Sir Andrew Crockett[1]

The interaction of monetary and financial stability

Keynote remarks by Sir Andrew Crockett at a SUERF and Central Bank of Iceland Seminar in Reykjavik, June 3, 2004[2]

1 Introduction

There can be little doubt about the importance of achieving monetary and financial stability. Instability in the financial sphere has exacted a large price over recent decades in developed and emerging economies alike. Inflation was a perennial problem during the 1970s and 1980s, and the price of eventually defeating it was high. More recently, distress at financial institutions, and throughout entire financial systems, has imposed enormous costs on the economies concerned.

Moreover, it is clear that monetary and financial stability can interact. Numerous papers have documented the common roots of currency and banking crises, and how one can exacerbate the other. According to one World Bank study, there have been over 120 financial crises in emerging markets over the past two decades. The typical resolution cost of these crises has averaged 16 percent of GDP, and the aggregate of such costs over all countries exceeds $1 trillion.

If it is accepted that monetary and financial factors can interact, there is still no very clear definition of the specific processes at work. Different observers stress different channels. The dramatic rise (and in some cases, fall) of asset prices has focused concern on the potential destabilising consequences of volatility in these prices. But there is much less agreement on whether this has anything much to do with the achievement of a central bank's inflation objectives.

In this lecture, I will try to explore some of these issues in a little more detail, asking the question of how inflation affects financial system stability and vice versa. For the sake of simplicity, I will mostly consider the channels of causation that run from one to the other, or vice versa, neglecting the obvious point that there is joint determination in a general equilibrium situation. I will try to pick up this latter point towards the end, before addressing remedies for instability. Another question I will address is one of governance structure. If, as I will argue, there are important interactions between monetary and financial stability, how should responsibility for systemic oversight be allocated?

2 Definitions

As in any analytical endeavour, it is well to start with a definition of terms. I will follow the normal practice and define monetary stability to mean stability in the purchasing power of money, or in other words, low and stable inflation. I will also accept the convention that inflation is defined in terms of the change in the price of a basket of goods and services representing current consumption. This, of course, begs the question of whether a change in the price of

1. Sir Andrew Crockett is Managing Director at JP Morgan Chase International and has been General Manager of the Bank for International Settlements.

2. Speech at a SUERF (The European Money and Finance Forum) and Central Bank of Iceland Seminar in Reykjavík, Iceland, on June 3, 2004.

existing assets, whether real or financial, has any relevance as a measure of inflation. I do not have an answer to that, but simply note at this stage that an increasing number of analysts are questioning whether a unidimensional measure of inflation captures adequately the phenomenon we wish to analyse.

I will define financial stability as the ability of the financial system to continuously intermediate savings and investment without provoking wide swings in asset prices. Note what this definition includes and does not include. The focus on the functioning of the system means that distress or failure at individual financial institutions is not a concern unless it impairs the intermediation capacity of the financial system as a whole, i.e. unless there is some mechanism for the contagious transmission of distress. And the proviso that wide swings in asset prices have to be avoided if the system is to be considered stable introduces asset prices into the definition.

This may not be generally accepted so it is useful to be precise on this point. Normal fluctuations in the price of financial and real assets are a natural and necessary part of the efficient working of the financial system. But if these swings become too wide (leaving aside for the moment what constitutes "too" wide) then stability concerns arise. Why?

We care about financial instability because it is wasteful. The asset price misalignments that typically precede and accompany financial instability can profoundly affect consumption and investment decisions, misallocating resources across sectors and over time. Even if this misallocation is not accompanied by the failure of financial institutions, the eventual costs to society can be significant.

3 Historical overview: Changing perceptions of monetary and financial stability

Under the Gold Standard, monetary stability was defined in terms of the maintenance of the gold value of national currencies. Changes in the purchasing power of a gold-backed currency were seen as the result largely of changes in the overall supply of gold and thus outside the control or responsibility of the central bank or the Government. In such a regime, the responsibility of the policy authorities was seen as maintaining the convertibility of fiat money into the reference standard (gold) on demand. In practice, this meant the maintenance of a sufficient gold reserve to meet normal claims for conversion, and a willingness to use interest rate policy to protect the gold reserve when payments pressures caused a drain.

In most countries, institutions emerged that took responsibility for ensuring the health of the rest of the banking systems. Usually, though not always, these were the institutions that subsequently became recognised as central banks. The tasks of central banks were first analysed in Bagehot's classic, "Lombard Street", which remains a *locus classicus* for central banks' financial stability responsibilities to this day. It became widely accepted that the central bank should act as a lender of last resort to the banking system, providing liquidity (at a price) to sound banks at times of financial strain, but declining to lend to insolvent institutions.

