BANK FOR INTERNATIONAL SETTLEMENTS – ANNUAL REPORT

The 63rd Annual General Meeting of the Bank for International Settlements, in which the Reserve Bank is a shareholder, was held in Basle, Switzerland, on 14 June 1993. The following are excerpts from Chapter VII of the Annual Report, entitled 'Asset Prices and the Management of Financial Distress'.

Asset Prices: A Longer-Term Perspective

Asset prices have played a prominent role in the present business cycle, both in terms of the amplitude of their fluctuations and because of their impact on financial institutions and economic activity. Such medium-term swings are of course not new; the last similar episode took place in the early 1970s. What has drawn attention to the recent asset price movements is not only their absolute size and geographical compass; it is also the fact that the prolonged upswing, in contrast to the previous one, occurred against a background of positive inflation-adjusted interest rates. An examination of the two episodes suggests that the distinguishing characteristic of the recent experience has been the ample availability of credit in the wake of market-driven and policy-determined structural changes in the financial industry.

While a large number of countries experienced a cycle in real aggregate asset prices over the last ten years, the severity of asset price inflation and deflation varied widely. The sharpest movements occurred in some of the Nordic countries and in Japan. In Sweden and Finland, for example, asset prices increased by over 200% in real terms between 1980 and 1989, only to have a substantial part of the rise reversed in the last three years. Norway also experienced large fluctuations, though not quite as pronounced. In the United Kingdom the upswing can be traced back to the mid-1970s: an increase of around 150% from trough to peak was only moderately affected by the recession in the early 1980s. Asset price swings in other countries, notably Australia, have also been steep relative to their own past experience and have had serious effects on the financial system and the economy.

In some respects asset price movements since the early 1980s resemble those in the early to mid-1970s. Large asset price fluctuations occurred during both periods, although their amplitude was generally greater in the 1980s. Moreover, major swings took place around business cycle peaks, in sharp contrast to the experience of the business cycle around the end of the 1970s.

Nevertheless, a number of differences are also apparent. First, in many countries asset price increases in the early 1970s generally occurred over a much shorter period – two to three years at most compared with over twice that in the 1980s. Secondly, movements in the early 1970s were dominated in most countries by increases in equity as opposed to real estate

TABLE 1: THE TWO UPSWINGS IN REAL ASSET PRICES

Countries	Residential property			Commercial property			Equities		
	1970s upswing[1]	1980s upswing		1970s upswing[1]	1980s upswing		1970s upswing[1]	1980s upswing	
		First half[2]	Second half[3]		First half[2]	Second half[3]		First half[2]	Second half[3]
	cumulative percentage change								
United States	10	2	13	n.a.	2	-15	22	44	46
Japan	57	23[4]	74	24	10	86	128	88[5]	166
Western Germany	39[6]	-7	21	16[6]	1	98	6	139	13
France	n.a.	-14	27	n.a.	39	78	13	112	86
United Kingdom	64	16	60	n.a.	-1	33	41	78	41
Canada	40	3	52	n.a.	n.a.	1	18	31	15
Australia	15	2	22	62[7]	126[4]	65	29	67	25
Denmark	24	38	8	2	52	30	88	190[5]	14
Finland	17	35[5]	59	31[6]	235[8]	73	237[9]	105	146
Norway	35	10	15	n.a.	65[10]	37	65	246	31
Sweden	2	0	35	-30	6	52	18	182[5]	114

1. From trough to peak, or, where no trough could be identified, from 1970 to peak.
2. From trough to 1985, or , where no trough could be identified, from 1981.
3. From 1985 to peak.
4. Trough in 1977.
5. Trough in 1979.
6. Series begins in 1971.
7. Trough in 1969.
8. Trough in 1978.
9. Trough in 1967.
10. Series begins in 1980.

Sources: National data and BIS estimates.

prices (Table 1). By contrast, although in the first half of the 1980s the rise in the asset price index was again mainly the result of stock price booms, in the second half the contribution of property prices was much greater, mainly reflecting the steep increase in the residential component. Australia and the United Kingdom are two notable exceptions to this pattern, in that property prices also played a major role in the 1970s. Thirdly, in a majority of countries the reversal of the upswing in real asset prices has involved larger declines in nominal terms than those in the 1970s (Table 2). This has been due in part to lower inflation, but has occurred despite the more prominent role played by property prices, historically much less likely to fall in nominal terms than equity prices. It goes some way towards explaining the more severe impact of asset prices on the balance sheets of both financial and non-financial economic agents in recent years.

