

Mr. Brash looks at the implications of the global financial marketplace for New Zealand Address by the Governor of the Reserve Bank of New Zealand, Dr. Donald Brash, to the Single Financial Services Market Conference in Wellington, on 19/11/97.

Introduction

It's a great pleasure to be here today to share some thoughts with you on the global financial marketplace, and its implications for New Zealand. We have recently had a dramatic example of how events in one country can spread rapidly. The recent share market collapse that began in Hong Kong and spread to equity markets around the world, including New Zealand, illustrates just how integrated global financial markets have become. Designing and implementing an effective financial policy in pursuit of national goals, in a world of highly integrated capital markets, is one of the most topical and challenging tasks in central banking today.

To keep my presentation today within manageable bounds, and reflecting my professional interest, I will constrain my comments to one of the important functions of a central bank, namely, the preservation of stability in the financial system. Our focus at the Reserve Bank is on promoting the maintenance of a sound and efficient financial system in New Zealand. This focus involves establishing a policy environment to counteract the possibility of contagious spread of financial distress, and in particular is aimed at encouraging prudent bank behaviour.

I will begin by sketching out some of the key trends in global finance, and will then describe the international regulatory response to these developments. Along the way, I will tease out the implications for New Zealand, and test our approach to banking supervision against these global developments. I will conclude with some crystal ball gazing.

Trends in the global financial marketplace

Let me begin then with some observations on the rapidly changing global financial marketplace.

It is now a commonplace that barriers between countries and financial markets, at least in developed countries, have largely disappeared, and this fact, together with new technologies, new financial instruments and new funding techniques, means that financial intermediation is increasingly global.

Fundamental to this trend has been the way in which advances in computer and communications technology have reduced the costs of cross-border transactions by lowering the costs of collecting and analysing data, undertaking transactions, clearing and settling payments and monitoring financial flows. And the cost reductions have been very dramatic. A recent article in *The Economist* noted that "the cost of a three-minute telephone call between London and New York has fallen from US\$300 (in 1996 dollars) in 1930 to US\$1 today". The same article stated that "the cost of computer processing power has been falling by an average of 30 percent a year in real terms over the past couple of decades". Such trends allow both the users of financial services and financial institutions themselves to look to global solutions to meet their financial needs. Funds can now be raised and invested, currencies exchanged, and financial risk positions changed around the world at almost anytime.

Contributing to the globalisation of finance has been the rapid trend towards financial market liberalisation. This has seen country after country freeing up their financial system. In that process, exchange controls (that had been intended to isolate domestic markets from global influences) have been dismantled. In the increasingly integrated global capital market that has resulted, global financial firms with often complex financial and corporate structures have emerged as dominant players. These firms are to be found operating around the globe -- relatively low transaction costs and the application of new technologies allow such firms to be active players in whichever of the world's financial markets they want to participate in. Distinctions between different types of financial institutions are breaking down as a result of the growth of these conglomerate structures, the relaxation in regulatory constraints, and the way in which derivatives can be used to transform the risk characteristics of institutions' portfolios.

A related development is that the risk management practices of global financial firms are becoming increasingly centralised as competitive pressures drive financial organisations seeking the highest risk-adjusted returns for shareholders. With the processing power of modern computers, it is now possible for the risk and return characteristics of large and complex portfolios to be managed centrally and, if not real time, at least on an intra-day basis. Virtually all large bank holding companies are now operated and managed as integrated units. This trend towards centralised risk management raises some fundamental policy issues as to how best to regulate and supervise such large and complex banking organisations.

Product innovation has gone hand in hand with liberalisation. One of the more significant developments has been the emergence of derivatives such as financial futures, swaps and options. The total risk of more traditional financial products has been broken into component parts and repackaged into synthetic products that have risk profiles similar to other financial instruments. The synthetic products can then be sold to those domestic and global investors willing and able to bear the associated risks. Such products are now used extensively throughout the world to help firms manage the exposure to interest rate and exchange rate movements that occur in liberalised financial markets. And innovation is ongoing, as is evident with the increasing application of derivatives to credit risk.

