International Financial Stability - How Can It be Restored and Maintained?*

Andrew Crockett

General Manager, Bank for International Settlements

INVITED LECTURE

JEL F 30

I am greatly honoured to be invited to give the 1999 Gerhard de Kock memorial lecture. Gerhard de Kock was a distinguished central banker, whose reputation and influence, like that of his father, another prominent Governor of the Reserve Bank, spread far beyond his native South Africa. In his long service to the Reserve Bank, de Kock never wavered in his conviction that a strong and stable financial system was the best basis for economic and social progress. In these times of turbulence in the international economy, his legacy is an inspiration to those who seek a better-functioning international monetary system. It is a privilege to pay tribute to his memory.

For me it is a special pleasure to make my first visit to South Africa; to honour the contributions of Chris Stals as he prepares to take his retirement, and to welcome Tito Mboweni to the community of central bankers. The transition in governorship that is taking place at the Reserve Bank mirrors what is happening elsewhere in your country. It is the unique achievement of the current political leadership in South Africa to have charted a new course for the country's economic and social development that is not afraid to build on the strengths of the past, even as it sets new goals for the future. In the field of finance, this means harnessing the skills and experience of financial institutions and markets to meet changing social needs. To be effective, however, development goals have to work with the grain of underlying economic forces. When market disciplines are ignored, instability can too easily result. And financial instability is, as we have seen, a powerful obstacle to social progress.

In my remarks today, I want to consider some of the forces that have contributed to financial instability at the global level. Why have so many countries been victims of volatile capital flows and currency instability? And what can be done to prevent it?

* Gerhard de Kock Memorial Lecture, Pretoria, 23 March 1999.

DRIVING FORCES FOR FINANCIAL CHANGE

First, however, it is necessary to understand the underlying developments that have been taking place in the financial sector. The financial system has undergone a remarkable transformation in the past two or three decades. Many of these changes have their origin in deep-seated, technological and social forces. Such forces cannot simply be resisted or repealed because some of their consequences are unwelcome. Financial systems will have to adapt to the new environment, not vice versa.

One of the principal driving forces has been the revolution in *communication and information processing technology.* This has transformed economic processes in many sectors, but in few more fundamentally than in finance. It has greatly increased the information available to economic agents, and led to an enormous reduction in the cost of making transactions across borders. It has made many traditional structures and methods of providing financial services obsolete. And it has facilitated the development of complex new financial instruments. These have provided innovative ways of hedging against risks and taking positions across markets and geographic boundaries. In short, the ability to make financial judgements and act on them has been enormously enlarged.

A related development has been *liberalisation in financial markets.* Related, because technological innovation has rendered ineffective many of the administrative restrictions and controls that used to characterise the financial system. But liberalisation also reflects a deep-seated change in economic and social philosophy. In the political arena, it is reflected in the growing support for democracy and open societies. The economic counterpart is a greater willingness to let market forces play their role in the allocation of economic resources: in international trade, in domestic competition and in the economic role of the state.

This should not be mistaken for "market fundamentalism", the notion that unrestrained markets are always right. Far from it. But it is a recognition that, with proper safeguards, the signals free markets can give are the practical basis for better resource allocation and faster growth.

Another major factor underpinning financial transformation has been rising levels of *income and wealth.* As societies have become richer, individuals have become better able to provide for the future, both for themselves and their families. They have sought additional ways of insuring against risk and providing for retirement. This has led to an increasing demand for financial assets, in forms that meet a diversity of individual needs.

An important aspect of these driving forces of change in the financial system is that they are largely irreversible. The genie of technology cannot be put back into the bottle. Financial markets are now so open and innovative that it would be almost impossible to roll back the tide of liberalisation, even if it were judged to be desirable. And rising levels of income and wealth are a key objective of economic policy in all societies.

FINANCIAL IMPLICATIONS OF ECONOMIC CHANGE

The major consequences of the underlying forces shaping the financial environment can be grouped, for convenience, under four headings: globalisation, securitisation, competition and complexity. Let me say a few words about each.

Globalisation is a term that is widely used, but defies precise definition. I take it to mean a process in which geographic and market barriers are being rapidly eroded. Economic agents are now able to make financial transactions with little hindrance in all major markets of the world. Not only this, they can switch with increasing ease between different types of intermediation, each of which is in increasingly close competition with the others.

Perhaps the most obvious manifestation of globalisation is the huge upsurge in cross-border financial transactions. In 1975, cross-border purchases of bonds and equities in the G-7 major industrial countries were approximately 4% of the annual GNP of these countries. By 1985, the comparable figure was around 30%. By 1995 it was close to 200%. And by now there are several large countries where cross-border securities transactions are several times larger than national GNP.