Differences between the two episodes can also be found in the mix of factors that may have underlain the asset price movements. Although in both periods asset price increases took place against a backdrop of robust economic growth, in almost all countries the sensitivity of the asset price index to real GDP growth was considerably higher in the 1980s (Table 3). The only countries where it was significantly lower were the United Kingdom and Denmark. Thus, while the more protracted upswing in economic activity of the 1980s may account for the longer duration of the rise in asset prices it cannot by itself completely explain its greater steepness.

Nor can the steeper rise be attributed to the level of inflation-adjusted interest rates(Graph 1). In both episodes there is a clear negative relationship across countries between inflation-adjusted interest rates and asset price increases; however, rates were low

TABLE 2: THE TWO DOWNSWINGS IN REAL AND NOMINAL AGGREGATE ASSET PRICES

Countries	1970s[1]		1980s[1]	
	Real	Nominal	Real	Nominal
	cumulative percentage changes			
United States	-32	-17	-82	-32
Japan	-37	4	-36	-31
Western Germany	-22	-2	-2	1
France	n.a.	n.a.	-12	-4
United Kingdom	-56	-41	-15[3]	-73
Canada	-17	-7	-16	-12
Australia	-32	39	-14[2]	-82
Denmark	-28	-9	-16	-10
Finland	-53	-16	-51	-42
Norway	-61	-56	-16	-8
Sweden	-13	4	-31	-17

1. The period is defined by the change in the real index from peak to trough or when no trough was reached in the 1980s, to the most recent observation.
2. Trough in 1990.
3. Trough in 1991.

Sources: National data and BIS estimates.

TABLE 3: SENSITIVITY OF REAL AGGREGATE ASSET PRICES TO ECONOMIC GROWTH IN THE TWO UPSWINGS*

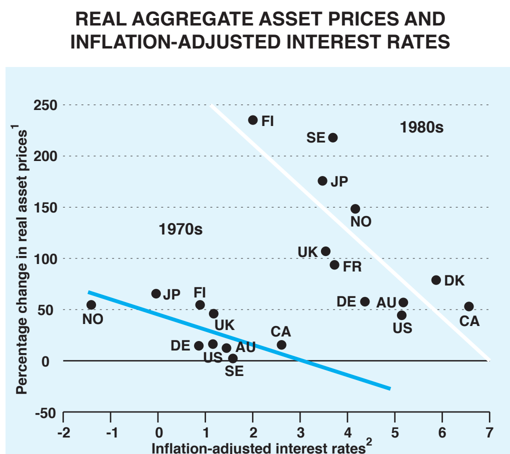
Countries	1970s	1980s	Countries	1970s	1980s
United States	1.14	1.48	Australia	1.02	1.68
Japan	3.12	3.18	Denmark	3.19	2.31
Western Germany	1.36	1.82	Finland	2.43	6.35
France	n.a.	4.11	Norway	3.82	5.75
United Kingdom	4.05	3.39	Sweden	0.30	6.88
Canada	0.60	1.41			

* Trough-to-peak percentage increase in the real aggregate asset price index divided by trough-to-peak percentage increase in real GDP.

Sources: National data and BIS estimates.

or even negative in the early 1970s but positive and much higher in the 1980s.

Explicit consideration of tax factors does not fundamentally alter this conclusion. Admittedly, the relevant opportunity cost of funds was lower in the 1980s once adjusted for tax provisions, a factor particularly significant in countries with relatively high inflation and for those agents able to deduct borrowing costs from their tax liability. For instance, once such an adjustment is made, the cost of funds for households' house purchases was negative for a good part of the 1980s in the Nordic countries, where full deductibility of mortgage interest payments combined with persistent inflation. Moreover, a reduction in the effective tax relief may help to explain the timing of the recent downturn in residential property prices in several countries, notably some Nordic countries, and