The rapid globalisation of finance is well illustrated by the phenomenal growth in cross-border financial activity. An April 1995 survey by the Bank for International Settlements estimated that an average of US\$1.2 trillion flowed through the world's foreign exchange markets each day, up 45% on three years earlier. Estimated turnover of over-the-counter derivatives on an average day was US\$880 billion, 70% of which involved transactions with counterparties in different countries. An article in *Institutional Investor* in August 1997 provides another illustration of the magnitude of cross-border finance -- "nearly US\$150 billion of net new private capital poured into the main Latin American and Asian economies in 1996, almost double the 1995 level". These numbers are enormous however you want to look at them.

New sources of systemic risk

The globalisation of finance, the liberalisation of financial markets and rapid technological change have opened up new opportunities in commerce for achieving economies of scale, and facilitating the international rationalisation of production and distribution. The resulting benefits include productivity growth and improving living standards. Innovations like derivatives improve the efficiency of financial markets. New technology allows sophisticated

management information and control systems, and the application of complex analytical models to help institutions manage risks more effectively.

But while considerable benefits flow from such developments, they also inevitably bring with them new risks. One of the most important from a central banker's perspective is the introduction of new sources of risk to the stability of the financial system:

- Liberalisation and globalisation bring competition, which squeezes out the rents created by previously protected markets. This produces efficiency gains but it also means that financial institutions in the new environment have less of a buffer of protected profits and are therefore more vulnerable to distress caused by either mismanagement or misfortune.
- Derivatives bring new risks in that they can expose financial institutions to greater leverage, thereby allowing for shocks to be amplified. In addition, they increase the linkages between national financial markets, which means that adverse events are quickly transmitted from one market to another.
- Furthermore, market participants can now react very rapidly to a problem in a particular country, or even a perceived problem. Capital can move rapidly and in large volumes. Again, a disturbance in one country can now flow rapidly to other countries with the result that other countries' financial systems, and the international financial system more generally, are arguably more exposed to disturbance than before globalisation.

In the light of these increased risks, it is worth recalling that there have been relatively frequent episodes of national financial instability over the past couple of decades. Since 1980, over two-thirds of IMF member countries have experienced at least one serious banking-sector difficulty. And, in more than 65 emerging country cases, bank losses nearly or completely exhausted the banking system's capital. In more than a dozen countries in the emerging markets of Asia, Latin America and Eastern Europe, financial collapses have required budgetary expenditure of more than 10% of GDP to resolve. Some industrial countries have also experienced major financial problems over the same period. The list includes the United States, Japan, France, Sweden, Finland, Norway and Spain. In Sweden, for example, 18% of bank loans were lost between 1990 and 1993 with two of the largest banks being bailed out by the state. These and more recent episodes of bank distress, such as Mexico and Thailand, suggest that there is no evidence that financial sector fragility is reducing with time.

While New Zealand has not experienced bank problems of the magnitude that I have just described, there have nevertheless been occasions of serious bank distress. In 1989-90, the Bank of New Zealand (which was government-owned at the time) had to be re-capitalised twice by the Government, at a total cost of about 3% of government expenditure. NZI Bank would certainly have failed had it not been re-capitalised by its parent in Scotland. A very significant non-bank financial institution, the DFC, was placed in statutory management in 1989 when it became insolvent.

A national financial crisis can not only have a severely adverse impact on the economy of the country directly concerned, it may also threaten the stability of the international financial system. A recent example was Mexico in early 1995. A build up of short-term US dollar-linked debt, combined with the devaluation of the peso and a sharp rise in interest rates, undermined the solvency of most of the Mexican banking system and resulted in a liquidity crisis. International investors shifted their claims away not just from Mexico, but also from other countries where similar weaknesses were suspected.

