Panel Discussion

1. Stanley Fischer

This paper states its conclusions modestly. It concludes that we have learned a lot in the past 50 years – particularly that monetary policy is important and needs to be institutionally based. Despite the enviable record the RBA has developed in the past two decades as a pragmatic flexible inflation targeter, there is no ringing call for everyone to join the club. And at the end we are reminded that we had better not forget the old lessons, that is, we should not get carried away by how much better we understand the way that monetary policy works than did our predecessors. The RBA's call for modesty is not only characteristic of its own behaviour, it is undoubtedly appropriate in general, especially after the events of the past two years.

Let me start with the 'constrained discretion' flexible inflation-targeting approach. The flexibility in that approach implies that the central bank takes account of short-run output effects in deciding how rapidly to try to return inflation to its target level. But if in the short run the central bank is targeting both inflation and output (growth), what does inflation targeting buy us? The answer – visible in the stability of inflation expectations for five years and more in most inflation-targeting countries – is *stable long-run inflation expectations*, which means confidence in the real value of the currency. That is no small thing; indeed it is essential to the stability of the macroeconomy and it is the essential achievement of the inflation-targeting approach.

I would like to talk about four more – interrelated – topics, on which our central banking community has been known to pronounce, sometimes with more certainty than may be warranted:

- the one-instrument, one-target story about money and inflation;
- the no-long-run trade-off story that morphs into a no-short-run trade-off story;
- the problem of the exchange rate for small, open economies; and
- asset prices, financial stability and macro-prudential supervision.

1.1 One instrument, one target

Not infrequently we hear central bankers say something like: 'We have only one instrument – money growth (or the interest rate) – and so we can have only one target, inflation'. This view may be based on the targets and instruments approach of Tinbergen, of over 50 years ago, the general result of which was that you need as many instruments as targets. That view is correct if you have to hit the target exactly.

But it is not correct if the problem is set up as is typical in microeconomics, where the goal is to maximize a utility function subject to constraints, in a situation where for whatever reason it is not possible to hit all the targets precisely and all the time. Among the reasons we may not be able to hit our targets precisely and all the time is that there may be more targets than instruments, for instance when the central bank's maximand is a function of output and growth. In that case we have to find marginal conditions for a maximum, and to talk about trade-offs in explaining the optimum. So it is *not* generally true that because the central bank has only one instrument, it can take into account only one target – unless the instrument has no effect on any variable other than the target.

That brings us to the nature of the impact of monetary policy on the economy.

1.2 Long-run and short-run trade-offs

To a first approximation the long-run Phillips curve is vertical, and there is no long-run trade-off between inflation and output, and/or unemployment. More than once it has been argued that because there is no long-run trade-off, monetary policy should not be used to try to affect both output and inflation in the short run.

This argument is invalid unless there is no short-run trade-off – a position that was argued early in the development of the rational expectations approach to monetary policy. But that is generally not correct, except perhaps in a hyperinflation.

The truth is that the long run is a succession of short runs, and that at every moment the central bank has to take the short-run trade-off into account.

How to combine the no-long-run trade-off view with the existence of a short-run trade-off? The best way devised so far is the flexible inflation-targeting approach. The RBA's version is that it should aim to attain the inflation target on average over the cycle, which is analytically clear, but may be practically hard to define in a country that has not suffered a recession for almost two decades. An alternative version, adopted by most inflation-targeting central banks, is that they should operate in a way that when inflation diverges from target, policy should aim to bring it back to target over the short run, typically defined as one to two years.

1.3 The problem of the exchange rate for small open economies

No small open economy can be indifferent to the behaviour of the exchange rate, which vies with the interest rate for being the most important relative price in the economy. (Of course, the word 'real' could be inserted twice in the previous sentence.)

The exchange rate issue comes to the fore when a country experiences an unwanted real appreciation as a result of capital inflows – as is happening at present in several developing and emerging market countries that have emerged from the recession more rapidly than the major industrialised countries and which have had to raise their interest rates to deal with inflation. Provided the resultant appreciation is modest, it may be possible simply to accept it as part of the international adjustment mechanism. But if it becomes too large, the country will want to take action to keep the real appreciation from doing serious damage to growth.