In the field of foreign exchange, the latest triennial survey of the Bank for International Settlements (BIS) reveals daily turnover in the foreign exchange market of some $1.85 trillion. This means that *daily* foreign exchange turnover in private markets is greater than the entire reserve holdings of the world's central banks. Annual turnover is somewhere in the region of twenty times world output. All this represents a huge change in the degree of integration in the world's capital markets.

Securitisation refers to the process by which financial intermediation is shifted away from direct lending by institutions towards finance raised through the issue of marketable securities. This does not necessarily eliminate the role of intermediaries, since ultimate borrowers and lenders still often need financial expertise to access markets efficiently. The floating of equity or marketable debt by an industrial company requires underwriting and marketing services. And financial institutions are the ones that design products by which individual credits (mortgages, for example) can be bundled together and sold as a marketable security.

Securitisation has been encouraged by technological developments that provide market participants with better information about the market and credit characteristics of the underlying assets. More information both allows a reduction in the information-providing contribution of intermediaries, and facilitates the attribution of different risks (credit, interest, exchange rate, and so on) to those most willing and able to bear them. Its consequence is that a greater proportion of financial intermediation than previously is responsive to changing market conditions.

A third consequence of a changing financial environment is increased *competition*. Before innovation and financial liberalisation, many intermediaries enjoyed a protected franchise, the result of administrative controls, lack of information, and the market power of established institutions. Banks and other financial firms were generally disinclined to jeopardise their franchise value by taking unnecessary risks.

With the removal of controls, however, and the breakdown of barriers between market segments, this comfortable situation changed rapidly. New entrants to the industry could offer similar services at lower cost, sometimes by "unbundling" existing financial products and eliminating hidden cross-subsidisation. An obvious example of this trend was the advent of money-market funds, offering the money-management services of traditional banks, without the costly additional features entailed in widespread branch networks. Other changes involved the separation of account-management, money transmission, credit origination, liquidity provision, custody, and so on into specialised intermediaries where service charges could be more accurately aligned with costs.

With increased competition, rates of return on capital began to fall for those institutions unable or unwilling to adapt. One response was to maintain profitability by reducing cross-subsidisation and cutting costs. In addition, many institutions sought higher yields from their portfolios, often by being willing to accept greater risk. Such a strategy could only be successful, however, where risk-management capabilities were up to the tasks of managing the new vulnerabilities.

Fourth and last, mention should be made of the sophistication and increased *complexity* of financial intermediation. A wide variety of new instruments enable market participants to hedge risks and take positions more efficiently than before. This is a reflection both of innovation in the design of financial products, and the need of institutions to hedge efficiently the risks they have taken on to enhance yield.

Many of the new instruments are custom-designed and traded over-the-counter. They can have pay-off characteristics that are related in non-linear ways to the value of underlying assets. This makes it more difficult for counterparties to accurately judge the risk-appetite and vulnerability of the institutions which whom they deal. It also means that market participants cannot easily judge what strains may occur in asset markets.

RISKS IN THE NEW ENVIRONMENT

It is now time to consider how these changes in the financial landscape have contributed to the instability that has characterised international financial markets in recent years. Before doing so, however, it is worth pointing out that the globalisation of capital markets, increased competition and the development of new financial instruments have had many beneficial consequences. Capital flows have enabled emerging markets to tap into a larger pool of savings to augment the resources available for development. Foreign investment has acted as a vehicle for the transfer of technical and managerial know-how, speeding the growth of productivity. And openness has been a spur to better domestic policies, as market disciplines have more quickly curtailed unsustainable policy developments. It is hard to imagine the Asian miracle having been as remarkable as it was without the contribution of international capital.

Competition, too, has had largely beneficial results. The cost of financial intermediation, that is the margin between the interest rates paid by users of funds and the returns received by savers, has been significantly reduced in the major financial centres. Moreover, new products have enabled firms and households to protect themselves against a wider range of financial risk. All this has increased the productivity of resource use and enhanced the rate of growth of output.

Yet it would be foolish to deny that the growing size, sophistication and complexity of the financial system have led to greater costs when crises occur. In the year following the outbreak of the Mexican crisis, the output of the Mexican economy fell by 6.2%. Previously, it had been growing by 3-4% per annum. Argentine economic growth also dropped about 10% below trend in the same period. Output losses by the five economies most affected by the East Asian crisis were even greater. They went from an average rate of growth of 7%

in the year before the crisis, to a decline in output of about the same magnitude the following year.