Instability in the international financial system can arise not only from the transmission of a national problem but also from a breakdown in the normal functioning of critical financial interconnections between countries. What I have in mind here are the payments and settlements processes that link national financial systems. This is not a new source of risk, and the best known illustration of the problem was the failure of Bankhaus Herstatt in 1974. This small German bank was active in the foreign exchange market. It defaulted after receiving Deutsche Marks from international banks but before the matching US dollar leg was processed later in the day. This left its counterparties exposed to the full value of the Deutsche Marks delivered. This event severely disrupted CHIPS, the main clearing system for US dollars, led to a collapse in trading in the US dollar/Deutsche Mark market and even resulted in disorder in the inter-bank money markets. The circumstance that led to Herstatt risk is still present today, namely the time lapse between the payment and receipt of currencies in foreign exchange transactions. What is different now is the exponential growth that has occurred in foreign exchange transactions since 1974. In the late 1990s, if a major international bank were unable to meet its obligations in settling an average day's foreign exchange transactions, it would have serious ramifications for the stability of the international financial system, as well for domestic financial markets.

Globalisation of finance to date has been most marked in wholesale business. But technology in the form of the Internet is now beginning to allow for retail products to be advertised and sold from anywhere in the world, and paid for electronically by anyone in any other country. There seems little doubt that, when our next conference on financial services is held, this trend to the globalisation of retail financial services will be an important theme.

In any event, there is no doubt that finance is now global. Nor is there any doubt that new sources of systemic risk have emerged from the liberalisation of financial markets, from the increased size and greater complexity of institutions, from the greater complexity of some of the new financial instruments, from the greater volume and speed of transactions, and from the increased involvement in the global financial system of national banking systems which are themselves suffering considerable strains. It is probably fair to conclude that, while the threat of serious disruption to the international financial system remains relatively small, should serious disruption occur it could have disastrous consequences for living standards around the world.

Regulatory response

Faced with these new sources of risk, the objective of safeguarding the soundness of financial systems has become a top policy priority both nationally and internationally.

Most obviously, the trend towards large and complex global financial institutions, centralised risk management and the blurring of boundaries between different types of financial institutions is leading to a change in regulatory structures.

Generalising somewhat, the traditional approach to regulating the financial industry was for there to be a bank regulator, a securities industry regulator, an insurance industry regulator and so on. This decentralised approach to regulation was seen as being appropriate when institutions were clearly delineated and decision-making was decentralised. However, in today's world of conglomerate financial institutions where decision-making and risk management are centralised, the traditional regulatory approach is seen as being inadequate

by many countries. Exposure of a bank to potential risk, for instance, cannot be evaluated independently of the condition and management policies of any conglomerate to which the bank belongs.

Whereas efforts have been made in some countries to co-ordinate and exchange information between different kinds of supervisors, in other countries the supervisory structure has been changed so that all financial institutions are supervised by one “umbrella-type” supervisory body. Recent developments in this direction have been seen in Australia, with the Australian Government adopting the recommendations of the Wallis Inquiry. This will see the establishment of the Australian Prudential Regulation Authority to oversee all financial institutions in Australia. Similarly, the new United Kingdom Government has decided to establish a new “super-regulator” that will bring together nine financial regulators in one organisation.

New Zealand’s regulatory approach

Given that the banking industry in New Zealand has always been dominated by foreign-owned banks, particularly from Australia and the United Kingdom, any development that makes supervision of the parent bank more effective is welcomed by us. From the Reserve Bank’s perspective, though, we have not seen a pressing need to change our regulatory structures in a similar way. The reasons for this are two-fold.

First, we take a rather different approach to promoting financial system stability, an approach which relies less on direct regulation and more on the use of market disciplines and the internal incentives for banks to behave prudently (I will return to this shortly).

Secondly, we see our present regulatory structure as being effective. Over recent years, our regulatory structure has been closely aligned to a public policy approach that recognises that open and competitive financial markets are desirable. Within this, all of the key areas where private sector failure may occur have been covered in a way that meets our circumstances. Hence, the Reserve Bank is responsible for the maintenance of the financial system’s soundness and efficiency, with our attention focused on the banking sector, where any systemic problems, if they were to occur, would arise. The Commerce Commission has responsibility for protecting the consumer against exploitation and unfair trading. And the Securities Commission is focused on improving the efficiency and fairness of the markets for securities (widely defined) of entities that raise funds in New Zealand. This approach recognises that in New Zealand systemic issues are central in the supervision of banks, whereas in non-bank financial services consumer-protection issues are more important.

