

Andrew Crockett: Monetary policy and financial stability

Speech by Andrew Crockett, General Manager of the Bank for International Settlements and Chairman of the Financial Stability Forum, given at the Fourth HKMA Distinguished Lecture, held in Hong Kong, 13 February 2001.

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It is a great pleasure to be invited to give the Fourth Annual HKMA Distinguished Lecture. And it is a special honour to follow in the footsteps of such eminent predecessors as Bill McDonough, Wim Duisenberg and Jean-Claude Trichet. With the BIS having established its Asian office here in Hong Kong, our links with the Special Administrative Region are now particularly close.

My topic today is Monetary Policy and Financial Stability. There can of course be no debate about the importance of the twin goals of price stability, on the one hand, and the stability of the financial system, on the other. What is less well understood is the relationship between them, and that is what I want to explore in this lecture.

It is an issue that is both important and timely. Important, because we need to ensure that arrangements for the pursuit of price stability do not inadvertently endanger the stability of the financial system. And we need to ensure that financial system weaknesses do not impede the effective operation of monetary policy. Timely, because the new Basel Capital Accord is focussing additional attention on the issue of systemic risk. Moreover, in a number of countries, responsibility for the supervision of financial institutions has been moved from the central bank to an independent regulatory authority, with the central bank itself retaining a more general responsibility for overall systemic stability. Australia and the United Kingdom are perhaps the clearest examples of such a shift, but similar moves have taken place in Korea, Hungary and a number of other countries. These institutional changes have sparked a lively debate about the appropriate institutional framework for monetary and financial stability policies.

In this lecture, I will argue that the terms of this debate are too narrow. What matters is not so much the institutional division of responsibilities. It is rather the nexus **between** monetary and prudential policies and how to devise a set of arrangements that can promote both monetary and financial stability, regardless of the formal assignment of policy tasks. This is a very complex matter because the linkages between monetary policy and financial stability go in both directions and take many forms.

My argument will be that a greater consensus than now exists is required on the underlying relationship between monetary and financial stability (diagnosis) in order to better frame policy responses (remedies). In implementing prudential policies, supervisory authorities may require a keener recognition that some of the main roots of systemic instability have been macroeconomic. One common macroeconomic element behind overextension in the financial system has been misjudgements about the economy's potential growth rate – a major factor in Japan in the 1980s and in South-East Asia in the mid 1990s. Another element is that financial market sentiment tends to move with the business cycle. Many of the dilemmas of policy arise because it is difficult in practice to distinguish what is cycle and what is trend.

Likewise, in framing monetary policy, central banks may require a keener recognition of the role of monetary policy in unintentionally accommodating the credit expansion that contributes to the build up of financial imbalances. In developing these themes, I will try to derive some operative conclusions both for the monetary policy and the supervisory function.

The structure of what I have to say is as follows: I will begin by recalling, in a somewhat stylised manner, the current debate on the relationship between monetary and financial stability. Next, I will broaden the focus so as to bring out some of the under-appreciated aspects of this relationship. Finally, I will try to draw some policy implications, both for the monetary and the supervisory authorities.

The current debate

The conceptual framework underlying the current debate is one in which the two objectives of monetary and financial stability, and the instruments used to achieve them, can be largely separated. The monetary authorities direct interest rate and credit policies towards a clearly defined objective of price stability. Increasingly, this is being done in the framework of inflation targeting, though Hong Kong, for reasons related to both its history and its economic structure, has chosen to anchor its monetary policy on an external peg. Against a background of price stability, financial stability is seen to be assured by rigorous prudential supervision, targeted at the risk management practices, and the solvency of individual institutions.

Within this broad conceptual framework, there are areas of agreement and disagreement. It is generally agreed that there is a clear division of responsibility between the monetary policy function and the prudential supervisory function. And it is accepted that information needs to be exchanged and actions coordinated, particularly during periods of financial turbulence. But otherwise, little need is seen for continuous interaction between the authorities responsible for these two functions.

Where disagreement has arisen is on the subject of whether supervisory functions should be placed in the central bank or outside. This is a debate that is set to continue for some time yet. Among the arguments made for retaining supervisory authority in the central bank are the following:

- The central bank will have easier access to information in the case of a crisis, and it will be easier to coordinate monetary and prudential policy actions;
- It will be easier to assess and respond to the build-up of system risk if the supervisory authority also has responsibilities, and hence specific know-how, in other areas of the financial system (e.g. market functioning and the operation of clearing and settlement systems).
- Access to supervisory information can help the authorities better calibrate monetary policy (e.g. the case of the “headwinds” that confronted the US economy during the recovery of the early 1990s).
- The central bank may be the only institution (especially in emerging market economies) with the necessary independence and credibility to implement rigorous prudential policies and limit governmental interference.