The textbooks say that fiscal policy can be tightened to reduce the interest rate and thus reduce the incentive for capital inflows. That is a good story, which is valid in many circumstances. But usually fiscal policy has enough of a problem in managing government spending and its financing without being burdened with having also to take responsibility for the exchange rate – and so the question returns to the central bank and to tools other than fiscal policy.

One strategy is for the central bank to intervene, buying foreign exchange and sterilising the purchases by offsetting sales of domestic assets. It is frequently said that foreign exchange intervention does not work – that the monetary authority cannot stand against the market forever. That is certainly true when the pressures are in the direction of a depreciation of the currency, for then the central bank has only limited access to the asset the market wants to buy – foreign exchange. It may be able to offset temporary pressures to depreciate, even those resulting from a capital outflow; some of the reserves will be usable for this purpose, and the country may also have access to foreign loans. But the country cannot stand against the market forever in this case.

However, the case of capital inflows, which we are discussing, is different. In that case, the central bank has the capacity to supply what the foreign exchange markets want – domestic currency. And provided the central bank is willing and able to sterilise the foreign exchange purchases, there need be no consequences for the inflation rate. The process can continue as long as the country is willing to continue to acquire reserves – and in recent years several countries have been willing to increase reserves by far more than anyone would have expected just a few years ago.

Full consideration of the decision of whether to intervene by increasing reserves in the face of an undesired capital inflow would involve calculating the costs of the appreciation and the consequences for current and future exchange rates of the intervention, along with the costs and benefits of holding additional reserves.

What if the country decides not to continue intervening? It is then driven to consider controls on capital inflows, a topic on which the IMF has recently pronounced more favourably than in the past. Controls are typically awkward, inefficient, inconsistent with a general pro-market approach, may discriminate against small- and medium-sized enterprises, and are frequently associated with corruption. In short, capital controls have very little to recommend them other than that they may be better than the alternatives. Policy-makers should make every effort to avoid using them – but central bankers should never say never.

1.4 Asset prices, financial stability and macro-prudential supervision

The authors do an outstanding job of discussing the asset bubble problem. They explain why we should not pose the problem as being 'should the central bank try to prick bubbles?', rather it is whether the central bank should take asset prices and the state of asset markets into account in setting monetary policy. The answer to this question is yes.

In the run-up to the current financial crisis, in the United States, the United Kingdom, Spain and other countries, the bubble and its consequences were concentrated in the housing market and its financing, direct and indirect. In many countries, housing prices enter the price index in one way or another, so an inflation-targeting country would have reason to react to rapidly rising house prices.

More generally, the central bank might want to react to rising asset prices to an extent which is different to that implied by their direct current contribution to the consumer price index. We are dealing here with the issue of *macro-prudential supervision*, and the question arises of what instruments the central bank can use to that end.

The obvious answer is to use regulatory instruments, such as mortgage terms, and possibly countercyclical capital and maybe liquidity ratios. This can be done, and will have to be done if we are to avoid another crisis like that of 2007–2010. However, the official community is still far from having an agreed approach to the issue, including that of where the responsibility should be located. The tendency is to place the responsibility with the central bank, but until the issue of the tools it has to deal with the problem is clarified, it will not be clear whether the responsibility can be efficiently exercised. This issue is under active consideration in the BIS, in other fora, and in individual countries, and we need to make progress on it soon.

1.5 Final comment

At the end of their paper, Cagliarini, Kent and Stevens remind us not to forget the past. These comments seem to take their reminder very seriously – for I have discussed short-run output-inflation trade-offs, foreign exchange market intervention, capital controls, the use of supervisory tools for macro-prudential supervision, and other approaches that until recently seemed to be part of history. So is it the past that lies ahead of us? No. The situation is different now, because we have inflation targets and the inflation-targeting approach, better institutional arrangements, much more sophisticated financial markets, more flexible exchange rates, much more open economies on both the real and especially the financial sides, a different evaluation of the costs of inflation and the nature of output-inflation trade-offs, and so on. Still, the choices facing policy-makers are not very different from those with which they have had to contend over the past 50 years, and that they doubtless will have to struggle with over the next 50 years and beyond.

2. Jean-Claude Trichet

It is a great pleasure to be here in Sydney today to celebrate the 50th Anniversary of the Reserve Bank of Australia. My pleasure is all the greater for having this opportunity to discuss – on the basis of an excellent paper by Governor Stevens and his colleagues – the lessons to draw from central bank experience over the past half century.

