highlighted that, even if countries were subject to the same broad economic principles, the difference in environments between countries would lead to some variation in the relationship between monetary policy and financial stability. And although there were some generalised distinctions, participants believed that the dichotomy between developed and developing countries was an oversimplification. It was clear that there were significant heterogeneities within the two groups of countries, as well as some similarities across the groups.

The debate drew out a number of factors considered to be important determinants of the nature of the relationship between monetary policy and financial

⁽¹⁾ This point is emphasised in the literature by Bordo and Jeanne (2002), Borio and Lowe (2002) and Bean (2004), among others.

⁽²⁾ See Borio and White (2004) for a fuller discussion of this argument.

⁽³⁾ Recent papers supporting this view include Bordo and Jeanne (2002), Borio and Lowe (2002) and Cecchetti et al (2002).

⁽⁴⁾ See, for example, Greenspan (2002) and Goodfriend (2003) for a discussion.

⁽⁵⁾ See, in particular, Gruen et al (2003) for a discussion of the informational problems in responding to an asset price bubble. Borio and Lowe (2002) argue that identification is difficult, but not impossible, and develop simple indicators of financial distress.

⁽⁶⁾ See Bean (2003 and 2004) for a further discussion.

stability relating to: the size and openness of an economy; currency mismatches and the exchange rate regime; the stage of development of its financial system; the degree of financial liberalisation and the state of prudential regulation; and ultimately the strength and credibility of a country's institutional and policy framework.

The size and openness of a country might affect its sensitivity to exchange rate volatility. A high degree of exchange rate pass-through, the significance of capital inflows, combined with a country's ability to raise debt in its own currency, could potentially contribute to this sensitivity. A high level of short-term, predominantly foreign currency denominated debt and a lack of credibility surrounding the authorities' commitment to controlling inflation have been associated with the amplification of currency crises into full-blown financial crises, as a currency depreciation affects corporate balance sheets as well as those of financial institutions.(1) Although a number of small developed countries were also subject to these problems, participants emphasised the heterogeneities across developing countries. For example, the holding of foreign currency denominated assets and liabilities by residents was considered to be prevalent among many Latin-American countries, but was not always a significant feature of developing Asian and African countries.

The discussion on measuring the importance of foreign currency in the domestic market went beyond the issues typically associated with the 'original sin' hypothesis, (2) which focuses primarily on a country's inability to borrow externally in its own currency and so its aggregate foreign-currency position. It also evolved beyond what is called in the literature financial dollarisation, whereby both foreign-currency assets and liabilities are taken into account. It was claimed that a more complete picture would be offered by the degree of currency mismatch, ie the net currency position of the whole economy, including hedging facilities as well as its balance of trade position.

The latter measure of exchange rate sensitivity has served to highlight significant variations across developing countries, pointing to how crisis-prone countries are more likely to experience the build-up of currency mismatches prior to a financial crisis.⁽³⁾ These

mismatches might also act as a constraint on authorities to loosen monetary policy during a crisis, for fear of causing or exacerbating a currency crisis, or might discourage them from adopting what might be a more appropriate exchange rate regime, the so-called 'fear of floating'. It became evident from the discussions that underlying the currency-mismatch problem of many countries were poor monetary policies—either with respect to controlling inflation or adopting a suitable exchange rate regime—and institutional weaknesses.

Poor inflation performance and monetary policies that lack credibility serve as a disincentive to investors to provide long-term finance in a domestic currency if the expectation is that governments will attempt to reduce their real debt obligations through high inflation. Therefore countries with a history of high and volatile inflation will generally have more foreign-currency debt obligations. However, the direction of causation is not entirely clear: there is some evidence that highly dollarised economies could experience higher levels of inflation, as a result of the growth in money supply, contradicting the traditional view that dollarisation is a self-disciplining device. On another view, a fixed exchange rate regime could lead to complacency towards exchange rate risk with the expectation that the authorities will maintain a stable real exchange rate.

Although participants accepted that a combination of floating exchange rates and inflation targeting might be necessary conditions to reduce the financial stability consequences of currency mismatches, they were not judged to be sufficient. For some countries, their currency sensitivities were, to some extent, a function of the stage of development of their financial markets. Vulnerabilities arising from currency mismatches might be mitigated by better developed domestic markets for foreign-currency hedging and reduced by the introduction of domestic-currency substitutes. More effective and efficient domestic financial intermediation would in turn reduce a dependency on, often volatile. capital inflows and so lend the authorities greater control over the money supply, thus strengthening the money transmission mechanism of monetary policy. It was argued that the development of domestic financial markets can be achieved not only through the 'stick' approach of tighter prudential controls and greater transparency of currency mismatches (both on banks'

⁽¹⁾ See Mishkin (2001).