GRAPH 1

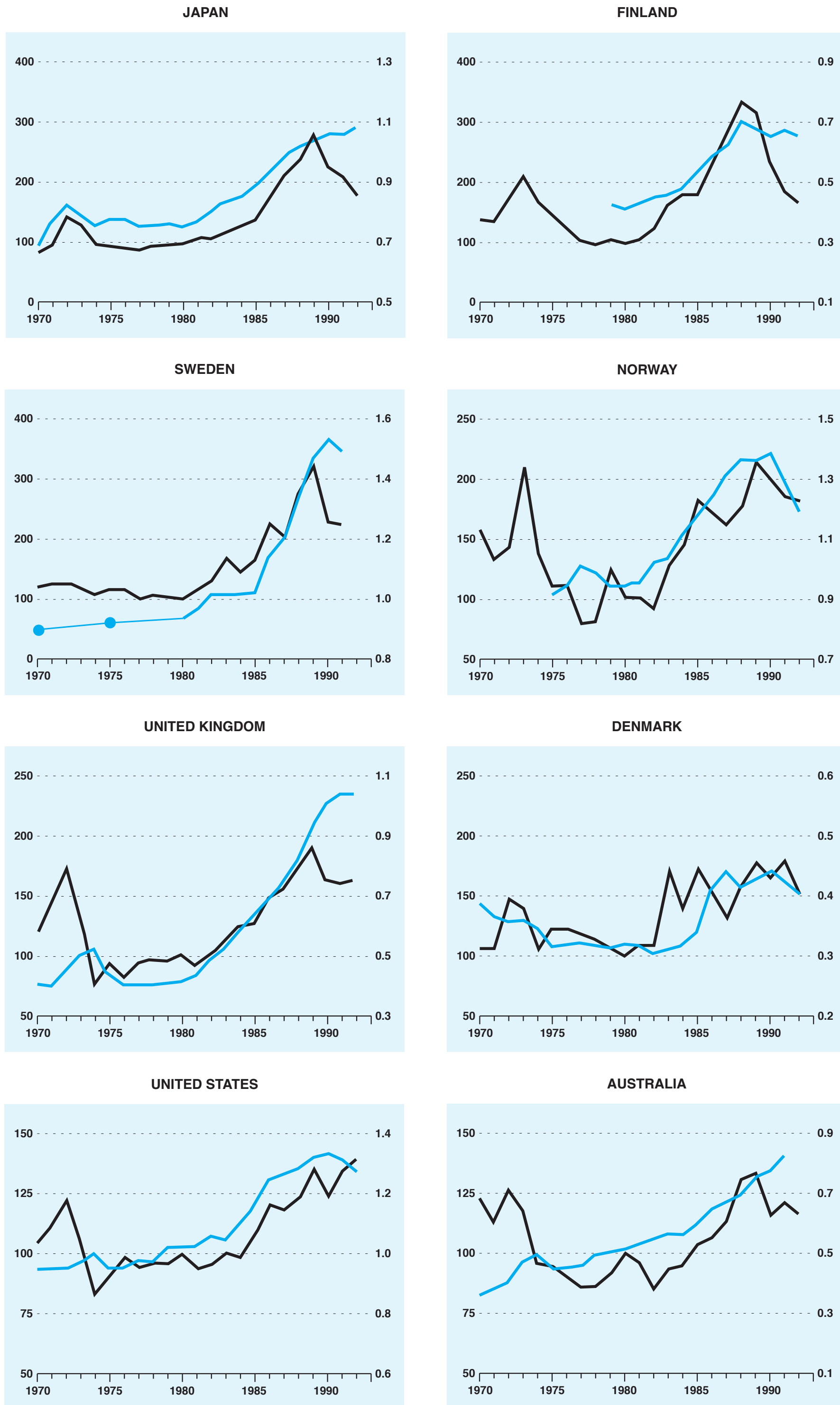
in commercial real estate prices in the United States. Nevertheless, favourable tax provisions also applied in the early 1970s, so that they cannot by themselves explain differences in the responsiveness to inflation-adjusted interest rates between the two episodes. As argued below, however, the impact of these provisions may have increased because of changes in the financial environment.

If the strength of economic growth, the level of inflation-adjusted interest rates and tax factors cannot satisfactorily account for the vigour of asset price inflation in the 1980s, then the main driving force has to be sought elsewhere. An obvious possibility is the behaviour of credit. In most countries in the sample there has been a relatively close relationship between the ratio of private sector credit to GDP and asset price movements, closer than in the early 1970s (see Graph 2).