Given the many common challenges that we have faced in the central banking community over this period, it is perhaps unsurprising that I find myself in large agreement with the paper's main arguments.

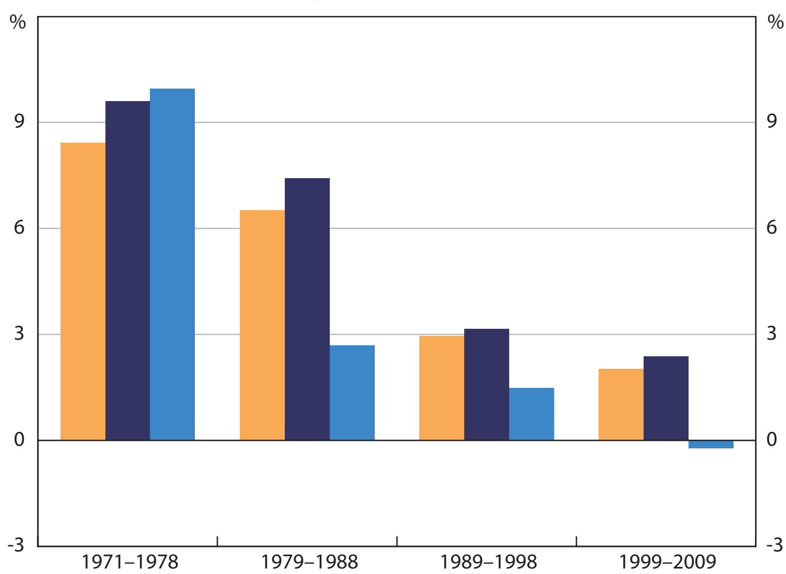
Looking back over recent decades, I would highlight many of the same lessons for monetary policy-making that Governor Stevens and his co-authors identify: recognition of the fundamentally monetary origins of inflation; appreciation of the importance of expectations in the inflation process; the consequent centrality of central bank credibility; and the resulting significance of the institutional arrangements surrounding monetary policy-making, especially central bank independence. Such considerations were central to the design of the European Central Bank (ECB) and to its monetary policy strategy, which guides our monetary policy decisions today.

I would also identify many of the same challenges for monetary policy in the coming years. Against a background of recent financial crisis, the role of central banks in containing financial imbalances and asset price misalignments clearly warrants further attention. And I agree that the future interaction between monetary and fiscal policies is likely to be complex in many parts of the world, given the considerable increase in public deficits and debt levels.

Notwithstanding this high level of agreement, in the interest of promoting discussion I will focus the remainder of my remarks on bringing a 'European perspective' to the debate. In the monetary policy-making community, we should always strive to learn from each other – a process which naturally implies a focus on differences in approaches across central banks. Yet we should be careful not to over-emphasise these differences, which are often only subtle or rhetorical in nature. Surely the main feature of the past half century of monetary policy-making – and perhaps especially of the most recent decades – is a convergence of central bank practice around three elements: a focus on price stability as the objective of monetary policy; a public quantification of that objective, supported by greater transparency of decision-making; and greater central bank independence.

And, notwithstanding the substantial challenges we currently face, convergence around these three elements has produced impressive results. After the poor experience of the 1970s, inflation was reduced and a prolonged period of price stability established (see Figure 1). In the countries which would be part of the euro area as of January 1999, average inflation stood at over 8 per cent in the 1970s and 6 per cent in the 1980s, but has fallen to 2 per cent since the

Figure 1: Inflation Developments in Industrial Economies
Average year-ended rate of inflation



Note: 'Other industrial economies' denotes the (equally weighted) average of CPI inflation rates in Australia, Canada, the United Kingdom and the United States

Sources: ECB, Euro Area-Wide Model database; OECD introduction of the single currency. The establishment of price stability has contributed to the creation of an environment conducive to greater economic prosperity.

2.1 A rule-based approach versus constrained discretion

The increased credibility of central banks has been central to achieving this success. Since price-setters are forward-looking, the evolution of price developments depends crucially on their expectations of future inflation. Anchoring private inflation expectations at levels consistent with price stability is therefore essential. This requires central banks to be credible. They must conduct monetary policy within a framework that convinces price-setters that they will act in the future as necessary to maintain price stability.

In principle, central banks could offer an exhaustive list of how they would respond to any future eventuality. But in practice, it is impossible to foresee all future contingencies. I agree, in that regard, with John Taylor,[1] according to whom recent experience in the money markets has demonstrated that it is possible to observe 'black swans' – even in places other than Australia!

