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66th ANNUAL REPORT

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Bank for International Settlements

66th Annual Report

1st April 1995–31st March 1996 Basle, 10th June 1996

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International financial markets

66th Annual Report

submitted to the Annual General Meeting
of the Bank for International Settlements
held in Basle on 10th June 1996

Ladies and Gentlemen,

It is my pleasure to submit to you the 66th Annual Report of the Bank for International Settlements for the financial year which began on 1st April 1995 and ended on 31st March 1996. You will note that a number of changes have been made to the format of the Bank's financial accounts, which are to be found at the end of this Report; these changes do not, however, affect comparability of the accounts from one year to another.

The net profit for the year amounted to 181,333,300 gold francs, after transfer of 3,529,792 gold francs to the Provision for Exceptional Costs of Administration and 3,073,940 gold francs to the Provision for Modernisation of Premises and Renewal of Equipment. This compares with a net profit for the preceding year of 162,408,716 gold francs.

The Board of Directors recommends that, in application of Article 51 of the Bank's Statutes, the present General Meeting should apply the sum of 53,333,300 gold francs in payment of a dividend of 260 Swiss francs per share.

The Board further recommends that 38,400,000 gold francs be transferred to the General Reserve Fund, 3,000,000 gold francs to the Special Dividend Reserve Fund and the remainder of 86,600,000 gold francs to the Free Reserve Fund.

If these proposals are approved, the Bank's dividend for the financial year 1995/96 will be payable to shareholders on 1st July 1996.

Basle, 23rd May 1996

ANDREW CROCKETT
General Manager

I. Medium-term policies and structural change: waiting for the benefits

Global economic developments were generally favourable in 1995, demonstrating the cumulative benefits of more disciplined macroeconomic policies and an increased reliance on market mechanisms in both developed and developing economies. In spite of a number of shocks to financial markets, including the Mexican crisis of early 1995, the international financial system continued to operate smoothly and to accommodate further growth in the volume of transactions. This welcome outcome may also reflect the beneficial influence of past policies, as oversight bodies have increasingly emphasised the need for better risk management procedures at the level of the individual firm as well as other measures to ensure systemic stability.

A major source of concern during the period under review was that economic growth in the industrial countries might be slowing excessively (Chapter II). In large part, the deceleration of activity now appears to have been the result of higher interest rates in 1994 and a related inventory cycle. Yet transitional problems associated with the pursuit of medium-term macroeconomic policy objectives on the one hand, and structural economic changes on the other, may have accentuated the slowdown. The first set of problems should dissipate, as the full benefits of fiscal consolidation and price stability become more evident. In contrast, the need to adapt to global economic pressures, arising from interacting changes in trade and technology, seems likely to remain an ongoing challenge for both economic agents and policy-makers.

Financial markets in the industrial countries (Chapter V) generally took the view that the medium term would be characterised by both stable real growth and stable prices. Bond yields in most industrial countries fell steadily throughout 1995, in many cases reversing almost entirely the increase observed in 1994. Moreover, there was some narrowing of the bond rate premia demanded in 1994 from countries judged to be more risky given their history of high inflation and large government or external deficits. Stock markets, particularly in the United States, rose strongly, in line with expectations that high current earnings would be maintained and that nominal interest rates would remain low. Even when bond rates rose sharply in early 1996, as economic indicators in both Japan and the United States became more positive, stock prices in both countries were quite well maintained through mid-April on the basis of higher expected earnings.

Economic developments in the developing economies (Chapter III), including those in transition from central planning, were also, on the whole, favourable in 1995. In South-East Asia, growth continued at very high rates, and in eastern Europe and Sub-Saharan Africa the gains made in 1994 were consolidated. While output continued to fall in the former Soviet Union, the pace of decline was much reduced and hopes grew that the positive effects of macroeconomic

stabilisation and privatisation might soon begin to manifest themselves. Even in Latin America, significant growth was maintained in most countries, although Mexico and Argentina were important exceptions for much of 1995; understandably so in the light of the Mexican crisis. While levels of inflation in developing economies generally remain too high, often exacerbated by fiscal deficits, a policy commitment to lower inflation has become more widespread and significant progress was actually achieved in a number of countries.

A combination of normal conjunctural uncertainties and the interacting effects of many ongoing structural changes has made the task of policy formulation and implementation more difficult in recent years. In such circumstances of increased uncertainty, it is especially important for policy-makers to be clear and transparent about their own objective – the pursuit of sustainable medium-term policies. As for structural pressures, it is also necessary to encourage adjustment rather than resistance. Insofar as these changes are driven by advances in technology, resistance would in any case prove futile. Moreover, it would also imply a willingness to accept permanent economic costs in order to avoid only transitional ones. For forward-looking policy-makers, this would not seem to be a very good bargain.

The pursuit of medium-term macroeconomic policies

During 1995, there was a strengthening of the resolve of policy-makers in many countries to pursue medium-term objectives of fiscal sustainability and price stability. In some developing economies, as well as a significant number of "higher-risk" industrial countries, this was a by-product of increased market discipline, underscored by the events surrounding the Mexican crisis. In several western European countries, the intensified focus on the Maastricht criteria for accession to economic and monetary union played a similar role. In the United States, the resolute action taken by the Federal Reserve in pre-empting inflationary pressures in 1994, and the caution with which it reacted to signs of slowdown in 1995, were generally interpreted by the markets as a confirmation of the commitment to longer-term price stability. Closely related to these developments was the growing readiness of policy-makers in many industrial countries to admit publicly that the burden of rapidly rising social security liabilities has to be addressed if a sustainable fiscal position is to be achieved.

Financial markets responded very positively to this evidence of a firming commitment to medium-term objectives. As observed above, the prices of both bonds and stocks rose sharply on balance and there was some reduction of volatility in financial markets, which led in turn to a weakening of demand for exchange-traded derivative instruments. In this environment, 1995 was also characterised by a near-record volume of net issues of international securities and continuing large inflows of private capital into emerging markets (Chapter VII). While South-East Asia and Brazil were particularly favoured destinations, Mexico and Argentina also regained access to international securities markets, although public sector borrowers were the best received. All of this might be judged conducive to stronger demand growth, not just in emerging but also in industrial economies.

Having noted the positive effects of these policy changes, it would be imprudent to ignore a number of transitional complications which may have accentuated the recent slowdown of growth in some industrial countries. For example, the policy commitment to price stability had disproportionate effects on asset prices previously based on expectations of persisting inflation. In turn, weak house prices in a number of countries may have contributed to the continuing absence of the "feel-good" factor and to generally low levels of consumer spending over the last few years. By the same token, concerns about the underlying value of collateral may have led to more cautious bank lending in several countries, including Japan, with repercussions on small and medium-sized enterprises in particular. Finally, fiscal restraint in 1995 was substantial in most industrial countries other than Japan. This clearly had direct effects on spending in the short term, and may even have encouraged higher private saving to the extent that future income support from governments began to look more doubtful and tax cuts less likely.

Given such possible transitional effects, it becomes all the more imperative that the commitment to medium-term objectives is seen as credible and that the full benefits of lower and less volatile interest rates are realised. With the markets still reflecting uncertainties about a budget agreement in the United States, the transition to economic and monetary union in Europe, and the near-term stability of governments in several industrial countries, the benefits of credible policies directed to medium-term stability will only become fully apparent when a calmer political climate prevails. The fact that this may take some time does not make the pursuit of medium-term objectives any less desirable.

Structural changes in real and financial markets

In recent years, the interacting effects of technological progress and increased international trade have had important implications for relative prices, production patterns and job prospects throughout the global economy. Trade has encouraged technology transfers and competitive innovations, while technological progress has encouraged trade by lowering the costs of both communication and transportation. Deregulation, in many cases in response to these underlying forces, has provided further impetus to structural change, as has the growing attractiveness of the developing world for foreign direct investment. While all countries will eventually benefit from such trends, adjustment problems have affected a number of industrial countries.

The effects of such forces can be most clearly observed in the United States. In spite of a long history of market liberalisation and record profit levels in 1995, corporate announcements of takeovers, mergers and lay-offs continued unabated. Even though highly flexible labour markets have kept the overall unemployment rate down, the prevailing atmosphere of job insecurity may well have contributed to the recent weakness of both wage demands and consumer spending. Wages and prices rose somewhat less in 1995 than might have been expected on the basis of historical relationships with the level of economic activity.