There has been a strong presumption in economic policy development in New Zealand over the last decade or so that market forces generally produce better outcomes than those arising from bureaucratic rules and regulations. Our approach to banking supervision reflects this.

We start with the presumption that financial markets contain powerful and flexible disciplinary mechanisms for rewarding good bank performance and penalising imprudent bank behaviour. Given the widespread public belief in most countries that “governments never allow banks to fail”, we do not argue that market forces alone will do the job, but we do see the disciplines of the market as being the dominant and most effective means

for promoting a robust financial system. There are three key elements in our market-based approach to banking supervision.

- The first is to ensure that the marketplace has sufficient and reliable information on banks on which to base financial assessments and decisions. This is achieved through a public disclosure regime which requires banks to publish a comprehensive range of financial, corporate and risk-related information for the bank and its banking group at quarterly intervals.
- The second important element is to promote market discipline by ensuring that government policy supports, or at least does not impede, the development of active inter-bank markets, the diversification of funding instruments and sources, the development of institutional investors and the entry of sophisticated foreign players to the financial market. The rationale is that professional players are the market's strongest disciplinary force.
- The third key element has been to strengthen the incentives for the directors and management of banks to manage their banks' affairs in a sound and responsible manner. An important aspect of this is a requirement for the directors of banks to attest to the accuracy of the information in the quarterly disclosure statements, to the fact that their banks have satisfactory risk management policies and to the fact that these are being properly applied.

This approach, of harnessing market forces and using improved internal governance to promote financial system soundness, is gaining some support in the international supervisory community, and among academics. This can be highlighted by recent comments from three prominent and highly respected individuals.

- "As financial transactions become increasingly rapid and complex, I believe we have no choice but to harness market forces, as best we can, to reinforce our supervisory objectives. The appeal of market-led discipline lies not only in its cost effectiveness and flexibility, but also in its limited intrusiveness and its greater adaptability to changing financial environments. Measures to enhance market discipline involve providing private investors the incentives and the means to reward good bank performance and penalise poor performance. Expanded risk management disclosures by financial institutions is a significant step in this direction." Alan Greenspan, May 1997.¹
- "For major banks in industrial countries there needs to be a shift of emphasis towards the re-reinforcement of internal managerial risk-control mechanisms, and a recasting of the nature and functions of external regulation, away from generalised rule-setting and towards establishing incentives/sanctions which reinforce such internal control mechanisms." Charles Goodhart, June 1997.²
- "Much recent thinking has focused on incentive-compatible regulation -- using the market's own internal forces -- as the promising next step for strengthening the financial system. It is

¹ Remarks by the Chairman of the Board of Governors of the US Federal Reserve System, Mr Alan Greenspan, at the Conference on Bank Structure and Competition of the Federal Reserve Bank of Chicago on 1 May 1997.

² From "Financial Regulation: Why, How and Where Now?" Charles A.E. Goodhart et al, 6 June 1997. (Charles Goodhart was for many years at the Bank of England and is now Deputy Director and Norman Sosnow Professor of Banking and Finance at the London School of Economics.)

banks' shareholders and management that have the strongest interest to measure risk accurately." Andrew Crockett, September 1997.³

To illustrate the evolution that is taking place in supervision, let me cite one example. In a recent initiative by the Basle Committee on Banking Supervision to amend the Capital Accord to include market risk, a greater role has been given to banks' own internal models in the measurement of market risk. This reflects a move away from regulation that relies on detailed rules to an approach that places more emphasis on the adequacy of internal risk control mechanisms. Such an approach recognises that it is bank directors and management that have the strongest interest and ability to measure risk accurately, and that an internally-generated measure of risk should be better than one derived from that imposed by supervisors. The ongoing challenge to regulators is to ensure that incentive structures are conducive to this outcome.

My own perspective is that a paradigm shift in supervision towards harnessing market forces will make a more significant contribution to promoting sound and efficient financial systems than simply changing regulatory structures within the same external regulation paradigm.