Central banks therefore need to adopt a framework which attempts to strike a balance between: on the one hand, application of a specific rule, fostering predictability; and, on the other, a completely discretionary approach offering flexibility in the face of unforeseen circumstances.

The inflation-targeting strategy adopted in Australia is one attempt in this direction. Governor Stevens describes this as a framework of 'constrained discretion'. The ECB's monetary policy strategy is another. We have often described our approach as being *'rule-based, but not rule-bound'.*

Is there a fundamental difference between 'rule-based' behaviour and 'constrained discretion'? I do not think so. Rather, the differences of language reflect different historical experience and cultural norms. In Europe – which has historically experienced high levels of inflation, and even hyperinflation – throughout the past 50 years there has been a preference for rules to constrain policy-makers, so as to avoid previous mistakes. Australia's experience, which is in line with the experience of English-speaking countries, has been different.

2.2 Medium-term orientation and monetary analysis

Whether characterised as 'constrained discretion' or 'rule-based, but not rule-bound', modern monetary policy frameworks accord central banks a certain 'degree of freedom' in their decision-making. To what ends should this freedom be put?

To be clear, it is crucial that price stability is maintained over the medium term. But it is neither feasible nor desirable for inflation to be targeted on a short-term basis. Within the academic literature, this is recognised in the so-called *'flexible inflation-targeting'* framework (Svennson 1998). This framework explicitly foresees the use of monetary policy to smooth developments in economic activity over the business cycle, while anchoring longer-term inflation expectations at levels consistent with price stability.

From the outset, such considerations were also recognised in the ECB's strategy. We have always acknowledged the need to avoid excess volatility in output and nominal interest rates, which

1 See Taylor and Williams (2009), for example.

would have resulted from excessive 'fine tuning' (ECB 1999). Our approach is characterised by a *medium-term orientation*, which recognises that – given lags in monetary policy transmission and the inevitable short-term shocks to price developments – we should not attempt to 'micro-manage' price developments. Rather, we evaluate risks to price stability at the medium-to-longer-term horizon.

The literature has focused on the use of monetary policy to smooth output in the relatively shorter run. But the flexibility accorded by a 'rule-based, but not rule-bound' approach can be oriented in other directions. For example, it can be used to contain financial imbalances, by applying the same approach as we adopt when facing other sources of inflationary pressure. If the slow accumulation of financial imbalances poses a threat to macroeconomic and price stability over the longer term, then we can respond to it in a commensurate manner, even if this response implies tolerating some inflation volatility in the shorter run.

At the ECB, we emphasise one tool which we believe helps us maintain a medium-term orientation: *monetary analysis*.

This is perhaps the most clearly recognisable distinguishing feature of the European approach. European central banks have always given prominence to assessing monetary dynamics and asset prices when preparing monetary policy decisions. At the ECB, we have always foreseen that the close monitoring of monetary and credit developments would provide important elements of a framework for addressing asset price misalignments.[2]

One particular focus of our monetary analysis is the low-frequency trend in money and credit developments, which is associated with the emergence of imbalances. This focus allows us to both assess risks to price stability in the medium to long term and, simultaneously, lean against excessive money, credit and asset price growth in our interest rate decisions. Such considerations influenced our interest rate decisions in 2004 and 2005. These decisions were criticised at the time by a number of observers, including governments and the International Monetary Fund. With the benefit of hindsight, the decisions appear to have been particularly well-judged. Certainly, this approach has helped to create greater symmetry in our response to asset price developments, and it was an important ingredient in the decision at the time.[3]

2.3 Global developments matter

The importance of monitoring money and credit developments is beginning to be more recognised by academics, as well as in the policy debate. For example, leading academics have argued in favour of defining and monitoring new monetary indicators to detect the build-up of leverage within the financial sector (Adrian and Shin 2008).

Of course, recognising the importance of monetary analysis does not necessarily simplify the task of interpreting monetary and financial developments. Experience has shown that ongoing financial innovation makes the interpretation of the monetary data particularly challenging. Therefore, we are continuously seeking to sharpen and deepen our understanding of monetary and financial developments.

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2 See European Monetary Institute (1997) and Issing (2002), for example.