These processes are less advanced and have not manifested themselves in the same way in western Europe and Japan, largely because labour markets there

operate rather differently. In continental Europe, the recovery in 1994 created fewer jobs than might have been expected and, more recently, a new wave of restructuring and job losses seems to have begun, with attendant effects on unemployment and consumer confidence. Given relatively inflexible European labour and product markets, and a greater reliance on the production of tradable goods whose relative price has been declining, the effects of these shocks may prove longer-lasting than in North America. In Japan, relatively flexible real wages and a corporate commitment to maintaining employment did not prevent a significant increase in the unemployment rate in 1995, particularly among the young. While this largely reflects the after-effects of the "bubble" period and the need for further structural reforms, the redirection of Japanese direct investment towards countries with lower costs may also have contributed to the halting nature of the Japanese recovery.

A similar interaction of technological progress, deregulation and international competition has also contributed to major structural changes in global financial markets in recent years (Chapters V and VIII). Moreover, it seems likely that this process will intensify, especially in continental Europe and Japan. Of particular note in the principal financial centres during 1995 were a number of important mergers of financial companies, a growing symbiosis between the banking and securities industries and a further increase in the use of new financial instruments for portfolio management. Other evidence of rising competitive pressures can be found in the record volume of syndicated bank loans, granted in many cases at low margins and with relaxed covenants, as well as a strong rebound in international banking intermediation. While in most countries these pressures confront financial systems which are profitable and healthy, this is unfortunately not the case everywhere.

Financial reform in developing economies has tended to focus first on the deregulation of domestic financial markets (Chapter VII). Nevertheless, international influences and competitive pressures are also being increasingly felt. While the Mexican crisis caused a number of countries to slow the pace at which international financial integration was to be allowed, there was no general rolling-back in 1995 of liberalising measures taken earlier. The crisis did, however, draw attention to the underlying structural inadequacies of the banking systems of many developing economies. Given a history of administrative credit controls, banks in such countries still have only a limited ability to assess risk, and they often carry a heavy burden of doubtful loans from the earlier period. The implications of such financial fragility, particularly if the situation is complicated by large-scale inflows or outflows of international capital, have been a prime concern of central bankers and regulators in emerging markets over the last year or so.

Monetary and regulatory responses during 1995

It is sometimes not adequately understood that a commitment to medium-term price stability does not preclude action by the monetary authorities to moderate cyclical slowdowns. Nor does such a commitment prevent the monetary authorities from responding appropriately to the effects of structural changes in

the economy, whether these effects are transitional (lowering demand) or permanent (raising supply). Indeed, for a combination of such reasons, there was a significant easing of monetary conditions in most of the major industrial countries during 1995 (Chapter IV).

At the same time, ongoing structural changes in economic and financial markets clearly complicate the practical conduct of monetary policy. Given the associated shifts in the demand for money, central banks in many industrial countries have found that controlling the growth rate of a monetary aggregate is no longer a sufficient condition to ensure the control of inflation. As a result, and sometimes only after having experimented with exchange rate targeting, a growing number of central banks have in recent years begun to use explicit inflation forecasts as a guide to interest rate decisions. Unfortunately, structural change complicates policy formulation even within this framework. In particular, the level of output consistent with a stable inflation rate becomes more difficult to estimate. Moreover, the monetary policy transmission mechanism becomes less well understood owing to the new channels of credit creation, the growing impact of trade and exchange rate movements on prices and the increasing use of derivative instruments to manage risk. Bearing in mind these complications, and the costs involved in reducing inflation were it allowed inadvertently to rebound, the easing of monetary policy in 1995 had necessarily to be cautious and measured.

Significant movements in certain financial indicators and asset prices in 1995 also complicated the assessment of monetary policy. For example, on the basis of traditional relationships, the steepening of the German yield curve implied positive prospects for the German economy quite at variance with other, more negative, indicators. In the United States, exceptional increases in stock prices led commentators to suggest that monetary policy might prove in the end to have been more stimulative than initially thought. Finally, the sharp appreciation of the effective exchange rates of the yen, in particular, and the Deutsche Mark in early 1995 (Chapter VI) eventually contributed to decisions to lower short-term interest rates in Japan and Germany. Indeed, in the former case, the implications of the strengthening yen were judged sufficiently serious to warrant the exchange market intervention successfully undertaken by the three major countries in August.

Uncertainties about the possible consequences of changes in global financial institutions and markets, combined with concerns arising from the Mexican crisis, led to further initiatives during the year to strengthen the foundations of the global financial system. With regard to the stability of financial institutions, the Basle Committee on Banking Supervision, in association with the International Organization of Securities Commissions, made important strides in dealing with market risk issues by publishing two papers encouraging disclosure by financial institutions of exposures and performance in derivatives markets. Moreover, the Basle Committee extended the Capital Accord to cover market risk and allowed for the first time the use of internal models as a basis for setting regulatory capital requirements. The publication of a paper on the regulation of financial conglomerates, jointly prepared by banking, securities and insurance regulators, marked another milestone for cooperation in 1995. Closer attention was also

paid to the repayment capacity of sovereign borrowers, with the International Monetary Fund announcing a programme of enhanced surveillance, along with more stringent reporting and disclosure standards for countries wishing to tap international financial markets.

As for efforts to safeguard the smooth functioning of financial markets, a survey conducted by central banks in association with the Bank for International Settlements in April 1995 provided the first comprehensive overview of the size and nature of global markets in derivatives. In addition, a report in March 1996 by the Committee on Payment and Settlement Systems of the Group of Ten central banks drew attention to the exposure of banks to foreign exchange settlement risk and suggested steps which the private sector could take to reduce that exposure.

Together with many initiatives taken earlier, these steps should both help prevent international financial crises and limit their repercussions should they occur. Nevertheless, it would be imprudent to assume that better ways to handle crises are therefore no longer needed. Indeed, the Group of Seven Summit communiqué of June 1995 explicitly called for efforts to improve procedures for handling sovereign liquidity crises and to augment the General Arrangements to Borrow. The final results of these and other efforts to reduce systemic risks have yet to be seen, but one conclusion must already be clear: giving the public sector adequate financial means to deal with crises must be combined with maintaining uncertainty as to the circumstances in which, if at all, such resources will be mobilised. In short, sovereign borrowers and private lenders must understand that incautious behaviour on their part will not necessarily be made good with public money. If this realisation encourages prudent behaviour on the part of all participants, it will also provide the best guarantee of a smoothly functioning international financial system.

II. Developments in the industrial countries

Highlights

Economic growth in the industrial countries slowed unexpectedly last year. While the timing as well as the causes of the slowdown varied, some features were common to most countries: private consumption growth was relatively weak as job insecurity made households reluctant to reduce saving as much as in earlier cycles; partly in consequence, there was a marked turnaround in the inventory cycle; and spending on longer-lived assets suffered from the lagged effects of the rise in interest rates in 1994.

Labour market conditions mirrored the changes in aggregate demand, with marked variations during the year and between countries. In the United States, unemployment fell to a rate generally associated with "full" employment whereas, by the end of the year, unemployment in many western European countries approached earlier peaks. Nonetheless, there are some signs that structural policies are starting to improve the adaptability of European labour markets, even though they have not yet led to stronger job growth. Due to the generally slower pace of demand growth, inflation eased further in the course of last year and average prices actually declined in Japan. At the same time, somewhat higher rates of inflation were experienced by some countries in a more mature phase of recovery.

As in previous years, movements in current external balances were mainly influenced by differences in relative cyclical positions and exchange-rate-induced changes in competitiveness, as well as by investment income flows associated with diverging international asset positions. The US current account deficit widened further, as a large swing in the trade balance with Mexico and the relatively advanced stage of the US business cycle more than offset the lagged effects of earlier weakness in the dollar. In Japan, by contrast, the current account surplus declined progressively throughout last year despite sluggish domestic demand growth, reflecting the lagged effects of a sharp rise in the yen. The current external balances of the European countries strengthened on average, but there were changes within the region; the United Kingdom moved further into deficit while France and Italy recorded larger surpluses.