⁽²⁾ Discussed in Eichengreen and Hausmann (1999).

⁽³⁾ See Goldstein and Turner (2004).

balance sheets and those of their debtors), but also through the 'carrot' of developing local-currency substitutes for both savers and borrowers as well as providing hedging possibilities.⁽¹⁾

Participants noted that deeper financial markets tended to be associated with developed countries, although different legislative and fiscal environments had led to important heterogeneities, such as whether the financial system was bank or market oriented, to what extent financial institutions were integrated, and the level of concentration in the financial system. A high degree of investment from the private sector, typical of many developed countries, was judged to be important to the development of deeper financial markets. Government borrowing, often associated with aggregate demand management policies, risked crowding out private borrowing and had resulted in banks in many developing countries holding a large proportion of public debt on their balance sheets.

Although increasing the strength and credibility of monetary policy for some developing countries lay in improving the money transmission mechanism through the deepening of its financial sector, it was noted that liberalising too quickly in inappropriate conditions (eg weak supervision and too generous safety nets), with increased capital inflows and the growth of domestic intermediation, had previously led to credit booms and asset price bubbles. With this and the reputational impact on government credibility in mind, it was suggested that some developing countries may have a 'fear of liberalisation'. One possible solution discussed was the establishment of a strong framework of prudential regulation in order to reassure the private sector, as well as mitigating some of the less desirable effects of financial liberalisation.

But ultimately, all of these steps required a backdrop of a stable macroeconomic environment and government credibility. This point became a constant theme in the discussion of the relationship between monetary policy and financial stability across different countries. Lack of credibility in monetary policy meant that greater changes were required to counter shocks. But the question remained how to improve confidence in monetary policy in the face of large and volatile capital inflows, which significantly reduced the authorities'

ability to control the 'trinity' of the money supply, exchange rate and inflation? This in turn raised the question of what was the appropriate sequence of measures employed prior to liberalising a financial sector and what was the optimal institutional framework to adopt?

Do institutional arrangements matter?

Compared with monetary policy, institutional arrangements for pursuing financial stability vary substantially across countries. Participants discussed whether these differences affected the nature of the relationship between financial stability and monetary policy and, in particular, the optimal degree of co-ordination between monetary policy and prudential regulation.

Maintaining financial stability is a long-standing goal of central banks, though many have sharpened their focus on this area in recent years—the increased number of central banks now publishing financial stability reviews is evidence of this.(2) In some cases—such as the United Kingdom and Australia—this renewed, and more explicit, focus on the stability of the financial system as a whole partly reflected changes in the regulatory environment brought about by the creation of an integrated prudential regulator, separated from the central bank. In other countries, by contrast, the central bank had retained responsibility for both monetary policy and bank supervision. Participants, in general, considered that there was no universal prescription for an optimal regulatory structure across countries, with theoretical arguments in favour of one structure over another unable to provide an unambiguous answer. Instead, an individual country's structural and institutional circumstances were thought to be important considerations.

There was a view, however, that the challenges to effective communication and co-operation may be greater where the prudential regulator is separated from the central bank. The counter to this argument was that establishing both formal and informal co-ordination arrangements between authorities may help to overcome these challenges.⁽³⁾

Indeed, the discussion highlighted that communication between prudential regulators and monetary policy

⁽¹⁾ See Levy-Yeyati (2003) for a discussion.

⁽²⁾ See Oosterloo and de Haan (2003) for a survey of institutional frameworks for financial stability.

⁽³⁾ It has also been argued that separation of responsibilities provides greater transparency regarding the agents and instruments used to pursue both financial stability and monetary policy.

makers was important to formulating effective policies in both spheres, regardless of the precise institutional structure. This was because of the two-way feedback between the real economy and the financial system; macroeconomic conditions are a key determinant of the health of financial institutions, which in turn can influence the business cycle and the monetary policy transmission mechanism. These links are reinforced by the potential for the financial system to amplify shocks to the real economy. In this context, some participants argued that 'microprudential' regulation, with its focus on individual firms, may not, by itself, adequately account for these links so that a more 'macroprudential' approach to financial stability is required.(1) This argument implied that greater co-operation between policymakers may be needed in the future.