All this is dramatic enough. But the impact on domestic absorption and living standards was even greater, because of the drying up of capital inflows and the enforced turnaround in the current-account of the balance of payments. On average, capital inflows were adding 6% to the spending power of these economies before the crisis hit. Afterwards capital outflows were taking always as much as 9.5%.

I will focus on three types of instability that have been particularly troubling in recent years. The first is *volatility in capital flows*: the tendency for financial resources to flow into countries in excessive amounts, and then to be reversed suddenly and massively when confidence is lost. The second is *contagion:* the phenomenon by which a crisis in one country is transmitted to others which were previously performing satisfactorily. And the third is *internal financial fragility*: the capacity of domestic banking and financial systems to develop deep-seated weaknesses, that are suddenly reflected in a costly crisis.

Of course, there are important interactions between the three types of instability. Indeed, one of the most troubling aspects of what has occurred in the emerging markets in recent years is the simultaneous occurrence of all three. A currency crisis broke out in Thailand, then quickly spread to other countries, even those whose broad policy stance had previously been endorsed by the International Monetary Fund (IMF). Then, in numerous economies, devaluation exposed weaknesses in the financial system and led to a vicious circle of further depreciation and intensified financial distress. Even though the countries originally hit by the crisis, Thailand and South Korea, are now showing signs of recovery, developments in Russia and Brazil remind us that its continuing consequences are severe.

But even though financial crises usually reflect a confluence of several elements, it is helpful in analysis to separate their individual contributions. The volatility of capital flows results from a combination of macro-economic policy weaknesses in borrowing countries and herd behaviour by lenders, exacerbated by inadequate information. In cases where economies have been performing well for several years, lenders have uncritically extrapolated the continuance of good times. They have been too ready to accept inflated collateral values, the sustainability of a policy of fixed exchange rates, and ill-thought out investment projects. Then, when economic conditions deteriorated, there has been a scramble for the exits. Investors suddenly realise that, however promising the longer terms future, a country may not be able to satisfy all its short-term obligations on time.

A second source of instability is domestic financial fragility in borrowing countries. This has some of the same causes as volatility in capital flows. Banks and other financial institutions have built up portfolios of loans and other claims that are predicated on the continuation of strong economic performance. Among the most glaring weaknesses of domestic financial systems have been: political interference in lending decisions; excessive lending to connected enterprises; currency and maturity mismatches; dependence on colateral with inflated values; the absence of effective bankruptcy legislation; inadequate capitalisation; and weaknesses in internal controls, facilitated by lax or inexperienced supervision.

Contagion is a more complex phenomenon. It is not quite true that economic disturbances are transmitted indiscriminately: it is usually the weaker economies and financial systems that are hit hardest. Countries with sound macro-economic policies and strong financial systems generally weather disturbances quite well. Nevertheless, there has been a disturbing trend for countries that have had reasonably good domestic policies to find their implementation threatened by factors beyond their control. South Africa is an example of this kind.

Part of the reason lies in the tendency of certain categories of investors to lump countries into the same asset class, even where there are differences in objective circumstances. They may simply lack the time or resources to be more thorough. Or they may realise that it is what the market in general thinks that determines price movements in the short term. There is no profit in being "right" about fundamental economics, if you are "wrong" about how markets will move in the short term. The name of the game in the short term is to correctly anticipate the reactions of others, irrespective of whether these are well-informed or not. The behaviour of financial markets recalls Keynes' famous dictum about the long run. This can make economies unnecessarily vulnerable.

STRENGTHENING THE FINANCIAL SYSTEM

A unifying characteristic about these various sources of financial instability is that they all have their roots in market failures. In the presence of market failure, policy makers have a fundamental choice: either to correct the source of the failure, or to control or offset its consequences.

The second course, controlling market outcomes through intervention, may occasionally be necessary, but carries considerable risks. It implies that the authorities can improve outcomes by frustrating market forces they believe to be undesirable. The risk, of course, is that they inadvertently delay desirable, or unavoidable, outcomes. This is the case when governments try to fix an exchange rate as economic competitiveness deteriorates. It is the case when regulators try to control which categories of assets financial institutions can invest in. And it is the case when administrative restrictions are placed on certain categories of capital flow, while other channels remain open.

For all these reasons, it is better, where possible, to try to correct the underlying sources of market failure: to remove the policy inconsistencies that lead to unstable exchange rates; to give private financial institutions the incentive to make prudent investment decisions; and to provide the necessary information for well-informed judgements to be made about cross-border financial flows.