Slower growth and persistent asymmetry

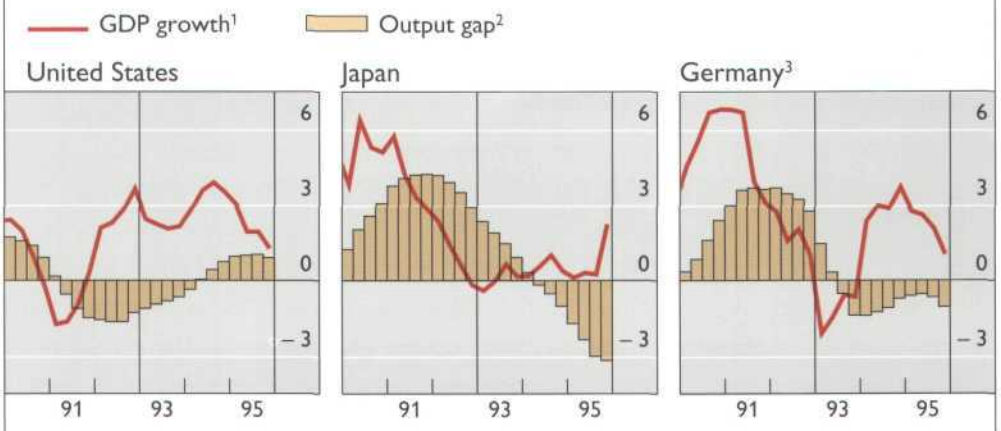
Developments in the three major economies

1995 growth patterns characterised by ...

The divergence in growth rates which had characterised the three major economies since 1991 persisted in 1995, although there were some signs of convergence as well (Graph II.1). The growth rate of the US economy decelerated towards a more sustainable level, while signs of recovery emerged

GDP growth and the output gap

In percentages



[1] Changes over four quarters. [2] Positive figures indicate excess demand. For the United States, based on the fixed-weight measure of GDP. [3] Prior to 1992 (GDP growth) and 1991 (output gap), western Germany only.

Sources: OECD Economic Outlook and national data. Graph II.1

in Japan in the second half of the year. In contrast, growth prospects in Germany seemed to deteriorate as the year progressed.

... the US economy slowing towards a sustainable rate of growth ...

The quarterly pattern of growth in the *United States* was far from smooth in 1995, impeding the identification of clear trends. During the first two quarters, the annual rate of growth averaged only ½%, as the lagged effects of higher interest rates reduced residential investment and consumption of durable goods and firms were forced to cut back inventories. Moreover, net exports fell in response to the recession in Mexico. However, influenced by lower long-term bond rates, output growth strengthened sharply over the summer, only to weaken again towards the end of the year, when a number of one-time adverse factors hit the economy.

... with low inflation ...

Although by most estimates actual GDP was already near or above potential by the end of 1994, and the rate of unemployment has been close to or even below consensus estimates of the "natural" rate, inflation eased further in the course of last year. While there are some signs of behavioural changes in domestic markets, the favourable inflation outcome was probably also influenced by the less buoyant conditions in Japan and Europe. Despite the decline in the dollar during the first half of the year and indications of emerging domestic capacity constraints, demand pressures could be relieved through imports from other countries with larger excess capacity.

... while the Japanese economy first stalled ...

The *Japanese* economy, after showing signs of recovery during 1994, stalled again early last year. As a result, the official rate of unemployment rose to a historically high level and the aggregate amount of slack, adjusted for hidden unemployment in the form of discouraged workers and idle workers still retained by firms, rose even further. However, the pattern of growth changed substantially in the course of the year. During the first half, output growth declined as a number of adverse factors reinforced each other, creating a deflationary environment that gradually spread from prices to volumes. The Kobe earthquake, a sharply appreciating exchange rate, falling asset prices and financial sector

fragility all weakened business and consumer confidence and spending. In addition, because only limited measures had been taken to liberalise the economy, smaller enterprises had particular difficulties in adjusting to falling goods prices and the rapid growth of low-cost imports from other Asian countries. Finally, the need to correct the earlier build-up of excessive capital stocks, combined with a steep contraction in net exports, slowed the recovery of profits as well as business investment.

... but then recovered

This downward trend was reversed in the second half of the year. Aggregate output growth picked up in response to stimulatory fiscal and monetary policies, a correction of the exchange rate, a revival of the equity market and a return to positive corporate profits. Nevertheless, the pace of the recovery has thus far been rather modest by past standards since structural obstacles and other underlying factors have continued to restrain household and business spending.

Weaker growth in Germany ...

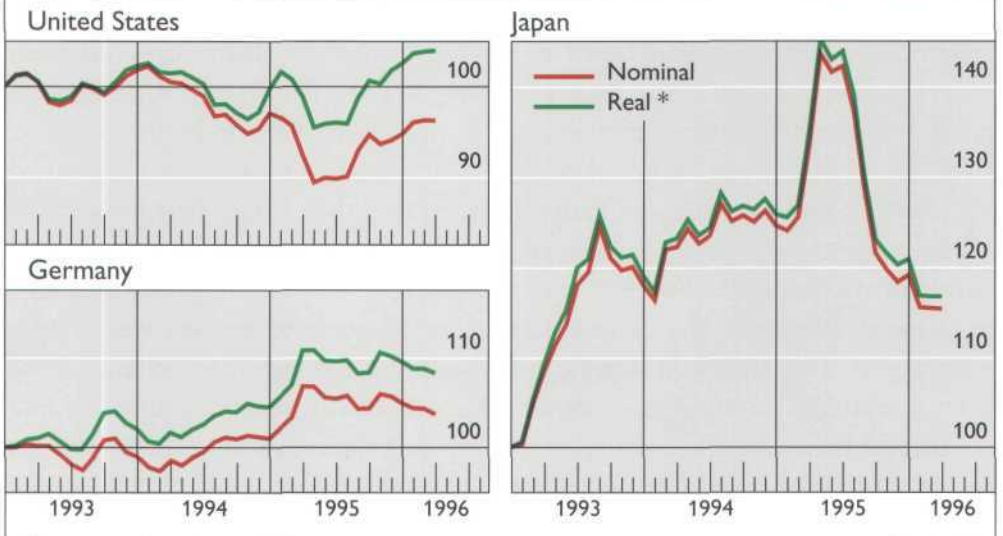
Output growth in *Germany* weakened but remained positive in the first half of last year, as household spending proved surprisingly resilient to the more restrictive stance of fiscal policy, and a progressive pick-up in business fixed investment largely offset lower residential and public investment. Furthermore, net exports continued to grow in spite of an appreciating exchange rate.

... due to currency appreciation and inventory corrections

However, quite unlike the outcome in Japan and the United States, growth in Germany fell further in the second half of the year as a result of several adverse factors. In particular, an effective appreciation of the Deutsche Mark during the first half of 1995 (Graph II.2), and an even larger increase in real terms because of a marked rise in wages, substantially eroded German competitiveness. Although enterprises managed to offset some of the effect of this appreciation through faster productivity gains, export growth nevertheless fell. Furthermore, deteriorating labour market conditions, partly due to firms' efforts to boost productivity, progressively eroded consumer confidence and spending. Finally, faced with weak growth of final demand, firms cut production to reduce an

Nominal and real effective exchange rates

December 1992 = 100



* In terms of relative unit labour costs.

Graph II.2

involuntary build-up of inventories and the recovery in investment gave way to a decline.

Other European countries

Owing to the close trade links within Europe, the slower growth in Germany spread to other countries, some of which were already experiencing weaker domestic demand. Growth in *France* had been quite buoyant during the first half of last year, in part due to incentives to buy automobiles and purchases brought forward in anticipation of a rise in the VAT rate. However, constrained by continuing high real interest rates in the face of budget uncertainties, the economy started to falter over the summer. Gradually worsening labour market conditions depressed consumer confidence, leading households to increase saving and reduce spending on durables as well as housing. When net export growth also turned negative, the unexpected weakening of final demand forced enterprises to cut inventories and scale back investment.

Growth also fell in France ...