There are, however, also arguments on the other side:

- Information exchange does not require that functions be grouped within the same institution;
- Given the blurring of distinctions between different types of financial institutions, the retention of supervisory responsibilities within the central bank may give rise to perceptions that the lender of last resort function is being extended, with consequent risks of moral hazard.
- The central bank may become too powerful if it is both independent and endowed with a broad range of functions.
- There could be a conflict of interest with monetary policy, if central banks were induced to be excessively expansionary in order to head off weaknesses at individual financial institutions.

In these terms, there is no obviously “right” answer to the debate. Individual observers may have their own preferences, but at the end of the day, the answer probably depends on country-specific circumstances. For example, how independent from political and industry pressure can a separate supervisor be? How scarce are the relevant skills? And how blurred have the distinctions between different types of financial intermediary become? Some, such as Charles Goodhart,¹ have argued that these considerations lead to the conclusion that the case for combining supervisory and monetary policy responsibilities in the central bank will generally be stronger in emerging markets.

But whatever is the answer to the question “Who should supervise?”, it is necessary to define tasks clearly and in such a way that the tools are available to discharge them. One risk in the present trend to remove supervision from the tasks of central banks is that central banks could be left with a responsibility for overall financial stability that is neither clearly defined nor supported with the necessary powers or access to information to discharge it. So where separate supervisory authorities are being established, it is important to set up a structure that promotes the necessary exchange of

¹ C A E Goodhart: “The Organisational Structure of Financial Supervision”, FSI Occasional Paper No 1, BIS, Basel, 2000.

information and coordination. Much attention is being given to this subject in the United Kingdom, Japan and other countries where new supervisory structures are being put in place.

My argument in this lecture, however, is that even with these developments, the basic conceptual framework for the promotion of financial stability is not fully adequate. It tends to see the interrelationship between monetary policy and financial supervision as being important in managing crises, rather than in their origination. There is not sufficient focus on the genesis of financial instability.

It is this framework that I wish to try and broaden. My conjecture is that the relationship between monetary and financial stability runs deeper than is often imagined. More specifically, the pursuit of price stability can sometimes allow financial imbalances to arise inadvertently, and can sow the seeds of subsequent instability. Conversely, the pursuit of prudential objectives, institution by institution, can take inadequate account of feedback mechanisms that can exacerbate macroeconomic cycles. Allow me to elaborate on these points.

Beyond the current debate: the genesis of financial instability

I will begin with two observations to support my conjecture that monetary and financial stability cannot be put in separate compartments and separately pursued.

My **first** observation is that since the 1980s inflation has been largely conquered, and yet financial instability has, if anything, intensified. It has taken the form both of price misalignments and widespread financial distress, both in industrial countries and emerging market economies. Exchange rate relationships have been highly volatile, and “bubbles” appear to have emerged and occasionally burst in property and equity markets. Bond yields, too, have varied over a wide range. In financial systems, there have been highly damaging crises in the Nordic countries, in Japan, in East Asia and in Mexico.

Several common features of these episodes of instability are worthy of comment. First, they occurred in circumstances where inflation was either not a threat, or was on a downward trend. In a liberalised financial system, the absence of inflation is therefore a necessary but not sufficient condition to avoid financial instability. Secondly, systemic problems were not caused by individual institutions getting into difficulty, and affecting others by contagion. In all cases, a whole set of institutions acted in more or less the same way, and were not disciplined by a supervisory authority which certainly knew what was going on. Thirdly, the portfolio behaviour in question was encouraged by expectations that underlying macroeconomic conditions – interest rates and growth rates – could be extrapolated uncritically into the future.

My **second** observation is that there have been several combinations of monetary and financial regime during the 20th century, and none has been conspicuously successful at achieving simultaneously both price stability and stability in a liberalised financial system.