A further challenge for financial stability policy noted in the workshop was that there were potential trade-offs between other public policy goals such as the promotion of an efficient financial sector. Overly prescriptive regulation, for example, may help to prevent failures of individual financial institutions, but it was also likely to discourage the development of an innovative financial system. This was a consideration behind the widespread deregulation of financial systems that has occurred since, at least, the mid-1980s.

Concluding remarks

This article has discussed the proceedings of the inaugural CCBS central banks' Chief Economist Workshop, on the interaction between monetary policy and financial stability. Although consensus was not reached on all of the issues, there was general agreement that a better understanding of the interaction is important for policymakers. This will require further research to consider whether monetary policy and financial stability are indeed close to being 'perfect partners'.

References

Bean, C (2003), 'Asset prices, financial imbalances and monetary policy: are inflation targets enough?', in Richards, A and Robinson, T (eds), *Asset prices and monetary policy*, Reserve Bank of Australia Conference, Sydney, 18–19 August, pages 48–76.

Bean, C (2004), 'Asset prices, monetary policy and financial stability: a central banker's view', speech at the AEA conference, San Diego, available at www.bankofengland.co.uk/speeches/speech207.pdf.

Bordo, M and Jeanne, O (2002), 'Monetary policy and asset prices: does 'benign neglect' make sense?', *IMF Working Paper no.* 02/225.

Borio, C (2003), 'Towards a macroprudential framework for financial supervision and regulation?', BIS Working Paper no. 128.

Borio, C and Lowe, P (2002), 'Asset prices, financial and monetary stability: exploring the nexus', BIS Working Paper no. 114.

Borio, C and White, W (2004), 'Whither monetary and financial stability? The implications of evolving policy regimes', BIS Working Paper no. 147.

Cecchetti, S, Genberg, H, Lipsky, J and Wadhwani, S (2002), 'Asset prices and central bank policy', *Geneva Reports on the World Economy 2*, International Centre for Monetary and Banking Studies and Centre for Economic Policy Research.

⁽¹⁾ Some recent papers also highlight this point. See Borio (2003) and Borio and White (2004).

Crockett, A (2003), 'Central banking under test?', in 'Monetary stability, financial stability and the business cycle: five views', *BIS Papers no. 18*, pages 1–6.

Eichengreen, B and Hausmann, R (1999), 'Exchange rates and financial fragility', in *New challenges for monetary policy*, Federal Reserve Bank of Kansas City, pages 329–68.

Goldstein, M and Turner, P (2004), 'Controlling currency mismatches in emerging markets', *Institute for International Economics*.

Goodfriend, M (2003), 'Interest rate policy should not react directly to asset prices', in Hunter, W C, Kaufman, G G and Pomerleano, M (eds), *Asset price bubbles: the implications for monetary, regulatory, and international policies*, Federal Reserve Bank of Chicago and World Bank Group, MIT Press, pages 445–57.

Greenspan, A (2002), 'Opening remarks', in *Rethinking stabilization policy*, Federal Reserve Bank of Kansas City, pages 1–10.

Gruen, D, Plumb, M and Stone, A (2003), 'How should monetary policy respond to asset-price bubbles?' in Richards, A and Robinson, T (eds), *Asset prices and monetary policy*, Reserve Bank of Australia Conference, Sydney, 18–19 August, pages 260–80.

Haldane, A, Saporta, V, Hall, S and Tanaka, M (2004), 'Financial stability and macroeconomic models', Bank of England Financial Stability Review, June (forthcoming).

Hoggarth, G and Saporta, V (2001), 'Costs of banking system instability: some empirical evidence', *Bank of England Financial Stability Review*, June, pages 148–65.

King, M A (2002), 'The inflation target ten years on', Bank of England Quarterly Bulletin, Winter, pages 459–74.

Levy-Yeyati, E (2003), 'Financial dollarization: where do we stand?', mimeo, Universidad Torcuata di Tella.

Mishkin, F S (2001), 'Financial policies and the prevention of financial crises in emerging market countries', *NBER Working Paper no. 8087*.

Oosterloo, S and de Haan, J (2003), 'A survey of institutional frameworks for financial stability', *De Nederlandsche Bank Occasional Studies*, Vol. 1, No. 4.