Some, but not all, of the other countries closely linked to Germany also experienced difficulties. *Belgium*, with a foreign trade/GDP ratio of around 70% and heavily reliant on exports of raw materials and semi-processed goods, was particularly exposed to the 1994–95 inventory cycle (see below). Consumption was also weak as real household income growth was restrained by growing unemployment and a restrictive fiscal policy and the saving rate remained close to 20%, the highest in Europe. As a result, total output growth declined significantly during the year. An even steeper fall was observed for *Switzerland* which was affected by a sharp appreciation of its currency, with particularly adverse implications for the tourist industry. Other factors behind the deteriorating real output trend in Switzerland were weak consumer confidence, following several years of falling real wages, and shrinking activity in residential construction, a lagged response to the building boom of the late 1980s.

... Belgium ...

... and Switzerland ...

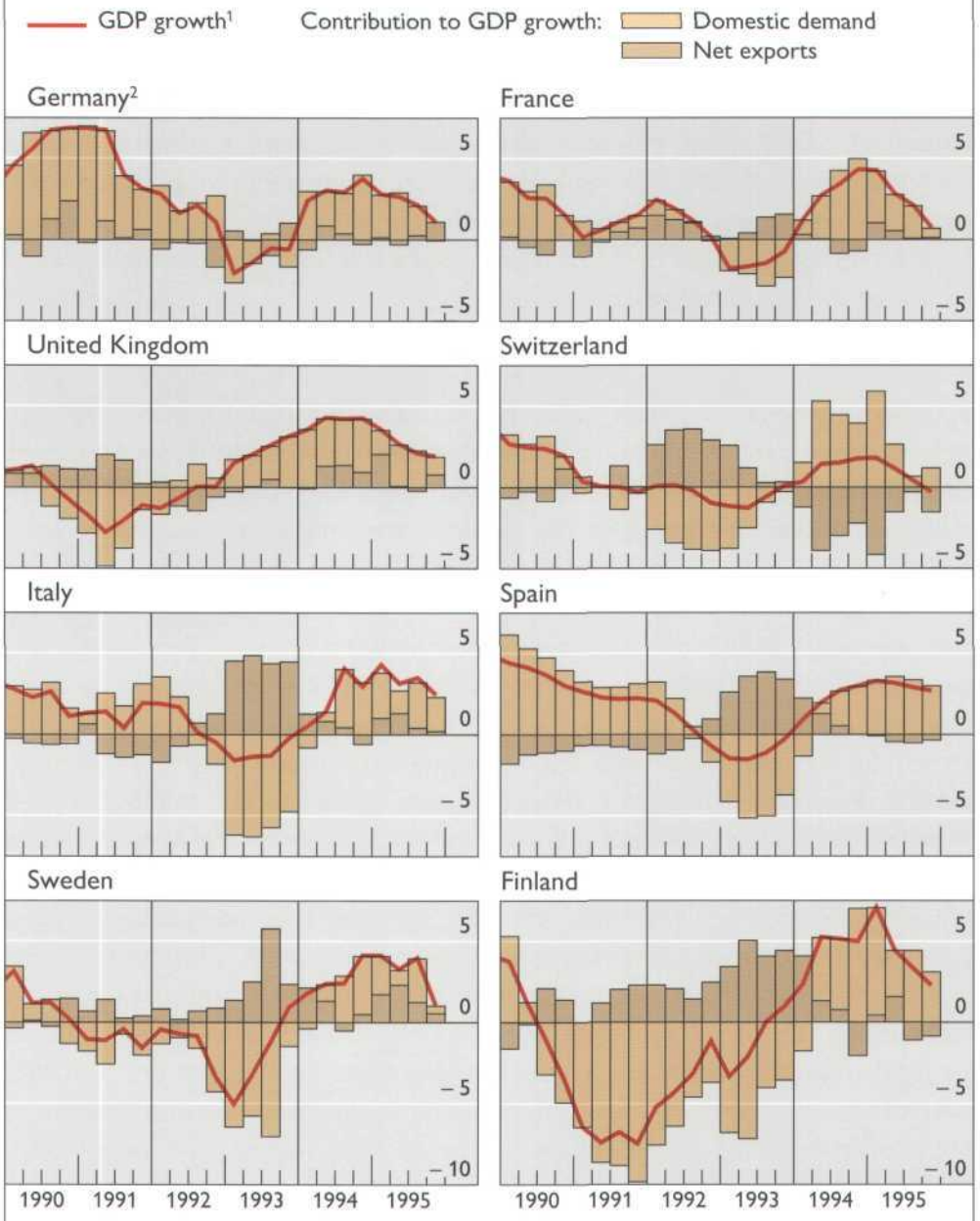
Yet other countries in continental Europe have to date been affected less by the slowdown in their major trading partner. In *Austria*, the impact of effective currency appreciation was partly offset by increased exports to eastern Europe and high investment growth. Moreover, large productivity gains, achieved without raising unemployment, provided room for an expansion of real wage incomes and household consumption. *Denmark* and the *Netherlands* also enjoyed relatively vigorous growth, along with slowly improving labour markets and comparatively brisk household spending. Business fixed investment was another source of strength in both countries but also stimulated imports of capital goods.

... but was relatively high in other European countries

Further afield, *Greece* and *Portugal* turned in rather better performances in 1995, in spite of tighter fiscal policies. Strong export growth has been a characteristic feature in Portugal over the last few years, although, because of a large initial imbalance, the contribution of net exports to growth was actually negative in 1995. Unlike in most other countries, the construction sector has been buoyant in Portugal, but household spending has remained subdued in a context of fiscal and wage restraint and growing unemployment. Following the recession in 1994, growth in *Turkey* rebounded sharply last year. Led by private consumption and supported by strong credit expansion and some relaxation of fiscal policy, real domestic spending may have grown by almost 10%. However,

Contribution to GDP growth: domestic demand and net exports

In percentages and percentage points



[1] Changes over four quarters. [2] Prior to 1992, western Germany only.

Source: National data.

Graph II.3

as this rate of increase far exceeded available capacities, surging imports combined with slower export growth substantially limited the rise in GDP.

Domestic demand strengthening in Italy ...

In those countries which experienced large depreciations in 1992–93, domestic forces have progressively replaced net exports as the principal engine of growth (Graph II.3). This was especially the case in *Italy* last year, as investment spending rose strongly in response to high profits and capacity constraints in the export sector. Household consumption, however, remained subdued, largely because of the continued decline in real wages. In the *United Kingdom*, by contrast, investment has been surprisingly sluggish given favourable enterprise profits.

... the United Kingdom ...

Residential construction has also been weak and house prices fell throughout most of the year. Private consumption, on the other hand, was rather buoyant, partly offsetting the effect of declining net exports. Net export growth also weakened last year in *Finland*, *Norway* and *Sweden*, whereas business fixed investment expanded at two-digit rates in all three countries. In contrast to earlier experience, the recovery in *Spain* was also led by investment rather than household consumption. Moreover, wage growth remained moderate, possibly reflecting the influence of deregulation measures. Finally, enjoying exceptionally strong growth of both net exports and the domestic components of demand, *Ireland* has recorded the fastest average rate of expansion (5.5%) in the industrial world for the last three years.

... and some other European countries

Other industrial countries

In other industrial countries (Canada, Australia and New Zealand), growth slowed considerably last year, reflecting a confluence of country-specific factors and the relatively mature phase of their business cycles. Under the influence of a marked decline in exports to the United States and a more restrictive fiscal policy, output in *Canada* stagnated in the first half of the year. The slowdown was particularly notable for household spending, whereas business fixed investment and inventory formation contributed positively to growth. Benefiting from stronger export growth, the economy recovered in the second half but, because the inventory build-up had been partly involuntary, a sharp correction held growth for the year to just over 2%. Aggregate employment growth also slowed, though this masked divergent sectoral trends. Public sector employment fell sharply due to budget cuts but this was more than offset by a pick-up in private employment, leading to a decline in the rate of unemployment.

Slowdown in Canada ...

The slowdown in *Australia* and *New Zealand* may be attributed to a combination of more restrictive policies, slower growth of business fixed investment and, in Australia, a marked decline in residential construction in lagged response to the rise in mortgage rates in 1994. In New Zealand, by contrast, strong demand for housing has pushed up real property prices by more than 35% over the last two years. Household consumption remained relatively buoyant in both countries, while the contribution of net exports was negative even though import growth slowed in step with weaker investment.