- Under the **gold standard**, there was a single anchor, gold convertibility, for both monetary and financial stability. Monetary stability was in fact defined as the preservation of the convertibility of a currency into gold. Likewise, individual financial institutions had to assure they could always mobilise gold (or assets convertible into gold) to redeem their liabilities. The gold standard was an example of a liberalised financial system in which the quantity of gold acted as a visible exogenous constraint on monetary authorities and banks alike. But it did not prevent waves of excessive expansion, followed by instability and bust. In other words, such a system, unmanaged, was inadequate to discipline inherent tendencies to excess in financial markets.
- The **interwar years** saw the replacement of the brittle discipline of the gold standard with the emergence of fiat monetary standards. This led to a closer identification of monetary policy with the objective of price stability. At the same time, it loosened the constraints on credit expansion, and did nothing to prevent widespread financial instability. In the wake of the turbulence of the early 1930s, most countries introduced strict regulation of commercial banking, and sometimes of other financial activity as well.
- The **Bretton Woods system** of the post-war period was a de facto dollar standard. Given the experience of the interwar period, it involved heavy regulation of domestic and international financial transactions. The system delivered monetary stability, at least for as long as the US authorities were able to keep inflationary forces in check. It also delivered

financial system stability. But there was a heavy cost from repressed financial systems in terms of the efficiency with which resources were ultimately allocated.

- The **floating exchange rates** that followed the breakdown of the Bretton Woods system saw a search for alternative monetary anchors, and for a means of disciplining the financial system within a more liberal environment. As I noted a moment ago, the approach pursued was to segregate pursuit of the two objectives. For the pursuit of price stability, money supply targets were the first object of attention, but when they proved unsatisfactory, an increasing number of central banks resorted to the “constrained discretion” of inflation targeting. As far as financial system stability was concerned, the answer was found in intensified prudential supervision. This followed several damaging crises that occurred in the wake of financial liberalisation. The focus of supervision was less on permitted activities of financial intermediaries, but on prudential risk management pursued by a combination of balance sheet constraints, supervisory oversight, and, market discipline. Until now, however, this approach has still not delivered durable financial stability.

The foregoing brief review leads me to the conjecture that is the basis of this lecture: the combination of a liberalised financial system and a fiat standard with monetary rules based exclusively in terms of inflation is not sufficient to secure financial stability. This is not to deny that inflation is often a source of financial instability. It certainly is. Inflation clouds and distorts relative prices, biases investment towards inflation hedges, and when it threatens to get out of control, requires drastic monetary tightening, and the wrenching adjustments that come in its wake.

Yet the converse is not necessarily true. There are numerous examples of periods in which the restoration of price stability has provided fertile ground for excessive optimism. “Irrational exuberance” can drive asset prices to unrealistic levels, even as the prices of currently traded goods and services exhibit few signs of inflation.

The reason is not far to seek. In a fiat money standard, the supply of credit is endogenous, governed by the reaction function of the authorities. If that reaction function responds solely to what is happening to inflation in the price of current output, there is little to prevent the emergence of cycles in the price of real and financial assets that do not enter into the inflation measure.

If an absence of inflation is not, by itself, sufficient to ensure financial stability, and the authorities’ reaction function does not prevent financial imbalances, to what can we look to contain their build-up? The answer is, of course, prudential regulation. However, the tools of prudential regulation are themselves based on perceptions of risk which are not independent on the credit and asset price cycle. If prudential regulation depends on assessments of collateral, capital adequacy and so on, and if the valuation of assets is distorted, the bulwark against the build-up of financial imbalances will be weakened. Put in simple terms, even with the necessary prudential rules, the system may not have enough built-in stabilisers to avoid financial instability.

This point can be made more apparent through a closer look at the anatomy of financial instability. In a stylised financial cycle, some exogenous development sets off an expansion of credit. It is often improved economic prospects, due to technological innovation, the implementation of reforms – or indeed many other genuine, real factors. Once under way, credit expansion fuels an acceleration of output and an increase in asset prices. Such developments appear to boost returns and lower risk, leading to further credit expansion and increased leverage in the system. If the mechanisms of prudential oversight – comprising markets, counterparties and official supervisors – work well, excessive leverage will be avoided. In such benign circumstances, financial institutions will weather any subsequent downturn. But if the extension of balance sheets goes too far, an eventual reversal can be abrupt and severe, with widespread bankruptcies, and substantial damage to financial intermediaries.

This kind of financial cycle is easy to identify *ex post*. It can be purely domestic in nature, or it can be driven by international capital flows. Examples are to be found in the Nordic countries following the liberalisation in the 1980s; in Japan in the 1980s and 1990s; and in the recent experience of a number of East Asian economies. But it is much harder to identify *ex ante*.

I draw first five conclusions from the foregoing analysis, that will be important for what I want to say in the final part of this lecture, concerning policy challenges.