There are a number of reasons why credit and asset prices may be correlated. On the demand side, borrowing is typically driven by expectations about the future income stream from investments, real and financial, which are reflected in the market price of assets. Borrowing decisions may also be of a more speculative nature, as when market participants seek to take advantage of anticipated capital gains. On the supply side, the financial intermediaries' willingness to lend increases when asset prices rise because of the borrowers' improved ability to provide collateral. In the later stages of asset price booms anticipated capital gains can become the dominant force and be disconnected from underlying fundamentals in the real economy. The downturn can then be triggered by a broad range of factors, including a slowdown in economic activity, less attractive tax provisions or a tightening of monetary policy. The stage can thus be set for a period of falling asset prices, adjustments in the balance sheets of both financial intermediaries and borrowers and declining or negative credit growth. For example, after borrowing heavily in the 1980s against the rising value of their dwellings (see Graph 3), many households in some countries saw the price of their property fall below their outstanding mortgage debt. It is estimated that in the United Kingdom at the end of 1992 as many as one and a half million homeowners, around 10% of the total, were so affected. Households in some Nordic countries and certain regions of the United States have faced similar problems.

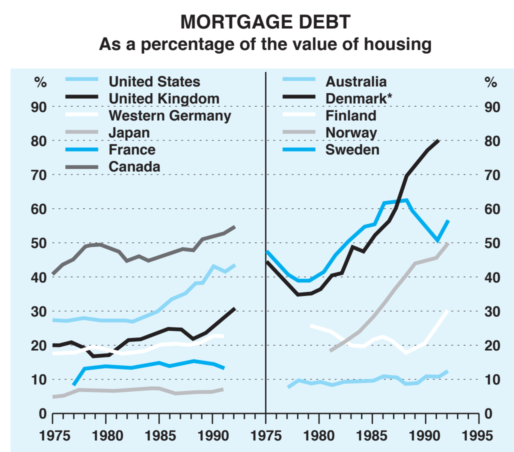
Some elements of the above general scenario tend to accompany all medium-term swings in asset prices. What distinguishes the experience of the 1980s is their breadth and severity following the major expansion of credit during the decade. To a large extent this rapid growth reflected a relaxation of credit constraints in the financial industry in the wake of both market-driven and policy-determined structural changes. The end result of those changes was greatly to increase competitive pressures in the industry and to broaden the range of borrowing opportunities. In the process, they also heightened the impact of pre-existing tax provisions which encouraged indebtedness and which had been less effective during the period when credit rationing was prevalent.

The relative importance of government and market forces in affecting financial structures and behaviour is not always clearly identifiable, since deregulation has sometimes reflected the perception that existing controls were becoming ineffective. The mixture, however, has varied considerably across countries. For example, market forces were primarily responsible for the increase in competition between banks and securities



* For Denmark, bank credit only; for Sweden, data shown for 1970, 1975 and 1980 onwards

GRAPH 2



GRAPH 3

firms in the United States which fuelled the debt-financed takeover wave during the 1980s, a factor contributing to the rise in stock prices. By contrast, deregulation was especially broad in Sweden, Norway and Finland, which moved from a system where credit was rationed to one of open competition, all in the space of a few years in the mid-1980s. A similar process took place in Australia in the early 1980s. Deregulation was also extensive in the United Kingdom, where (direct and indirect) restrictions on credit were abolished and greater competition between banks and building societies was encouraged in the early to mid-1980s, thereby reinforcing an underlying market trend. Interestingly, in that country a deregulatory process (under the *Competition and Credit Control Act* of 1971) had also preceded the increases in asset prices of the early 1970s. In Japan deregulation has been more gradual, but as from the mid-1980s restrictions on corporations' access to international markets were relaxed and deposit rates partly freed, while less regulated non-bank credit institutions thrived. By contrast, in Germany, where the financial system underwent little structural change, there was no major cycle in asset prices.

Alongside structural factors, easy monetary policy appears to have been partly responsible for the rapid growth of credit during the asset price upswing, particularly in some of the countries experiencing the largest price cycles. To different degrees, the policy stance in Sweden, Norway, Finland and Japan was arguably not consistent with restraint in borrowing. This was also true of the United Kingdom around the mid-1980s, just as it had been in the early 1970s. No doubt the rapidly changing contours of the financial system complicated the authorities' task. Where interest rates replaced quantitative rationing as the main mechanism governing the granting of credit, their level tended to provide a misleading indication of the tightness of credit conditions, especially in the presence of significant pent-up demand. Similarly, the surge in credit and broad monetary aggregates was sometimes discounted as an innocuous by-product of deregulation. In some cases, the relatively easy credit conditions were also connected with reluctance to let the exchange rate appreciate, the effects of which are especially significant in a context of liberalised capital flows. By contrast, the monetary discipline enjoyed by ERM members probably helped to temper speculative behaviour.