... and in Australia and New Zealand

Output growth by contributing factors and policies

Some common features

In spite of the divergent growth patterns, some common features of change could also be observed last year. One of these was the weakness of household spending. In most countries, household saving rates had fallen sharply in the previous cyclical recovery but this decline has been much less pronounced in the most recent upturn (Table II.1); in fact, the absence of a sustained recovery in Japan can, in part, be ascribed to a rise in household saving last year. The generally low saving rate at the start of the latest recovery, allied with households' desire to restore earlier financial balances, is an important reason for this behaviour but other concerns also made them more cautious.

Common features of change include:

relatively high saving rates ...

Household saving during recent recoveries: selected countries

Cumulative percentage change in the saving rate since recession

Countries	Final year of recession	Years after recession		
		1	2	3
United States	1982	−2.1	−2.5	− 4.4
	1991	0.2	−0.9	− 2.8
Japan	1983	−0.2	−0.6	− 1.1
	1993	−0.6	−0.6	..
Germany	1982*	−1.6	−2.8	− 4.0
	1993	−0.7	−1.3	..
France	1983	−1.5	−3.8	− 6.5
	1993	−0.5	−0.3	..
Italy	1983	−1.7	−5.1	− 9.2
	1993	−1.0	−3.2	..
United Kingdom	1981	−1.3	−4.3	− 5.8
	1992	−0.9	−3.5	− 5.6
Canada	1982	−3.2	−6.2	−10.9
	1991	0.5	0.2	− 1.7
Belgium	1981	−2.6	−3.8	− 6.5
	1993	−1.2	−3.0	..
Sweden	1981	−3.5	−6.2	− 9.2
	1993	0.3	0.2	..

* Western Germany only.

Sources: OECD Economic Outlook and national data. Table II.1

... linked to fiscal policies and slow growth of real wages;

As further discussed below, fiscal policies were tightened both in 1994 and last year. The associated slower growth of household disposable income directly contributed to the weakness of spending. Moreover, expectations of further fiscal consolidation may have exerted an additional adverse influence. Another development was the slow growth of real wage incomes, reflecting the combined effect of wage moderation and persistently high or rising rates of unemployment. This influence has been especially evident in countries such as Italy and Belgium (Graph II.4), where real wages either declined or were constrained by policy-related ceilings on nominal wage growth. A similar pattern, albeit less pronounced, can be observed in Germany, France and Switzerland.

a turnaround of the stock cycle;

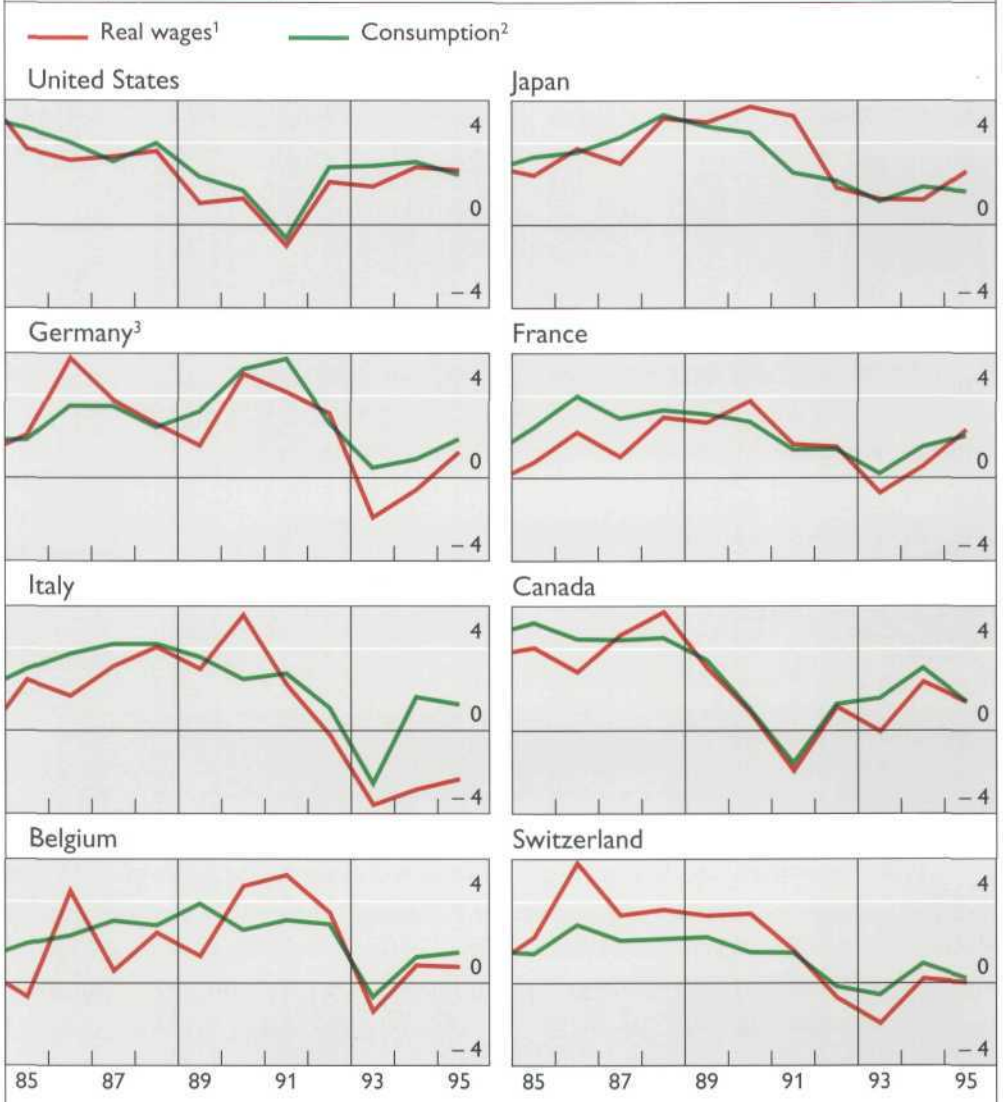
A second common feature, and a major factor in explaining the sharp slowdown between late 1994 and early 1995, was the turnaround in the inventory cycle. While inventory swings in the second half of 1994 had contributed almost 1 percentage point to the annual rate of GDP growth in the Group of Seven countries, this factor had a negative effect during the first six months of 1995. Indeed, in several countries, including the United States, Germany and France, attempts by enterprises to correct excessive inventories acted as a drag on growth throughout the year.

and buoyant investment in machinery and equipment ...

A third feature, albeit with more exceptions than the two discussed above, was the strength of business fixed investment in several countries, especially notable given the slow pace of recovery. One example, typical of countries with buoyant capital spending, is Switzerland. Despite sluggish overall growth, business fixed investment has expanded by nearly 35% since 1993. The composition of

Growth of real wages and consumption

Annual percentage changes



[1] Compensation of employees deflated by private consumption deflator. [2] Private final consumption expenditure in volume terms. [3] Prior to 1992, western Germany only.

Source: National data. Graph II.4

investment in Switzerland is also typical: a predominating role for investment in machinery and equipment. Notwithstanding a marked decline in real unit labour costs, wages relative to the cost of capital have increased owing to lower investment goods prices and nominal interest rates. Combined with growing competitive pressures and the fact that most technological progress is embodied in new equipment, this relative price shift has provided firms with a strong incentive to substitute capital for labour. However, there were also countries (Germany, France and the United Kingdom) where business investment was weak, relative to both the previous cyclical recovery and the strength of profits.

... though with exceptions

Fiscal and monetary policies

Macroeconomic policies exerted a powerful influence on growth patterns and the composition of demand last year. In most countries, fiscal policy was

Change in the policy mix towards ...

significantly tightened (Table II.2), whereas monetary policy became less restrictive (see Chapter IV). Given the different lags with which fiscal and monetary policies affect spending, this change in the "policy mix" may help explain the slowdown in growth and, together with movements in inventories, the general expectation that growth is likely to resume later in 1996.