All this sounds fine in the abstract. But exactly how can the sources of market failure in the financial system be identified and corrected? To answer this question, it is necessary to analyse the financial system in somewhat more detail.

The financial system can be thought of as having three pillars. The *first* is the set of institutions that are the principal intermediaries: banks, securities firms, insurance companies, and fund managers. The *second* is the markets in which financial claims are traded: equities, foreign exchange, fixed interest securities, as well as the various derivative instruments based on them. And the *third* is the infrastructure within which institutions and markets interact. This infrastructure includes payment and settlement systems, the framework of accounting conventions, the nature of corporate governnance, the structure of contract law, including bankruptcy provisions, and so on.

Each of the three pillars displayed significant weaknesses in recent years. Financial institutions have got into difficulties, leading to a contagious loss of confidence, and in some cases to widespread failures. Bail-out costs have been high. Financial markets have displayed a degree of instability that cannot easily be related to underlying economic fundamentals. And accounting and legal shortcomings have aggravated financial difficulties in economies as widely different as Japan and Mexico, Russia and Indonesia. Strengthening the international financial system requires measures to address all these sources of weakness.

For *financial institutions*, what is needed is an improved culture of risk management and a capital cushion that is sufficient to absorb unavoidable fluctuations in economic fortunes. Banks and other financial intermediaries should only be licensed to conduct business when they meet strict professional and prudential standards. Their credit-granting activities should conform to rigorous requirements of risk measurement, pricing and control. Internal systems must be up to the task of containing the risks of modern financial techniques. And banks' activities need to be restricted whenever they fail to meet these requirements or when their capital falls to unacceptably low levels.

The main responsibility for prudent operation falls on the owners and managers of financial institutions themselves. They can be encouraged in this by minimum capital standards (which increases their incentive to protect their investment), by disclosure and transparancy, and by effective supervision.

In the banking sector, the Basle Committee on Banking Supervision a year and a half ago issued a set of "core principles for Effective Banking Supervision a "year and a half ago. Other regulatory groupings are following the same path. Supervision of financial institutions is, however, an extremely complex task, which cannot be reduced to a limited number of quantified rules. It will require a sustained effort of leadership, training and monitoring over a number of years. This is one reason why the BIS recently established the BIS Financial Stability Institute under the Chairmanship of John Heimann, an experienced regulator with knowledge of the industry from the practitioners' side also.

For *financial markets*, there are at least three requirements to improve their current funcitoning. The *first* is macro-economic stability, so that markets are not subject to sudden changes in the external environment. Currency crises generally have their origins in unsustainable macro-economic policies, often excessive fiscal deficits or exchange rates that remain fixed in the face of a deteriorating external position. It is therefore important that countries commit to stable fiscal and monetary policies and an exchange rate regime that is consistent with their ability and willingness to adjust domestic policies.

A *second* requirement is greater transparency, so that all market agents have access to information that is relevant for price determination. Markets do not function well when key information is withheld or distorted. Examples of this are the nature of the indebtedness of the public sector in Mexico in 1994, and the underlying level of foreign exchange reserves in Thailand and South Korea in 1997. Similarly, when economic agents are unaware of the exposures of other players, and their possible reactions to changes in market conditions, they may withdraw from the market, causing liquidity to dry up. This happened following the Russian moratorium in 1998, and led to the near-collapse of a major hedge fund.

The *third* requirement for effective market functioning is an appropriate set of incentives, so that market participants are appropriately rewarded or penalised for the quality of their judgements. A problem in recent years has been that decision-makers have faced a distorted incentive structure. They may be highly rewarded for positive outcomes, but only lightly penalised for negative ones. This encourages excessive risk-taking. The incentive structure may also encourage herd behaviour. Financial decision-makers find the penalties for being wrong in company with the rest of the market are much less than those for being wrong alone.

In the area of *market infrastructure*, the needed reforms are rather clear. Countries with underdeveloped legal codes need to quickly develop a robust system of contract law, and law enforcement. Those that have such a system have to make sure it works quickly enough. Justice delayed is justice denied. Accounting standards have to be clarified and strengthened, so that the accounts of financial firms can be readily interpreted by their counterparties. Payment and settlement systems have to be made robust. And dependence on external technologies, from information processing to communications to public utilities, has to be constantly reviewed. The Year 2000 problem is only the most prominent of the threats to financial stability posed by external events.

THE PROCESS OF REFORM

I have argued that a strengthened international monetary system will have to be based on efforts to improve the functioning of the market mechanisms on which the current system is based. But how, in more concrete terms, can this be achieved? Specifically, how can the three pillars of the financial system - institutions, markets and infrastructure - all be made more robust?