A fundamental question raised by the latest episode of medium-term swings in asset prices is whether such large movements are here to stay or whether the recent experience has been exceptional. To the extent that this episode reflected the costs of adjustment to a more competitive, deregulated financial environment, there are grounds for optimism. At the same time, in such an environment credit demands can be more easily accommodated, and so can speculative pressures. Preventing such excesses, with the threat that they carry for financial stability, is a major policy challenge, and one that calls for consistent action at the macro and micro level.

The Banking Industry and the Management of Financial Distress

Since the late 1980s there has been a widespread deterioration in the profitability, asset quality and credit standing of banks in most industrial countries. The unprecedented

wave of downgradings which has swept through the industry is the most telling indicator of this trend.

This deterioration in part reflects the weakening of economic activity during the period. Its magnitude, however, has been exacerbated by the pronounced swings in asset prices, together with the fairly generalised surge in private sector indebtedness, which have characterised the present business cycle. Banks in those countries where asset price movements and the increase in credit have been relatively greater have been among the most severely affected. Real estate prices have played a particularly important role, not only because of the common use of property as collateral, but also because of the large and typically growing scale of lending for the acquisition and construction of property.

The behaviour of share prices was comparatively less important but played an appreciable role in at least two countries where banks have significant longer-term equity investments. In Finland the sharp decline in the stock market added to the banks' serious problems. In Japan, unlike in previous years, banks were unable to boost their results by realising latent gains on their shareholdings owing to a combination of continued market weakness and moral suasion on the part of the authorities, concerned that such sales could drive prices down further.

The unfolding of asset price deflation last year partially offset the impact of certain positive factors on bank performance. One of these was the decline in short-term interest rates and the steepening of the yield curve, which widened interest margins primarily among banks located in non-ERM countries. In addition, the currency turmoil in the ERM was a significant source of windfall income for several major institutions, particularly in the United States and the United Kingdom. A longer-term factor was banks' continued efforts to contain operating expenses, as part of the broader retrenchment in the industry following the rapid expansion of the previous decade and in response to structural competitive pressures. In some cases attempts to raise spreads on lending also played a role, most notably in the United States.

From a longer-term perspective, in a number of countries the deterioration in the performance of credit institutions has been sufficiently severe for governments to be called upon to share the costs of the required restructuring. Financial distress in significant segments of the industry has occurred in the United States, Norway, Sweden and Finland. In Japan actual bankruptcies or rescues (see Table 4) have so far been limited to non-bank financial institutions and some of the smaller banks; but the authorities have taken measures and encouraged private initiatives aimed at securing an orderly resolution of the asset quality problems afflicting credit institutions more generally. In all these countries policy-makers have had to find answers to pressing questions regarding the appropriate management of the difficulties, with implications for macroeconomic stability and the efficiency of their financial systems.

TABLE 4: SUPPORT FOR FINANCIAL INSTITUTIONS[1]
(as a per cent of GDP)

	Banks	Thrifts	Total
United States[2]			
1980-87 average	0.1	0.2	0.3
1988-91 average	0.3	1.3	1.5
1992	0.2	0.5	0.7
Norway			
1988-90 average			0.3
1991			2.0
1992			1.7
Finland			
1991			0.9
1992			5.7
Sweden			
1991			0.3
1992			2.0
1993			2.4

1. Including guarantees.
2. Gross disbursment of deposit insurance funds and the Resolution Trust Corporation.

When the crisis erupts, it can have a major contractionary impact on the economy. The crisis is transmitted through several channels. As confidence in the intermediaries evaporates, the disorderly withdrawal of funds, the drying-up of credit lines and the unwillingness to transact with troubled institutions force them to cut their lending drastically and to dispose of assets at 'distress' prices. The payment system may be seriously disrupted: as credit dries up, so does the banks' ability to provide settlement services. The typically high leverage of credit institutions, the close linkages between them and imperfect information about their underlying condition create a flammable mixture with the potential for amplifying the crisis and its associated costs, as localised distress can easily spread through the system.