... fiscal tightening

Because of the close financial linkages between countries, the fall in interest rates was universal even if the levels of nominal as well as real interest rates still differ between countries. In contrast, the degree of fiscal tightening has varied significantly. Fiscal restraint has been most pronounced in countries with public debt/GDP ratios of 70% or more, though some countries with lower debt ratios (for instance, the United Kingdom and Australia) have also adopted a more restrictive stance. On the other hand, structural deficits actually rose in Germany, Austria, Ireland and, in particular, Japan. Indeed, since the recession started in 1991 Japan's structural deficit has increased by more than 5% of GDP and a further deterioration is expected for the first half of 1996. Despite fiscal consolidation and a surplus on the primary balance in two-thirds of the industrial countries, gross debt ratios generally continued to rise last year. Moreover, the need for fiscal austerity is underlined by the effects on public debt over the next ten years of pension and health care obligations.

General government financial balances and debt

As a percentage of actual or potential GDP

Countries	Net financial balances				Structural balances				Gross financial liabilities			
	1980	1990	1994	1995[1]	1980	1990	1994	1995[1]	1980	1990	1994	1995[1]
United States	– 1.3	– 2.5	– 2.3	–2.0	– 1.2	– 3.0	– 2.5	–2.0	37.3	53.7	61.0	62.1
Japan	– 4.4	2.9	– 2.0	–3.5	– 4.7	1.7	– 1.0	–1.8	51.2	65.0	73.6	81.1
Germany	– 2.9	– 2.1	– 2.6	–3.5	– 3.9	– 3.1	– 1.8	–2.7	32.8	43.4	50.5	59.0
France	– 0.0	– 1.6	– 6.0	–5.0	– 0.4	– 2.2	– 4.1	–3.5	20.1	34.2	48.7	51.5
Italy	– 8.6	–10.9	– 9.0	–7.4	– 9.7	–11.7	– 7.4	–6.1	57.7	98.0	125.5	125.0
United Kingdom	– 3.4	– 1.2	– 6.9	–5.7	– 3.2	– 3.1	– 5.3	–4.6	54.0	35.3	50.5	51.8
Canada	– 2.8	– 4.1	– 5.3	–4.2	– 2.9	– 4.7	– 4.0	–3.0	44.3	73.1	95.6	97.3
Australia	– 1.7	0.6	– 4.0	–2.0	– 1.9	0.4	– 4.0	–2.5	..	23.5	36.1	38.1
Austria	– 1.7	– 2.2	– 4.5	–6.0	– 2.9	– 3.2	– 4.0	–5.5	37.3	58.3	65.0	69.2
Belgium	– 9.3	– 5.8	– 5.3	–4.4	–11.6	– 6.6	– 3.7	–2.8	78.7	130.5	136.0	134.0
Denmark	– 3.3	– 1.5	– 3.8	–1.9	– 3.4	– 0.6	– 2.5	–1.0	37.7	59.6	75.6	75.0
Finland	3.4	5.4	– 6.3	–5.7	2.2	2.7	– 2.6	–3.8	12.1	14.5	60.0	61.5
Greece	– 2.6	–14.1	–11.4	–9.2	– 3.8	–13.6	–11.0	–8.5	33.1	82.7	114.0	115.5
Ireland	–12.1	– 2.3	– 2.3	–2.3	–12.6	– 2.4	– 1.0	–2.0	71.3	97.4	90.3	83.9
Netherlands	– 4.3	– 5.1	– 3.2	–3.3	– 5.1	– 6.4	– 2.5	–2.8	46.8	78.8	78.1	78.8
Norway[2]	5.2	2.3	0.4	2.0	– 4.2	– 1.0	– 5.0	–4.5	47.6	32.5	40.5	41.5
Portugal	5.6	– 5.5	– 5.8	–5.4	4.7	– 7.2	– 4.2	–3.5	43.0	68.6	69.5	70.2
Spain	– 2.2	– 4.1	– 6.6	–6.0	– 1.0	– 6.7	– 5.0	–4.6	18.3	45.3	63.2	65.8
Sweden	– 4.0	4.2	–10.4	–8.3	– 4.4	1.4	– 8.6	–7.0	41.3	43.3	79.5	75.8
Switzerland	0.0	– 0.0	– 3.0	–2.5	0.0	– 1.2	– 2.0	–1.7	43.0	31.0	47.0	49.0

[1] Preliminary. [2] Structural balance excluding oil sector production and revenue.

Sources: European Commission European Economy, IMF World Economic Outlook, OECD Economic Outlook and national data.

Table II.2

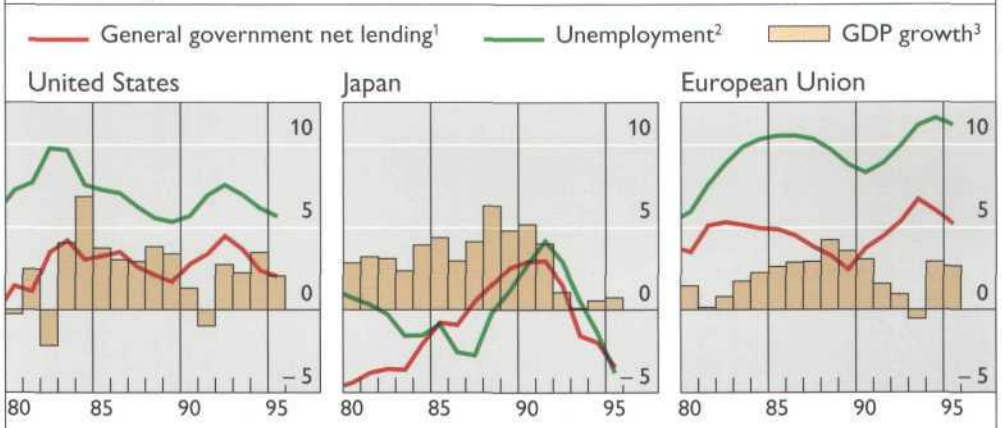
The "twin" problems of high unemployment and high fiscal deficits

Complementing fiscal restraint with structural policies

Fiscal consolidation is essential to ensure long-run economic sustainability. Yet it is important to note in this regard that a substantial part of the rise in fiscal deficits reflects higher social transfers and subsidies, most of which are directly or indirectly related to the increase in structural unemployment. This phenomenon is most evident in the European Union (Graph II.5), where about half of the rise in the deficit since 1979 (when the US and EU unemployment rates were equal) may be attributable to this factor. The implication of this observation is that structural reforms to reduce unemployment play an important complementary role to fiscal restraint in re-establishing long-run sustainability, all the more so since fiscal restraint in the context of rigid labour markets might otherwise raise unemployment further, leading in turn to less fiscal progress than initially anticipated.

Budget balances, unemployment and growth

In percentages



[1] As a percentage of GDP; sign reversed for the United States and the European Union. [2] As a percentage of the labour force; for Japan, ratio of actual to potential GDP. [3] Changes over one year.

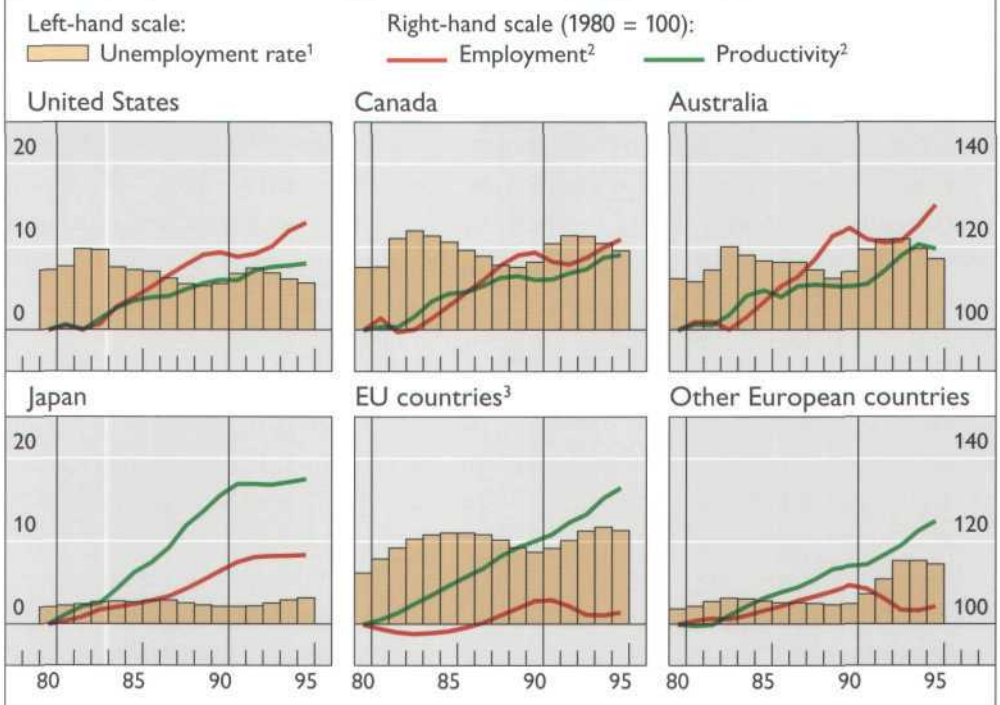
Sources: OECD Economic Outlook and national data. Graph II.5

Divergent labour market developments

Divergent labour market trends last year ...