The foregoing view of central banks' responsibilities began to change when national monies were detached from gold, and their value became dependent on national policies. This, by the way, is a change that cannot be dated with precision. Most currencies went off gold in 1914, but governments retained for some time the objective of returning to some form of gold standard. It was not until the demise of the Bretton Woods system in the early 1970s that gold ceased to play any role in monetary systems. Well before then, however, public opinion had realised that domestic inflation was a consequence and responsibility of central bank policies.

After the Second World War, the preoccupation of policy authorities with financial stability tended to diminish, for several reasons. One of the legacies of the Great Depression was a network of controls and restrictions over domestic financial systems that had the effect of providing safety nets and limiting competition in the banking sector. Such a shielded environment effectively protected banks from losses and supported franchise values in the face of most shocks affecting bank profitability.

In many countries, monetary policy was also considered somewhat secondary, for two reasons. First, fixed exchange rates reduced the scope for discretionary policy. And second, prevailing academic opinion, as reflected, for example, in the Radcliffe Report (1958) held that inflation was caused mainly by real phenomena, and these were not much affected by monetary conditions.

All this began to change after about the mid-1960s. The combination of the persuasive advocacy of the Monetarist school and the experience of accelerating inflation convinced professional opinion that the central function of central banks should be the achievement of monetary stability, in the sense of controlling inflation. Bringing down inflation took considerable time, and involved considerable cost, but by the 1990s it had been largely achieved. In the course of this effort, much theoretical and empirical work provided a basis for improved understanding of the inflation process. And institutional mechanisms, for example independent central banks and inflation targeting regimes, helped to cement the achievement of price stability.

The successful fight against inflation was accompanied in most countries by liberalisation in financial systems. Administrative controls, such as interest rate ceilings and limitations on business activities, were relaxed or removed. Competitive forces were allowed greater play.

Most observers probably assumed that lower inflation and a liberalised financial environment would have contributed to strengthening systemic stability. After all, the uncertainties associated with high and variable inflation provide fertile soil for the misallocation of resources that often leads to financial distress. And a competitive environment is usually supposed to promote the survival of the strongest firms.

In the event, however, the liberalisation of the financial environment has led to an increase in the number of episodes of financial instability. Combatting this instability has therefore risen up the political agenda, both nationally and internationally. Debate has centred both on the policies needed to prevent and deal with financial distress, and on the allocation of institutional responsibilities for prudential regulation and crisis management.

The point of this somewhat lengthy historical detour is that a simultaneous preoccupation with monetary and financial stability is a relatively new phenomenon. Hitherto, policy authorities have typically been concerned with one or the other, but not both together. And they have not really confronted the question of how one interacts with the other.

4 The impact of monetary stability on financial stability

Let me now turn to the central topic of my remarks today, which is the interaction of monetary and financial stability. Not surprisingly, perhaps, much of what I have to say will be in terms of the transmission of *instability*. For the sake of simplicity of organisation, I will start by assessing the ways in which monetary instability can affect financial instability, then look at the lines of causation running in the other direction. Following that, I will try to assess some of the ways in which interactions can occur jointly.

Monetary instability is usually manifested in a high rate of inflation (though the recent experience of Japan reminds us that deflation can be an equally serious problem with, arguably, fewer reliable policy tools to use in response). High inflation can contribute to instability in the financial system in several ways. First, high inflation is almost invariably associated with unstable inflation. Unstable inflation generates uncertainty in intertemporal contracts that is difficult, if not impossible, to hedge against satisfactorily.

Historically, banks have borrowed short to lend long. When short-term interest rates rise to reflect higher inflation, they can find themselves locked into assets whose yield is fixed while their funding costs rise. The losses can be masked if accounting conventions fail to reflect adequately valuation changes. For example, if loans can be carried on the books at historical cost, a financial institution may appear to be adequately capitalised when in fact its financial condition is severely weakened. Under these circumstances, insiders may use their continued access to funds to make increasingly risky bets to restore their profitability ("gambling for resurrection"). Somewhat simplified, this is the story of the Savings and Loan crisis in the United States, and lies behind some of the difficulties faced in other financial systems.

A second mechanism by which inflation can generate financial distress is through false incentives set up by the interaction of high inflation with a fixed but adjustable exchange rate system. What such a system in effect does is combine a continuous inflation in domestic prices with a periodic step adjustment in foreign exchange prices. Misalignments of relative prices are bound to occur in such circumstances, and those who make decisions based on the expected continuation of an exchange rate peg will be exposed to potentially severe losses. There have been many occurrences, most notably in the East Asian crisis of 1997-98 and in the Argentine crisis of 2001-02, in which fixed exchange rates allowed the buildup of financial imbalances, then exchange rate depreciation led to or exacerbated domestic financial crisis.

Third, and more generally, inflation generates resource misallocation and makes it harder to judge the underlying profitability of projects. Credit risk becomes harder to appraise, especially when the continued ability of a borrower to service debts is dependent on the continuation of a given relationship between the growth of costs and revenues.