Concern about systemic problems of this kind has historically been at the root of the authorities' involvement in the management of financial distress. The form that this involvement has taken has depended on several factors, including the severity of the problems, country-specific features of the legislative and regulatory environment and broader political and economic constraints. In all cases, however, three interrelated issues have had to be tackled: how to avoid a disorderly market reaction; how to achieve the required restructuring of the institutions' balance sheets and operations; and how to prevent a recurrence of the problems.

The options open to the authorities to avoid a disorderly market reaction depend to a large extent on the timing of their action and the scale of the problem. Early identification of the latent distress and swift intervention are crucial. These in turn call for appropriate information systems and the necessary funding capacity.

There are several ways of dealing with institutions in distress: forbearance, liquidation, and balance-sheet restructuring as a means of maintaining the institutions in operation either as independent entities or merged with other companies. Examples of all these strategies can be found in the experience of the countries considered.

Forbearance-defined broadly as a 'buying time' approach, possibly combined with a relaxation of supervisory and regulatory standards – has sometimes been adopted when the difficulties have been viewed as temporary and/or manageable by the impaired institutions. One such example is the experience of the US savings and loan industry in the wake of the sharp rise in interest rates in the early 1980s which undermined its solvency: many institutions were allowed to continue operating despite being technically insolvent. A similar example in some respects is the accommodating treatment of US money centre banks immediately after the eruption of the crisis in lending to developing countries, especially as regards provisioning levels. Some elements of forbearance can also be found in the Japanese authorities' handling of the current asset quality problems, as exemplified by the temporary relaxation of the accounting treatment of valuation losses. Although forbearance may work in certain circumstances, it is not without risk. Its success typically depends on external events largely beyond the control of the authorities and the intermediaries: in the cases just mentioned, a more favourable configuration of interest rates, an improvement in the debt repayment capacity of the borrowing countries and a propitious macroeconomic environment. In the meantime, any relaxation of supervisory discipline can weaken the constraints on imprudent behaviour.

Liquidation, or the piecemeal sale of the institutions' assets, is a comparatively infrequent procedure. This in part reflects the view that considerable value is lost when the assets of a bank are broken up, not least because of the disruption to established credit relationships. It is also due to concern about the knock-on effects on other parts of the banking and financial system more generally. Because the significance of these factors tends to grow with the size of the bank, it is typically the smaller institutions that are liquidated. This is clearly illustrated by the US experience, where the authorities responsible (the Federal Deposit Insurance Corporation

(FDIC) for the banks and the Resolution Trust Corporation (RTC) for most thrift institutions) have been statutorily bound to choose the least costly solution, except possibly, in the case of the FDIC, when the intermediary was considered to be 'essential to the community'. In the Nordic countries and Japan liquidation procedures have been initiated almost exclusively in the case of non-bank financial companies.

The more common solution is to restructure the distressed institutions' balance sheets. This invariably involves a direct or indirect recapitalisation. One possibility, standard practice in the Nordic countries, is to inject capital into the troubled intermediaries themselves, either through an explicit infusion of funds or through guarantees. The guarantee may relate to the value of the assets, the fulfilment of repayment obligations or the residual acquisition of share capital issues. A second, complementary possibility is to assist in the merger of the institution with a better capitalised one, often after having taken over its bad assets. This is the most frequent procedure applied to US banks (purchase and assumption); a variant is also common in Japan, where the authorities encourage stronger institutions to take over weak ones. Mergers have also been numerous among savings banks in Norway and Finland. They may be more problematic when the degree of concentration in the industry is already high, as is the case among large banks in the Nordic countries. A third possibility is for creditors to accept a significant reduction in the contractual value of their claims, an element present in informal arrangements in Japan. The recent rescue of a large housing loan company, in which creditor banks restructured their loans on concessionary terms, illustrates this approach.

The reshuffling of assets and liabilities, however, is only a means to a more efficient use of human and financial resources. The restructuring, therefore, is generally extended to broader aspects of the institutions' operations, such as the elimination of excess capacity. In the Nordic countries, for instance, the restructuring plans have typically involved the slimming-down of branch networks, the shedding of labour, withdrawal from certain activities or markets and internal organisational changes.