First, the financial industry is unlike other sectors in that the feedback mechanism from supply to price is less effective, or even perverse. In a traditional industry, an expansion in supply puts immediate downward pressure on price, squeezing profit margins, reducing the incentives to invest and

encouraging exit from the industry. In the financial sector, the price that falls when the supply of credit increases is the interest rate. This has the effect of pushing up asset values and appearing to strengthen the balance sheets of borrowers and intermediaries alike. Rising asset values encourage leverage and credit expansion contributing to further increases in credit growth. Conversely, falling values lead to deleveraging and reductions in credit growth.

Second, fundamental value, the basis on which decisions to buy and sell, to lend and borrow are made, is extremely hard to assess. We can of course decompose value into an expected stream of returns, a discount rate and a risk premium. But this does not take us very far. To an important extent value, like beauty, is in the eyes of the beholder. Its assessment is subject to powerful waves of shared optimism or pessimism. Investors are prone to see new paradigms, to force new facts to fit entrenched perceptions. This helps explain why exchange rates among major currencies can exhibit wide volatility, and why individual stocks, and even stock indices, can move by large amounts even in the absence of significant new information.

My **third** conclusion is that cyclical upswings are typically sustained by overly optimistic expectations, and muted perceptions of risk. As expansion proceeds, risk spreads usually narrow, asset values are buoyant and loan-loss provisions are reduced. With the benefit of hindsight, this looks perverse, since we can see that risks and imbalances have actually accumulated in the later stages of an upswing, only to materialise in the ensuing recession. The fact is that financial intermediaries are better at assessing relative risks at a point in time, than projecting the evolution of risk over the financial cycle. Unfortunately, however, it is these perceptions of risk, and the asset values that lie behind them, that constitute the raw material on which prudential controls operate.

Fourth, widespread financial instability typically arises from exposures to common, rather than idiosyncratic factors. The model in which an individual institution gets into difficulties and affects the system through contagion, is the exception rather than the rule. More commonly, financial systems encounter crisis when many institutions have operated in a similar way, and have collectively failed to see a common macroeconomic threat. The financial cycle is the most typical cause. Financial intermediaries, and their supervisors, fail to take adequate account of emerging imbalances, and are lulled to a false sense of security by the apparent strength of asset prices.

Fifthly, monetary policy loses much of its effectiveness in dealing with a recession if banks, badly overexposed as a result of the preceding boom, are unable to lend. I hardly need to belabour this point to an Asian audience. A well-functioning financial system is essential for successful monetary policy because of its pivotal role in the transmission of monetary policy measures.

Policy challenges

If the argument so far is valid, achieving the elusive twin goals of financial and monetary stability will require mutually reinforcing anchors to be put in place in the two spheres. Moreover, it will require an enhanced appreciation of the interdependence of policies in the two areas. I will deal with these two-way channels of inter-dependence in turn, starting with prudential regulation and the goal of financial stability.

A key element here is to recognise the role of common factors in generating financial distress, and the need to find better ways of identifying and tackling emerging imbalances. Supervisors are recognising this, and are increasingly focussing on developments that generate systemic, rather than idiosyncratic, difficulties. This means looking at the correlation of risks across institutions, rather than factors that threaten individual failure. It also means that prudential controls should be calibrated to the systemic relevance of individual institutions, rather than being the same for all.

We can think of this analogously to the paradigm shift brought about by mean/variance portfolio analysis in the 1950s. Portfolio analysis now focuses on the aggregate risk/return characteristics of a whole portfolio, not on the characteristics of individual securities. Similarly, our concern with the financial system ought to be with its overall efficiency and resilience, not on the performance of individual intermediaries. This is not an easy shift in perspective for supervisors to make, given their natural focus at the institution level. Nevertheless, it is a shift that is now becoming apparent in the public statements of leaders of the supervisory profession.

Another area in which a change in supervisory perspective is taking place lies in a greater recognition of the time properties of risk over the financial cycle, and of the endogenous character of risk with respect to the collective decisions of lenders. There are two problems here. One is the fact that

underlying risk builds up as expansion and leverage continues, while **apparent** risk declines, with the rise in collateral values. The second is that decisions to extend or withdraw credit can have perverse externalities: what is rational for one lender acting in isolation becomes systemically threatening if undertaken by all lenders together.

The answer seems to lie in stronger incentives to build capital cushions in good times, that can be reduced in bad times. This would better reflect the underlying riskiness of banks' portfolios and would provide a built-in mechanism to dampen the financial amplification of the business cycle.