And finally, it should not be overlooked that, when inflationary expectations are deeply embedded, a deceleration in inflation can be as much of a shock as an acceleration. This is the story of the distress in parts of the life insurance industry in recent years.

5 The impact of financial stability on monetary stability

Let me now turn to the question of how financial instability can affect monetary stability. Will a central bank be handicapped in its pursuit of low and stable inflation by instability in asset prices, or by strains in the financial system?

There is a school of thought that believes that developments in financial markets and institutions have little influence on the ability of the central bank to achieve price stability. According to this line of reasoning, the main channel of transmission of monetary policy to the price level runs through the impact of interest rate changes on the level of final demand. There is no reason to suppose that financial market conditions impair the ability of the central bank to control policy interest rates. Similarly, there are not likely to be circumstances in which interest rate changes are ineffective in influencing demand.

But what is true in normal market conditions in mature economies is not necessarily true in disturbed conditions, particularly in emerging economies. In the latter markets, bank failures clearly compounded exchange rate depreciation and made it virtually impossible for the central bank to attain its price stability targets.

In industrial countries, too, however, financial strains can complicate the achievement of keeping inflation at the desired level and achieving a smooth evolution of demand. Japan is perhaps the most prominent example of a country that, following the bursting of an asset price bubble, fell for a protracted period into a deflationary trap, in which conventional monetary policy was of limited effectiveness. But if Japan is the most extreme case, it is certainly not alone. In the United States, for example, the Federal Reserve has on occasion been induced to maintain an unusually accommodative monetary policy to counteract the “headwinds” created by weakened financial balance sheets. And there are other, similar, cases.

Other dilemmas are created when asset prices rise rapidly. There is no disagreement that asset prices are relevant to monetary policy decisions through their impact on private sector wealth, and thereby on the propensity to spend. But should other potential channels be taken into account? Will potentially unsustainable increases in asset prices have other effects on spending, for example when they are unwound? If this unwinding lies at some uncertain time in the future, say beyond the normal two-year horizon of inflation targeting, should it be ignored or factored into decision making? And if it is a matter of concern to policy makers, should they use monetary policy responses or other instruments to offset the buildup of imbalances, or should they await the corrective phase and take action then? These are complex questions, to which there are no easy answers.

6 Policies to achieve monetary and financial stability

The next question I want to address is whether policies to achieve monetary and financial stability, respectively, can be developed and pursued independently, or whether they need to be coordinated, and if so, how. I will come in the following section to the question of how responsibilities should be assigned.

The majority view is probably that monetary and financial stability, in the sense in which I am defining them in this lecture, are distinct goals that are most effectively pursued by separate policy instruments. Insofar as monetary policy is concerned, the key policy instrument is the short-term interest rate controlled by the central bank, and the intermediate target is the inflation rate, about two years out. Some central banks have found it helpful to develop a specific inflation-targeting regime. Those that do not use such a framework generally communicate something similar through their public statements.

Financial stability has been pursued through the elaboration of policies of prudential supervision, combined with particular instruments (the "safety net") to protect the system in case of unusual shocks. Increasing attention has been paid of late to improving the risk sensitivity of prudential supervision, and also to limiting possible moral hazard.

There is little doubt that these will continue to be the cornerstones of stability policies. Yet, as implied by the discussion in the previous section, there may be a need to take additional account of the interactions between the two. Monetary policy works through the financial system, so there is a need for the monetary authorities to know how financial institutions are being affected by the prudential supervisory framework. Similarly, the condition and vulnerability of particular institutions depends on the current and future monetary stance. Prudent behaviour by individual institutions (for example, reducing lending when the economic activity seems to be weakening) can be destabilising from the macroeconomic standpoint.

In my view, these considerations mean that it is desirable to find ways of more explicitly taking into account the interaction of monetary and financial system factors in formulating stability-oriented policies. For example, it may be helpful to consider the implications of a rate of credit expansion that is consistent with stability in the price of current output, but allows asset prices to increase at a markedly higher rate. When this occurs, it may point to financial instability down the road and, perhaps, increased difficulty in meeting inflation targets.

Looking at policies of prudential supervision, it may be desirable to reconsider the application of those that inadvertently promote procyclical price movements. These include those that measure perceived risk with relation to the current state of the business cycle. Changing provisioning practices, and encouraging through-the-cycle credit assessments, would help dampen the amplitude of the credit cycle. And the wider use of stress-testing could help limit excessive credit growth during the expansion phase of a cycle.

7 Governance issues: Assigning responsibility for policies to achieve monetary and financial stability

So far, I have been arguing that monetary and financial stability are separate but linked phenomena, and that both are important for the effective functioning of the economy. I have also pointed to some techniques by which the interaction between policies aimed at the two objectives might be taken into account. In addition to this substantive issue, however, there is an important governance question. Which body should be assigned responsibility for each objective, and how should they cooperate with each other?