3 See in particular Trichet (2009).

One result derived from this ECB research relates to the identification of the *global nature* of asset price boom-bust cycles and associated financial crises. This suggests that there should be global concern over the monetary and credit developments that underpin these episodes. Not surprisingly, recent ECB research suggests that global variables – rather than only national or regional indicators – can enhance our ability to identify a build-up of financial imbalances.[4] I take this opportunity to raise awareness in the central banking community of the importance of monetary analysis and its implications, both for economies individually and globally.

2.4 Concluding remarks

We are emerging from the uncharted waters navigated over the past few years. But as central bankers we are always faced with new episodes of turbulence in the economic and financial environment. While we grapple with how to deal with ever new challenges, we must not forget the fundamental tenets that we have learned over the past decades. Keeping inflation expectations anchored remains of paramount importance, under exceptional circumstances even more than in normal times. Our framework has been successful in this regard thus far (see Figure 2).

Figure 2: Measures of Longer-term Inflation Expectations in the Euro Area
Year-ended

Note: (a) Five-day averages of daily data
Sources: Consensus Economics; ECB; Thomson Reuters

4 See Alessi and Detken (2009).

The RBA has operated through 50 turbulent years of monetary policy-making. As recent experience has shown, there will be a need for innovation by central banks to meet novel challenges. But the lessons of the past 50 years – and, in particular, our success in anchoring inflation expectations – should remain uppermost in our minds.

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3. Joseph Yam

I would like first to add my congratulations to the Reserve Bank of Australia on its 50th Anniversary. As a retired person I feel particularly honoured to have been invited to the celebrations. I wish the RBA continued success in the performance of its central banking functions for many more years to come.

On the subject matter of this session of the Symposium, I find it difficult to add anything meaningful to an excellent paper by Governor Stevens and his colleagues and after the distinguished speakers before me. What I can do is address the subject matter from an emerging market perspective, conveniently using, where appropriate, the framework of the excellent paper in front of us.

3.1 Monetary policy in emerging markets

I think it is fair to say that monetary policy in emerging markets has generally benefited from the experience of the developed markets. For the minority of emerging markets that import monetary policy from the developed markets through maintaining a stable exchange rate, the success of monetary policy in delivering currency stability is readily felt. For the majority of emerging markets that subscribe to the basic principles for good monetary policy described in the paper, the credibility of monetary policy and of central banks has been enhanced. Indeed, the need 'for a strong domestic framework', where there is 'a clear idea of monetary policy goals, adequate instruments and sufficient political scope for the decision-maker to act' (p 15), is increasingly understood and accepted, even at the political level. This is manifested in the increasing focus among the majority of emerging markets on price stability as the primary role for monetary policy.

Nevertheless, it is still a fact that central bank mandates in emerging markets generally contain a broader spectrum of social and economic goals. Specifically, in most emerging markets, central banks are also in charge of prudential regulation and therefore, explicitly or by implication, have responsibility over the maintenance of financial stability. Fortunately, however, the mainstream views of the developed world hitherto have been that financial stability is difficult to maintain, as articulated in Section 3.5 of the paper, and that realistically the 'cleaning up the mess afterwards' argument has more support than the 'leaning against the wind' argument. Thus the broader objectives of emerging-market central banks have been such that they have not led to an inordinate degree of political interference in the conduct of monetary policy, which might otherwise have hindered the establishment of credibility.

But these mainstream views seem now to be changing, obviously as financial instability inflicted tremendous pain in the developed markets and interestingly as 'the mess' proved to be 'too big for the tools at hand' to clean up. The politics is also such that more central banks are likely to be given explicit responsibility over the maintenance of financial stability. Where financial stability is already the responsibility of central banks, there will likely be greater importance attached to this objective, reflecting greater expectations from the people. This distinct shift of sentiment is regardless of the limited tools available to central banks and the fact that the principal tools for the control of the supply or the price of base money have hitherto been firmly oriented towards delivering the monetary policy objective. I fear, therefore, that we may be entering a period in which there is significantly greater risk of erosion of the hard-earned independence and credibility of central banks, and the ability of the central banks to achieve their established monetary policy objective, not just in emerging markets but in other jurisdictions as well. This risk must be prudently managed, particularly in cases where explicit responsibility for the maintenance of financial stability is to be given to the central bank.