While the rate of unemployment eased overall in the industrial countries last year, the fall was rather less than expected and there were marked variations during the year and between countries. In the United States the rate of unemployment declined to around 5½ % and, owing to rapid employment growth, it fell for the third year in succession in Canada and Australia although in Canada the improvement stalled in the course of 1995 due to cuts in public employment. Unemployment also fell in the United Kingdom albeit, in this case, partly owing to a decline in the labour force. In contrast, a number of other EU countries recorded higher unemployment rates at the end of 1995 than 12 months earlier. While employment grew in the first half of 1995, it started to decline as the recovery faltered. In Japan, unemployment rose to a new historical high, but remained low compared with other countries.

The labour market: selected indicators



[1] As a percentage of the total labour force. [2] Whole economy. [3] Excluding Austria, Finland and Sweden.

Sources: OECD Economic Outlook and national data. Graph II.6

... represent a continuation of longer-run differences ...

The recent differences in labour market performance in the United States and the EU countries are consistent with longer-run trends which have left the average rate of unemployment in the EU area at twice the US rate (Graph II.6). Moreover, while discussions in the United States have focused on whether or not the "natural" rate of unemployment (the rate consistent with stable inflation) has declined compared with the 1970s and 1980s, the principal issue in Europe is rather how much the natural rate has increased (see page 27) and which policies will prevent it from rising further. In the latter context, three separate but interrelated issues have attracted particular attention: the insufficient adaptability of European labour markets, mostly stemming from employment protection measures; the rigidity of real and relative wages, usually linked to institutional and regulatory features; and the high levels of labour costs, widely attributed to various kinds of non-wage labour costs.

... reflecting market imperfections

Labour market adaptability: measurement and effects

Indicators of labour market adaptability typically relate measures of employment changes to corresponding changes in output as well as its variability; in general, the stronger the relationship the more adaptable the labour market is assumed to be. Table II.3 presents indicators of this type together with aggregate employment growth for two sub-periods. As the table shows, the degree of job creation and adaptability (as defined in the table) was clearly much lower in continental Europe than in the English-speaking countries during the period 1975–85, while Japan occupied an intermediate position. Adaptability appears to

Labour market adaptability ...

have been particularly low in Italy, France and Belgium, which can largely be explained by various employment protection measures, such as high redundancy payments and lay-off costs, as well as barriers to short-term or part-time work contracts. However, during the second sub-period, both job creation and adaptability rose in the EU area, notably in countries that introduced measures to deregulate and liberalise their labour markets. In particular, the introduction of temporary work contracts, together with some reduction in redundancy costs, substantially raised adaptability in Spain and Italy. In other countries, increased use of part-time labour or the move to decentralised wage bargaining, with productivity improvements being a principal condition for wage gains (as in Australia), has had a similar influence on adaptability.

... has increased in Europe ...

Measures that improve the adaptability of labour markets can be expected to raise employment growth eventually, but not necessarily in the short run. While the reduction in redundancy costs and the introduction of temporary work contracts make firms more willing to hire workers in response to favourable shocks, such policies also lower firms' costs of making workers redundant when unfavourable shocks occur. Moreover, increased adaptability may coincide with attempts by enterprises to cut costs and improve labour productivity through retrenchment and "downsizing" in response to heightened competitive pressures. This may be crucial to firms' survival in a more competitive environment, but it also means that fewer jobs are created per unit of output, notably when progressively more firms are exposed to such competitive forces. Finally, in some cases the benefits of labour market liberalisation have not yet been realised because product markets are still too highly regulated.

... but may not raise employment growth in the short run ...

Employment growth, job creation and adaptability

Countries	Employment growth[1]	Job creation[2]	Adaptability[3]	Employment growth[1]	Job creation[2]	Adaptability[3]
	1975–85			1985–95		
United States	2.2	0.80	0.65	1.6	0.60	0.85
Canada	2.1	0.60	0.75	1.4	0.60	0.75
Australia	1.3	0.45	0.70	2.0	0.70	1.10
New Zealand	1.1	0.60	0.35	0.4	0.35	0.85
Japan	1.1	0.25	0.35	1.1	0.40	0.35
EU countries[4]	0.2	0.05	0.30	0.8	0.30	0.85
of which: Germany	0.3	0.10	0.60	0.7	0.25	0.75
France	0.1	0.05	0.50	0.4	0.20	0.50
Italy	0.5	0.15	0.20	−0.1	<0[5]	1.20
United Kingdom	−0.1	<0[5]	0.85	0.4	0.15	0.90
Spain	−1.6	<0[5]	0.80	1.0	0.30	1.30
Other countries[6]	0.9	0.35	0.40	0.0	0.00	1.05

[1] Annual percentage changes. [2] Ratio between percentage changes in employment and in GDP respectively. [3] Ratio between standard deviation of changes in employment and in GDP respectively. [4] Except Austria, Finland and Sweden. [5] Negative employment growth coinciding with positive output growth. [6] Austria, Finland, Norway, Sweden and Switzerland.

Sources: OECD Economic Outlook and national data. Table II.3

In most EU countries and in Australia, as well, the various measures mentioned above seem to have facilitated a faster and smoother adjustment to changes in demand and competitive pressures and have indeed led to a higher degree of job creation and slightly faster employment growth. Yet, in other countries a more adaptable labour market has been associated with a fall in job creation and/or employment growth. As the table shows, this was the case after 1985 in the United States and has, perhaps, been most pronounced in countries, such as Finland and Sweden, that experienced exchange-rate-related recessions during the 1985–95 period. Less employment growth and job creation may also be observed for New Zealand which, having started in the mid-1980s, has gone further than most other countries in liberalising its labour market. However, the experience of New Zealand also shows the eventual positive benefits of greater adaptability, even if the adjustment lags are uncomfortably long: in the 1990s employment growth has averaged almost 2% per year and the rate of job creation has been higher than in the period of regulation.

... though it will do so eventually

The problem of long-term unemployment

According to other indicators, based on labour market flows, a lack of adaptability does not seem to have prevented employees in Europe from moving into and out of jobs. The problem is rather that too few jobs are being created relative to the number destroyed. As a result, the outflow from unemployment has been very low, implying that those who lost their jobs have stayed unemployed for a very long time. Consequently, policies to improve adaptability need to be complemented by measures targeted in favour of the long-term unemployed. Such measures have been attempted with some success in the United Kingdom and Australia.

Wage rigidities

Wage rigidities reflect inflexible relative wages

This problem has several potential dimensions. One is that *aggregate* real wages may not be sufficiently responsive to increases in unemployment and to the changes in productivity and terms of trade on which real wages ultimately depend. It appears, however, that this is less of a problem than it used to be. Indeed, a striking development in Europe during the last 10–15 years is that the income share of labour has fallen in all countries.