The key is to realise that in a decentralised system of many players and many markets, a centralised approach to reform is unlikely to work well. Moreover, in a market-based system, regulations that run counter to market forces are probably doomed to failure. It is simply too easy with modern technology to find ways around burdensome controls. And the incentives to do so are too great.

Is this a counsel of despair? I do not think so. Market practitioners have a strong interest in sound standards and market stability. Working together, I believe regulators and market practitioners should be able to come up with codes of best practice and industry minimum standards that will enhance market functioning while strengthening stability. Of course, official supervision and regulation will be needed. It is rarely possible for the private sector to agree completely on best practice. And some enforcement mechanism to prevent free riders is necessary. Moreover, the social and private costs of financial instability are not the same, so that official intervention is often required to ensure the optimal social outcome. But within these parameters there is no reason why the process of developing best-practice codes should not be a market-friendly one. There are four main stages to the process. *First* comes the identification of sources of market failure. *Second* comes the design of standards. *Third* comes the monitoring of observance in individual countries. And *fourth* comes technical assistance to meet standards that are not observed. Allow me to say a little more about each of these four aspects in turn.

The identification of sources of market failure is a task for the official sector, working internationally in such forums as the IMF's Interim Committee, and other groupings such as the G-7 and G-22. Specialised groups, such as bank, securities and insurance regulators, as well as other committees that meet at the BIS can also play a role in this process. The job to be done is to analyse the weaknesses that have led to crises in the international financial system, and to identify areas where improved standards would help deal with them.

The second task is to draw up standards that will help contain risks and remove sources of market failure. Drawing up standards should mainly be the responsibility of groups of specialised experts drawn from national authorities. The reason for this is twofold. The necessary expertise is largely at the national level, rather than in the international organisations. And the acceptability of codes is likely to be greater if those affected by them feel they have had a hand in their development. When it comes to financial supervision, accountancy practices, legal codes, market practices and payment and settlement systems, there is no substitute for the detailed knowledge that can be found only among regulators and practitioners at national level. These have the additional advantage of direct and continuous contact with the industry they represent or supervise. The BIS hosts and supports a number of grouping of such experts, amongst the best known of which is undoubtedly the Basle Committee on Banking Supervision.

It is a different matter when it comes to the third task, that of monitoring and surveillance. Strengthened codes of prudential behaviour are of no use if they are not implemented effectively. The international community has a strong interest in ensuring effective implementation. One means to this end will be to create market incentives for countries to adopt best practices. But the organisation best placed to oversee the process of implementation is the IMF. The IMF has regular annual consultations with virtually all its 182 member countries. It is uniquely well paced to assess the interactions between appropriate pressure to bear in those cases where non-compliance with best practice has systemic stability implications.

Fourth, and last, many countries will need help, perhaps over prolonged periods to strengthen their financial systems to a point where they do not pose a systemic threat. Such technical assistance can come from many sources, but clearly the World Bank has a central role to play. The World Bank and the regional development banks have longer-term structural reform as a central part of their mission. They also have the financial and human resources to devote to what is bound to be an expensive and time consuming task. The BIS will also contribute to this task through its recently established Financial Stability Institute, the initial focus of which will be to support the implementation of the Core Principles for Effective Banking Supervision.

You will have noticed that I mentioned a number of institutions and groupings as being well placed to take primary responsibility for each of the four stages towards a strengthened financial system. But it is important to recognise that all of these stages are closely inter-related. So, therefore, are the tasks of the various institutions that the international financial community has created to oversee and implement measures to strengthen the system. One key issue in the new international financial architecture will be to ensure that co-operation and co-ordination among these institutions is as efficient as it can be. This is the purpose of the Financial Stability Forum, which was proposed by President Tietmeyer and has been accepted by the G-7.

I have the honour of having been invited to chair this forum, which will hold its first meeting next month. The goal of the forum is to exchange information, promote improved standards, and identify incipient vulnerabilities in the international financial system. The Forum will comprise all the main international organisations, regulatory associations and expert groups, as well as national authorities from the G-7 and, eventually, other countries. Its success, however, depends on its collective willingness to act together in the fields I have been discussing in this lecture.

CONCLUDING REMARKS

Let me conclude. Strengthening the global financial system is one of the most urgent items on the agenda of the international community. It does not call for grand new institutional designs. Rather it requires the more mundane and painstaking task of identifying present sources of weakness in market functioning and correcting them. Fortunately, the broad lines of what needs to be done are reasonably clear. What is now required is the will to get on with it.