3.2 The toolbox

An essential way of managing the risks is to ensure that the central banks have the necessary tools in place for the job. Specifically, to safeguard the effectiveness of monetary policy, there may be a need, in normal times, for at least giving monetary policy the clear priority in the use of the policy interest rate, or imposing the requirement that the use of the policy interest rate for other purposes should not undermine the effectiveness of monetary policy. In crisis situations, as has been the case in the past couple of years, where inflation was not a concern and when it was clearly in the wider public interest and in the interest of nursing the financial system back to health to keep interest rates low, there is definitely a need for greater flexibility.

The policy interest rate, obviously, should not be the only tool in the toolbox. There is a need for other tools, for use in a non-crisis environment, for moderating credit cycles and lessening the extensiveness of asset price bubbles, which usefully limit the adverse impact of bubbles on financial stability when they burst. Simple prudential tools do work well to make leverage in housing and other asset markets suitably costly. Simple prudential tools would have prevented sub-prime mortgages from coming into being and their derivative products from being created. Less simple prudential tools, but certainly well within the technical capability of supervisors to design and use at the appropriate time, are perhaps needed to ensure that such financial innovation as securitisation and credit risk transfer would not distort incentives and encourage the serious erosion of credit standards that we saw. There is simply the need for the legal authority and the willingness to do so, although we should not underestimate the domestic political resistance to reform, given the strong political lobby of financial intermediaries. We also should not underestimate the difficulties in the effective application of reforms on an international scale, given the globalised environment within which financial markets now operate.

3.3 Capital flows and monetary policy

A different issue that has been presenting challenges to the conduct of monetary policy, particularly for emerging markets, is the huge amount of international capital flowing around. This had been the case even before almost everybody resorted to quantitative easing as one response to the current financial crisis. With quantitative easing, these challenges have intensified. Whether a jurisdiction is targeting inflation or maintaining a stable exchange rate, volatile and voluminous capital flows are very difficult to cope with. For those focusing on inflation, many argued that the exchange rate could serve as a shock absorber. This argument ignores the reality that large exchange rate fluctuations can be destabilising, both to the economy and to the financial system. It also ignores the reality that the foreign exchange market is far from efficient in discovering a price that reflects economic fundamentals. Exchange rates, more often than not, overshoot. With an estimated 95 per cent of foreign exchange turnover generated by position-taking, some highly speculative in nature, and only 5 per cent representing the need arising from international payments, the price discovered reflects more the sentiment of those playing the market for a living rather than anything else. And we know how fickle their sentiment is and how they love volatility.

3.4 Solutions for emerging markets

Yet there are not many safe options for emerging markets to deal with volatile and voluminous capital flows while maintaining the integrity of monetary policy. Again for those focusing on inflation, the options are to allow some movement in the exchange rate, conduct some sterilised intervention and impose possibly temporary restrictions to capital flows. For those maintaining fixed exchange rates, the options are even more limited. And all these options can be quite costly. Furthermore, one often has to contend with the condemnations of those who dogmatically wave the free-market banner in response to any market intervention by the authorities and the damage such irresponsible comments inflict on credibility. Hong Kong had its unfair share of these in 1998. In the current turbulent times in global finance, with a lot of liquidity overhang waiting to be withdrawn, I fear that the difficulty in the conduct of monetary policy in emerging markets may intensify. I just hope that this does not mean the eruption of financial crises among them. Many have taken the advantage of large inflows in recent years to accumulate more foreign reserves. This is wise as I am quite sure that these reserves will prove helpful in coping with the possibly more difficult times ahead.

For the longer term, there is always the option for emerging markets uniting themselves, in one way or another, to form a critical mass that is large enough to absorb the voluminous and volatile capital flows without causing difficulties that are otherwise beyond their individual capacities to cope. That means individual jurisdictions of that relevant group conceding their sovereign rights over monetary policy to a multinational central bank, in other words, the creation of another monetary union, following the example of the euro area. Alternatively, the market may, in the fullness of time, produce an anchor currency in a particular region with close economic interests to which other currencies in that region could choose to be pegged to, in whatever firm or loose way they wish to do so in order to suit their own circumstances. Perhaps then the international financial system, with the benefit of an additional leg to stand on, could become more stable for the benefit of all.

4. General Discussion

Two main topics received considerable attention in the discussion in this session. The first concerned the future of prudential supervision and regulation. The second was how central banks should respond, if at all, to developments in asset markets. Other topics that were touched on included the relevance of recent events to: central bank communication; the transmission of monetary policy; and monetary policy under fixed exchange rates.