Although it is far too early to make conclusive assessments of the success or otherwise of our new supervisory approach (which has now been in operation for nearly two years), I am satisfied that it is encouraging prudent behaviour by banks in New Zealand, and thereby is reducing the likelihood of financial system instability in the future. Moreover, I am confident that it is doing this at lower efficiency, compliance and taxpayer costs than other supervisory options might be expected to achieve.

Payments system reform

So far, I have discussed the regulatory response to the globalisation of finance in terms of the health of the individual institutions that make up the financial system. Of equal significance to financial stability in this new environment is how resilient payment and settlement systems are, both domestically and internationally.

In common with most central banks around the world, we have been devoting considerable attention to payments system reform. Our main focus to date has been developing a real time gross settlement system for large-value transactions between banks. Until quite recently, the standard form of settlement was end-of-day net settlement: all payments and receipts between banks were allowed to accumulate during the day, to be settled by transfer of the very much smaller net amount at the end of the day. The risk of this form of settlement is that it usually requires participants to grant unsecured and unlimited credit to other participants during the period until final settlement occurs. Credit extended to a single counterparty can in some cases exceed a bank's entire capital. One important solution which has been implemented in some countries, and which we have as a high priority to implement within the next few months in New Zealand, is the replacement of this traditional end-of-day settlement arrangement with an RTGS system. Individual transactions under RTGS are settled one-by-one during the day rather than being allowed to accumulate, thereby removing the very large exposures that can

³ Speech by the General Manager of the Bank for International Settlements, Mr Andrew Crockett, at the Money, Macro and Finance Conference held in Durham on 11 September 1997.

build up between banks. Once implemented, RTGS will be a significant milestone in the reduction of domestic payment system risks.

Another important initiative that we are promoting to reduce systemic risk is to make bilateral and multilateral netting arrangements for certain transactions legally binding. With legally enforceable netting arrangements in place, the various “gross” obligations to make payments can be offset against one another, and it is only the net amounts due which are called into question in the event of a bank failure.

Our attention is also being actively focused on dealing with settlement risk in cross-border foreign exchange transactions. As already noted, the value of foreign exchange deals that are now being settled is so substantial that the resulting settlement risks can be of a size to cause systemic concern for both national and international financial systems. This risk, mentioned earlier in my presentation, is often referred to as Herstatt risk. As in New Zealand, much international attention is currently being focused on this problem.

Co-operation amongst supervisors

My final comments on the response of regulators to global financial trends concern the co-operation among supervisors and international agencies to address the potential for systemic disruption.

These efforts have gained momentum over the last decade as the inherent tension between nationally-based regulatory structures and an increasingly globalised financial sector has become apparent. Co-operation among bank supervisors under the auspices of the Basle Committee on Banking Supervision has produced a number of important agreements on the supervision of banks, including minimum capital standards and minimum standards governing the supervision of banks’ cross-border establishments. Similarly other supervisors, such as the International Organisation of Securities Commissions (IOSCO) and the International Association of Insurance Supervisors (IAIS), have pursued co-operation in their areas of responsibility. And in the early 1990s, in recognition of the emergence and growth of financial conglomerates, banking, securities and insurance supervisors from G-10 countries began to work together to identify problems that conglomerates can cause and to consider ways to overcome them.

The Mexican crisis in 1995 in particular, and the widespread incidence and high cost of banking problems more generally, have prompted calls for concerted international action to promote the soundness of financial systems. These calls have strengthened over the last couple of years with the G-7 countries calling for “the adoption of strong prudential standards in emerging countries” and encouraging the international financial institutions to “increase their efforts to promote effective supervisory structures in these economies”. The Basle Committee on Banking Supervision has been at the forefront of this effort over the past year with the release of its Core Principles for Effective Banking Supervision. These principles have quickly become the focal point for the increased efforts to strengthen financial sectors around the world. Also aiming at more effective bank supervision, the IMF is making the evaluation of financial supervision and regulation part of its annual country reviews, and the World Bank is emphasising the strengthening of financial infrastructure as an important part of its structural assistance programmes.