I am of course aware of the difficulties of implementing such proposals. Fluctuations in regulatory capital would provide opportunities for regulatory arbitrage and supervisory forbearance. Nevertheless, there are certain options that would limit such dangers. For example, provisioning practices could certainly be made more forward-looking than at present. Loan-to-value ratios could be adapted in the light of potentially unsustainable movements in asset prices or be based on conservative, less cyclically-sensitive measures of value. More generally, financial intermediaries could be induced by their supervisors to adopt a critical attitude to optimistic scenarios particularly during booms. Stress testing is an essential technique in this connection. Many of the techniques I have just referred to should find their place in the supervisory oversight pillar of the new Basel Capital Accord.

Lastly, supervisory techniques will need to take a balanced view of the utility of market forces as an aid to stabilising behaviour. Disclosure and transparency undoubtedly facilitate the exercise of counterparty discipline. They are an important part of a more robust financial architecture, as the third pillar of the new Basel Capital Accord recognises. There is still much to do in Asia in raising disclosure standards and in allowing the market to provide the necessary discipline. Asia's crises were a stark lesson that sweeping problems under the carpet did not solve them. I hardly need to remind this audience of that. At the same time, one should be aware that market participants may be subject to collective misperceptions of risk. And even if risk is correctly perceived, private responses may not be appropriate from the viewpoint of systemic stability. Private behaviour can be affected by expectations of official action (moral hazard); by short term horizons induced by the nature of contracts; by differing interests as between principals and agents; and more generally by the combined effect of forces that make for what we commonly term "herd behaviour".

Let me turn, finally, to the role of monetary policy. I have argued that excessive credit expansion during upswings has often contributed to the accumulation of financial imbalances, imbalances whose unwinding has been associated with bouts of damaging instability. If I am right in this, the question immediately arises of whether monetary policy should have as one of its objectives to limit the accumulation of such imbalances or, more simply put, to prevent the emergence of financial excesses. This has become a hotly debated subject of monetary economics in recent years, and the end of the debate is not in sight.

On the one hand, there are powerful arguments for saying that monetary policy should focus exclusively on consumer price inflation and not concern itself with asset prices and financial imbalances more generally. A proliferation of objectives is a recipe for confusion. Moreover, how can the authorities distinguish an unsustainable from a sustainable evolution in asset prices? Even if they felt confident that a particular development was unsustainable, how could they muster the political support to resist it, especially if in so doing they were to induce an economic slowdown? Finally, how could one recognise such a development sufficiently in advance to deflate it without damaging consequences that would inevitably be blamed on the central bank?

Nevertheless, it seems a counsel of despair to say that nothing can be done. The costs of uncontrolled financial cycles are sufficiently large that avenues for resisting them should at least be explored. At a minimum, it seems reasonable to suggest that, in formulating monetary policy aimed at an inflation objective, central banks should take explicit account of the impact of financial developments on the balance of risks. When credit expansion is rapid and asset prices are growing substantially faster than the price of current output, it might be appropriate for the authorities to aim for price increases in the lower part of the target corridor, or else to aim at a slowing in the overall rate of credit expansion. In particular, rapid credit growth should prompt the central bank to look extra hard for inflation risks.

Such a policy, undertaken when the inflation threat seems remote, would no doubt be characterised as excessively cautious. Yet it should be remembered that the costs of financial crises have in the event turned out to be much greater than the output forgone in the short term by restraining unsustainable growth.

Conclusion

Let me end by recapitulating the main points of my argument. Many institutional actors are involved in the quest for financial and monetary stability. They share a common goal, but they approach it from different perspectives.

I hope I have persuaded you that the interrelationship between these perspectives is broader and deeper than is usually thought. Monetary policy and prudential supervision interact in ways that increasingly demand a unified, and mutually reinforcing framework. Much progress has been made in developing such a framework in recent years. Nevertheless, much remains to be done.

The preservation of stability in the financial system requires an understanding of how macroeconomic developments interact with institutional behaviour and prudential norms to support or undermine equilibrating tendencies. And the implementation of monetary policy requires an understanding of the fact that the consequences of monetary policy for economic behaviour go much wider than their impact on the consumer price index.

This is much more than simply a matter of who does what, of whether responsibility for supervision of banks is located inside or outside the central bank. One could even argue that the loss of supervisory responsibilities by central banks has prompted a healthy re-examination of what is meant by systemic stability, and how it can be achieved in a world of many actors.

Systemic stability remains a key challenge for financial authorities worldwide. Nobody, least of all an Asian audience, needs to be reminded of the costs of crisis and disruption in the financial sector. An enormous amount has been achieved in improving the capacity of the financial system to contribute to economic growth and development. The task now is to ensure that adequate defences are in place to understand and limit the system's exposure to financial instability.