The answer to this question is much easier in the case of monetary stability than in the case of financial stability. There is by now little disagreement that monetary policy should be in the hands of a central bank that has the necessary autonomy to pursue a policy of price stability.

Things are less clear-cut when it comes to ensuring the stability of the financial system. Traditionally, the central bank assumed this responsibility. Bagehot was the first to explicitly describe the Bank of England's role in this respect, but the model was followed in many other countries.

More recently, however, banking supervision has been separated from monetary policy, and located in a specialised agency, in a growing number of countries.

This raises the question which is the best model for achieving financial stability, and, if the decision is to place supervision in a separate agency, how can the central bank's remaining responsibilities be described and implemented?

The case for separating the regulation of banks from the formulation of monetary policy is that the two functions are conceptually distinct. Indeed one may even get in the way of the other insofar as management focus is diluted, and the pursuit of one sets up a conflict of interest with pursuit of the other. This could be the case, for example, if a central bank with supervisory responsibilities was induced to ease monetary policy in order to achieve other objectives, such as protecting the solvency of banking institutions.

It is also sometimes argued that a central bank could be tainted by the shortcomings in the performance of its regulatory role and thus rendered less able to perform its monetary policy functions. More plausibly, it can be argued that supervisory oversight now needs to be coordinated among insurance, securities and banking regulators, and that it would take the central bank too far from its monetary and banking expertise to ask it to assume these additional functions. For this reason, it may be best to combine the functions of financial oversight in an integrated regulator that is well placed to treat different types of financial institution on an equal basis.

Against these arguments, there is also a powerful case to be made for leaving banking supervision within the central bank. The central bank has day-to-day contact with the financial markets that is hard to replicate in a supervisory authority, and even if it could, would represent a wasteful duplication of official expertise. Central banks need to have a clear view of the state of the banking sector's balance sheet, in order to better understand how the transmission mechanism of monetary policy will work. And in the event of systemic strains, coordination between the supervisory and central banking authority will be unavoidable, coordination that would be facilitated by having them under the same roof.

Another argument for keeping supervision in the central bank is that of independence from political pressures. In most countries, central banks enjoy a significant measure of independence and respect, hard-won over many years. They are often able to attract a high-calibre staff on the basis of this. Transferring supervisory responsibility to what might be at the outset a weaker institution would put this at risk. Charles Goodhart has noted that this is a particularly relevant argument in emerging market countries.

The foregoing begs the question of whether banking supervisory responsibilities should be regarded as the functional equivalent of responsibility for financial stability. I would argue not, and not simply because the banking sector is only one component of the financial system. Financial stability involves more than simply the prudential management of individual financial institutions. It means, in addition, the avoidance of macroeconomic imbalances that, if left unattended to, will generate financial strains that may find their expression in disruptive movements in financial asset prices and, as a result, potential strains in financial institutions. It also means attention to the market dynamics that can transmit difficulties throughout the system in the event of an exogenous shock.

It can be questioned whether financial supervisors, with responsibilities to ensure the prudent operation of financial institutions under their charge, are adequately equipped to deal with financial instability, thus broadly conceived. Indeed, this is probably why most central banks that have lost explicit responsibility for banking supervision have mostly maintained a more general responsibility for promoting financial stability.

It is not easy to describe what this residual responsibility involves. One can get some idea from both the fact and the content of the "Financial Stability Reviews" that have taken their place of late alongside the "Inflation Reports" of a growing number of central banks. Financial stability, in this conception, seems to include a responsibility to examine potentially unsustainable trends in financial markets, to review the impact on market dynamics of structural changes in the financial industry and the development of new financial instruments, and to consider the evolution of balance sheet developments at a sectoral level, as well as simply on an institutional basis.

Efforts have also been made in a number of quarters to define responsibilities in the event of a systemic threat. Among the major countries, perhaps the most coherent approach seems to be that of the United Kingdom. There, there are procedures for the Financial Supervisory Authority (FSA), the Bank of England and the Treasury to meet on a regular basis at various levels. A memorandum of understanding outlines the procedures to be followed and the relevant responsibilities in the case of a crisis. Financial assistance would have to be furnished through the Bank of England, the judgement of the condition of threatened institutions would come primarily from the FSA, and the decision on whether to commit public funds from the Treasury.

No comparable clarity of responsibility exists in either the Eurozone or in the United States. Indeed it is legitimate to ask the question of whether a timely solution could be found in either of the latter jurisdictions in the event that financial stability was threatened by the imminent failure of a large financial institution. Developing clearer understandings of the respective responsibilities of public bodies is important unfinished business in the sphere of financial stability. It is hard to achieve focus on such questions when the prospect of systemic instability seems remote. But when such instability arises, it may well be too late.