A comment on the international supervisory response

While the international regulatory response has many positive elements, to me it has not always been appropriately focused. Often following a crisis, there are calls to “strengthen supervision”. For various reasons, I feel that these calls, or the ways in which they have been answered, have not always been well directed. Let me briefly elaborate on why I think this.

At both the national and the international levels, the nature of the policy response to a crisis needs to be based on a careful analysis of the “problem”. It is certainly clear from the record that there have been significant weaknesses in some countries’ banking systems, and that these weaknesses have both contributed to the emergence and severity of financial crises and complicated the task of resolving them. However, I am somewhat sceptical of the general proposition that “poor supervision” has been the primary cause of these weaknesses. There has been a tendency to give supervision the “blame” for problems which have originated elsewhere, and/or to seek supervisory remedies for problems which might well be better solved in other ways. I would note further that “supervision” (in its general sense) has sometimes been part of the “problem” rather than part of the “solution” -- particularly when it has involved excessive forbearance by the regulatory authorities, and/or excessive reliance on the public safety net. I think it important that we supervisors should be appropriately modest about what we can achieve, and supervision should not be seen as an assured remedy for all potential problems.

Establishing price stability and a sustainable fiscal position are also critical elements in the pursuit of sound financial systems. While weakness in the financial system can have macroeconomic implications, the reverse is also undoubtedly true -- unsound macroeconomic policies can have long-lasting effects that lead to weakness in financial systems. Excessive credit creation and inflation are obvious examples. Some observers have suggested that virtually every major financial system problem in the last two or three decades was caused, directly or indirectly, by unsound macroeconomic policies.

Some of the international regulatory responses also do not sufficiently recognise that the objectives of bank supervision, and the infrastructure within which supervision takes place (for example, the quality of company law, accounting standards, and external auditors), are not the same in all countries. To have any chance of being successful, international initiatives will need to be flexible enough to suit this wide variety of national circumstances.

For emerging countries where the banking infrastructure may not be well developed, it may well be sensible to actively pursue financial stability through improving the quality of prescriptive rules. In this regard, the initiative by the Basle Committee to establish an international standard of core principles for effective supervision may be helpful.

But regulators in many developed countries are finding that the complexity of banking, the blurring of functional dividing lines amongst financial institutions, globalisation, and the speed of portfolio adjustment are making external regulation based on standard rules less effective and less feasible. This is resulting in an increasing emphasis being placed on internal risk management processes and in harnessing market disciplines to promote prudent banking behaviour.

What this suggests to me is that the regulatory approach followed by a particular country will need to fully reflect its own circumstances. Attempting to apply a “one-size-fits-all” approach to all countries is likely to be ineffective, and may even be counterproductive.

The Future

So, what do I see as being the likely issues of the future? What is certain is that the future will surprise us! But some things seem likely.

Innovation in the financial sector will continue, as will the integration of the world's financial markets. Using market disciplines to strengthen the financial system also seems likely to grow in relative importance.

New Zealand's approach to promoting financial system stability is entirely consistent with the global trends that I have described and, in particular, with the "incentive-compatible" approach to regulation. It seems absolutely appropriate for our circumstances. There will inevitably need to be refinements made to our regulatory approach from time to time, but I believe that the principles on which it has been established, and its basic design, are soundly based and will remain so for the foreseeable future.

At some point in the future the "special" status of banks in the New Zealand supervisory approach may need to be reassessed. This might be prompted by the continued gradual breaking down of the traditional distinction between banks and non-banks in financial intermediation, or perhaps by banking services being provided in New Zealand by institutions not physically located here. It may also be prompted by a risk-proofing of payments and settlements systems that effectively prevents the problems of one bank contagiously spreading to others. Concerns about financial system stability might ultimately be best addressed by designing a supervisory framework that is focused on those systems themselves rather than on the main institutions. For the foreseeable future, though, concerns about financial system soundness in New Zealand are likely to continue to be focused on the banking system, as it is here that systemic risks are likely to remain concentrated.