Concerns about distortions of competitive conditions and moral hazard are a reminder that government involvement in the management of financial distress comes at a cost and is subject to its own limitations. Governments cannot be viewed as a kind of 'deus ex machina', capable of erasing painlessly and at a stroke the serious consequences of financial disequilibria. For example, the assumption of losses by the government in effect redistributes their burden more widely; it does not eliminate it, as is reflected in swelling government borrowing requirements. And when the liabilities vis-a-vis non-residents are sizable, the constraints on external financing can quickly be tested.

The emergency management of financial distress needs to be supplemented by longer-term measures aimed at preventing the recurrence of the problem. A key lesson to be drawn from the origins of the recent difficulties is that prevention calls for mutually reinforcing policies at the macro and micro levels with a view to ensuring financial discipline.

At the macro level, historically the best safeguard against financial excesses has been a firm long-term anti-inflation commitment. The inflation of the 1970s set the stage for the sharp rise in the level and volatility of interest rates in the early 1980s, which triggered the crisis in the US thrift industry and in lending to heavily indebted developing countries. Relatively high inflation has also contributed to the present difficulties in the Nordic countries, not least by interacting with tax provisions to provide generous subsidies to borrowers. As discussed above, the comparatively easy monetary stance in the Nordic countries and in Japan arguably facilitated the surge in asset prices, a pattern also observed elsewhere, notably in the United Kingdom.

At the same time, a firm anti-inflation policy is clearly not sufficient. The difference in the

responsiveness of asset prices and the general price level to credit conditions can pose a serious dilemma for the monetary authorities, who may have to weigh the risk of failing to restrain speculative behaviour, on the one hand, against that of an unwelcome contraction in the real economy, on the other. This dilemma arose most obviously in Japan, where evident signs of speculative excesses coexisted with low inflation.

At the micro level, the additional policy lever for achieving financial discipline is prudential supervision and regulation. As is most clearly illustrated by the experience of the Nordic countries and the US savings and loan industry, unless prudential safeguards are considerably strengthened in a liberalised, more competitive financial environment so as to complement market discipline, the emergence of distress is a major risk.

Steps in this direction have been taken in all the countries which have experienced problems. Some have been part of broader international efforts, most notably the strengthening of capital standards in line with the Basle capital accord. Others have been in response to more specific shortcomings of domestic arrangements. Improvements in disclosure are one example. Another is the measures taken in Japan to bring under an upgraded supervisory umbrella those non-bank financial companies where distress first emerged. In Finland the supervisory system is being overhauled. In the United States several policy initiatives since the savings and loan crisis have aimed at reinforcing the framework of prudential regulation and supervision. The most recent, the *Federal Deposit Insurance Corporation Improvement Act* of 1991, is especially broad-ranging. As part of its implementation, late 1992 saw the introduction of a system of measures, some mandatory and some discretionary, to be taken by federal bank regulators depending on the level of capitalisation of institutions at risk. The system is designed to ensure 'prompt corrective action' with a view to reducing the probability of failure and the associated costs to the Bank Insurance Fund. The Act also tightened the conditions under which the FDIC may provide open-bank assistance. In addition, in January 1993 the FDIC for the first time charged risk-related deposit insurance premiums, based on levels of capitalisation and regulators' supervisory evaluations. The change was motivated by the belief that the previous system was overly generous and underpriced, thus blunting incentives to prudent behaviour.

Strengthening the framework of prudential regulation and supervision in response to the highly competitive and rapidly changing financial environment is a global policy challenge. Together with the pursuit of a stable and prudent macroeconomic policy it is also a precondition for securing and preserving the benefits, while avoiding the costs, of the process of deregulation that has gathered pace during the past decade. A key objective of this process has been to reverse the pervasive government involvement that characterised the financial systems of many industrial countries. The experience of those countries in which a financial crisis has erupted indicates that, unless buttressed by the appropriate macro and micro policies, deregulation may paradoxically lead to more, rather than less, government involvement.

Notes to Graph 1, page 15.

Note: AU = Australia; CA = Canada; DK = Denmark; FI = Finland; FR = France; DE = western Germany; JP = Japan; NO = Norway; SE = Sweden; UK = United Kingdom; US = United States.

1. Trough to peak.
2. Averages of quarterly ten-year government bond yields less an uncentred three-year moving average of inflation over the period defined by the movement in the real asset price index for each country.

Sources: National data and BIS estimates.