Discussion began with the panel being asked whether or not prudential supervision should be conducted within the central bank. One panellist noted that a separate supervisory authority often leads to a situation in which the central bank lacks important information, although another suggested that this could be overcome by sufficient cooperation between the central bank and a separate supervisor. One panellist expanded on this point, describing how it could be very useful to have the bank supervisor present at monetary policy discussions during times of financial instability. Another suggested that it is difficult to draw strong conclusions as to whether prudential supervision should be inside or outside the central bank, noting that there had been divergent experiences over recent years across countries with similar institutional frameworks; what seemed clear though to this panellist was that the existence of multiple supervisors is problematic. On the issue of the future of prudential regulation, one panellist raised the benefits of using macro-prudential policies to deal with cycles, but acknowledged that gaining political support for such measures is not straightforward. As a conclusion to this thread of discussion, one panellist warned of a regulatory over-reaction to recent events, with the potential for excessively tight regulations to unduly inhibit the availability of credit.

The appropriate response by central banks to asset price developments was discussed at length. The issue was initially broached by one of the panellists, who indicated that they were open to re-thinking how monetary policy should respond to asset prices, but doubted the strength of the empirical relationship between interest rates and asset prices. In contrast, another panellist argued that monetary policy should be assumed to have an important influence on asset prices, even if it is difficult to measure these effects accurately. Other panellists agreed that the appropriate response of monetary policy to periods of emerging financial imbalances warranted further examination. In this regard, one panellist argued that monetary policy should take account of a broad range of variables, including monetary aggregates, and regardless of the precise approach, monetary policy should always be directed towards medium- to long-term outcomes. The Australian experience of a boom in the housing market from 2002 to 2003 was cited as a period of particular interest given that at the time the Reserve Bank of Australia made public its concerns regarding risks associated with rapidly rising house prices and housing credit, and raised interest rates a little earlier than otherwise in light of these concerns. Even so, one panellist noted that the level of house prices had moved higher since the end of that boom. In response, another panellist expressed the view that the RBA's approach had been a modest success, helping to 'ring the bell' on the boom in late 2003 and demonstrating that house prices do not always rise.

Reacting to these views, one participant aired their concern that if central banks around the world attempted to 'nip the next asset price boom in the bud', they would limit the scope for unemployment to fall from its current high levels. Two panellists responded by saying that they viewed current central bank policy as having done very little in response to rising asset prices. It was also suggested that while maintaining a credible commitment to medium-term price stability was important, the very high unemployment and weakened fiscal positions currently affecting much of the developed world may require monetary policy to remain accommodative for an extended period.

During the discussion regarding whether monetary policy should respond directly to emerging financial imbalances, one participant suggested that having multiple goals for monetary policy may complicate the task of communicating the central bank's policy framework to the public. This led to a broader discussion of central bank communication, with panellists agreeing that it was a critical tool for central banks to manage expectations. The practice of providing some indication of the likelihood of future monetary policy moves was viewed by one panellist as being a valuable way of reducing the scope for disruptions in financial markets. It was also noted that there was scope for policy messages to be tailored to different segments of the public, adjusting the complexity of statements appropriately.

One of the participants raised the issue of whether the recent experience of financial and economic instability offered some lessons regarding the transmission of monetary policy. Particular reference was made to the implications of the variation of credit spreads and liquidity premia over time, as well as the implications of the existing procyclical prudential regulations. In response, panellists noted that the recent use of unconventional monetary policy instruments by many central banks had helped to reduce liquidity premia to more reasonable levels. In addition, it was agreed that credit and risk-taking behaviour should be better incorporated into macroeconomic models, and that the Phillips curve and output gap frameworks on which most economists currently rely (either explicitly in models, or via more heuristic means) are missing an adequate treatment of the financial system. Also, on this issue, it was noted that the financial system, rather than just amplifying shocks, was a source of shocks itself.

Finally, the scope for central banks to manage the business cycle within a fixed exchange rate regime was raised by a participant. One panellist responded by saying that in this situation it was even more important to ensure that financial institutions have a large enough 'cushion' (of capital) in order to deal with cycles. They also described the value of other (non-interest rate) tools that can be used to dampen business cycle volatility, such as changes in loan-to-valuation ratios and variable capital adequacy requirements.