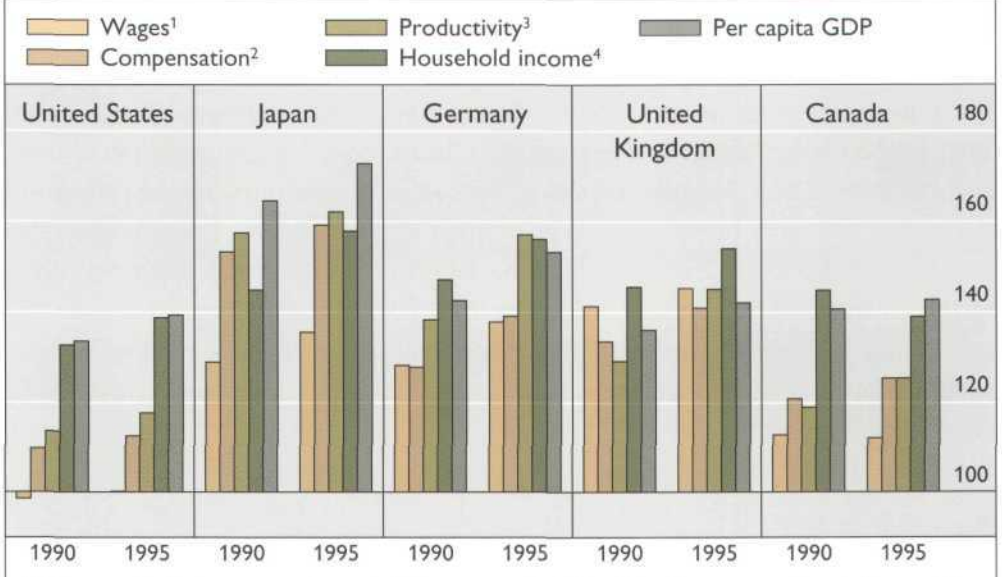
The problem of wage rigidities now tends to be associated more with rigid *relative* wages. While in the United States and the United Kingdom, shifts in the relative demand for various types of labour have led to declining wages of unskilled workers relative to those of skilled workers, relative wages in most continental European countries have changed very little. As a result, the proportion of unskilled workers unable to find a job has increased more than in the United States.

A frequently heard argument against flexible relative wages is that they lead to lower productivity growth and stagnating average real wages because a large proportion of the labour force can only find low-paying jobs, and enterprises have an incentive to offer such jobs when wages for the unskilled are low and flexible. One development, often cited in this regard, is that US real earnings per employee have fallen by over 10% since 1973. However, this development is based on a narrow wage concept and when extending the definition to wages and salaries per employee, real wages have been stable (Graph II.7). Even this broader

Falling real wages in the United States ...

Alternative measures of per capita real income and output

1973 = 100



[1] Wages and salaries per employee (whole economy), deflated by the consumption deflator. [2] Per employee, deflated by the GDP deflator. [3] Ratio of GDP to total employment. [4] Per capita household disposable income, deflated by the consumption deflator.

Sources: OECD Economic Outlook and national data. Graph II.7

measure does not imply that US individuals are no better off on average than they were 25 years ago because a growing proportion of workers' income consists of non-wage benefits; including these benefits, employees have enjoyed a real income gain of 10%. A further point, of crucial importance in this context, is that high adaptability has meant that a larger proportion of the population is now working than in 1973. Taking all of this into account, together with higher government transfers net of taxes and profits accruing to households, real household income per head has grown by almost 40% since 1973, or at the same rate as per capita GDP. Nonetheless, there is also some evidence that laid-off workers are now less likely to find a new job that pays as much as the "old" one. This may have increased insecurity about future job prospects and in turn depressed consumer confidence in the United States.

... but a marked rise in real income

Other countries have had higher overall growth rates than the United States, but in most cases because productivity growth has benefited from a process of "catching up" with US technologies, though at a progressively declining rate. As a result, and critical to the issue of adaptability, the general slowdown in productivity growth since the 1970s has been much smaller in the United States, despite a larger shift of employment from industry to services than in most other countries. Moreover, except for Canada, where the proportion of the population in work has also increased, other countries show a much smaller difference between the growth of real wages and that of household income. Indeed, in the United Kingdom the rather slow growth of per capita GDP can in part be explained by a decline in the labour force.

Real income growth in other countries

High labour costs

High labour costs in Europe ...

A comparison of total hourly labour costs in the manufacturing sector (Table II.4) leaves no doubt that labour costs are high in continental Europe, and most notably in Germany. It is also evident that one important reason is the high share of non-wage labour costs, the bulk of which consists of pension and other social security contributions. Moreover, these non-wage costs are rather insensitive to cyclical and other shocks and, because of ceilings on contributions, weigh more heavily on the relatively low-wage workers whose jobs are already under threat for other reasons. Non-wage labour costs are, therefore, an important element in explaining not only the high level of total labour costs but also the rigidity of relative wages.

... with potential but uncertain employment effects

High labour costs may also have reduced employment growth by providing enterprises with an incentive to invest abroad rather than at home. Last year, for instance, German foreign direct investment jumped to a record level. Although direct investment inflows also rose, the cumulative net outflow so far in the 1990s has reached DM 180 billion, equivalent to more than 10% of domestic investment in machinery and equipment. The net effect of this outflow is, of course, uncertain. If the outflow had been invested in Germany, aggregate demand and output would have been higher but the consequent rise in employment proportionately far less (see Table II.3). In addition, the alternative to investing abroad might have been to bolster firms' financial asset position. Finally, a large part of Germany's foreign direct investment reflected attempts to strengthen marketing and service networks abroad and thus helped to maintain domestic jobs in export-dependent firms.

Total labour costs in manufacturing: selected countries

Countries	Total hourly labour costs in 1995			Social security contributions and payroll taxes as a percentage of total taxes (1993)
	Indices based on data in a common currency Germany = 100	of which[1]		
		Wages	Non-wage labour costs	
Germany	100	55	45	39
Japan	75	59	41	34
France	61	54	46	47
United States	55	71	29	29
Italy	52	50	50	37
Canada	49	74	26	17
United Kingdom	45	73	27	18
Hungary[2]	10	50	50	39
Czech Republic[2]	7	60	40	35
Singapore[2]	23	68	32	30[3]
Korea[2]	19	70	30	8
Malaysia[2]	6	76	24	15[3]

[1] As a percentage of total labour costs. [2] Based on 1994 figures. [3] Including contributions to public provident funds.

Sources: Institut der Deutschen Wirtschaft IW-Trends, IMF Government Finance Statistics, OECD Revenue Statistics, Swedish Employers' Confederation and national data. Table II.4

Alleviating the burden of non-wage labour costs by providing health care more efficiently and/or reducing social security contributions is often proposed as a means to help solve Europe's unemployment problem. This is desirable provided that lower non-wage labour costs are not offset by higher wages. Furthermore, since social security contributions account for a major share of public sector revenue (in some cases almost 50%), steps to reduce this part of non-wage labour costs would have to be taken in tandem with fiscal consolidation measures.

Reducing non-wage labour costs

Concluding remarks

While it does appear that various policy changes have helped to improve the adaptability of European labour markets in recent years, progress has been very slow. Relative wage flexibility is still lower in continental Europe than in the United States and total hourly labour costs have remained high. This outcome reflects not only the tenuous nature of the reforms implemented to date but also the fact that some reforms can be a "two-edged sword" in the short run. For example, reducing employment protection measures increases firms' incentive to hire but also their capacity to make workers redundant. Adjustment lags are also long and the need to remain competitive has raised the priority firms attach to lowering costs by improving labour productivity. Finally, solving the problem of high labour costs by reducing social security contributions needs to be seen within the framework of fiscal consolidation and easing the burden of the welfare state.

Policies have helped to improve adaptability ...

... but benefits still to come

Lower inflation in most countries

Changes in prices, unit labour costs and profit margins

Inflation in the Group of Ten countries averaged 2¼% last year, the same as in 1994 (Table II.5); except for 1986, when consumer prices were significantly influenced by the one-time effect of lower oil prices, this is the lowest rate in more than 30 years. While some countries were exceptions to this general trend, in most cases these exceptions can be attributed to temporary influences, such as changes in indirect taxes and/or higher mortgage rates. Wage moderation combined with relatively high productivity growth remained the most significant factor in explaining the favourable inflation performance. In fact, for the first time in the postwar period, unit labour costs have declined for several years in many countries. Nonetheless, last year the average decline was smaller than in 1994, and in Denmark and Sweden lower unemployment and/or growing profits in the tradables sector have already led to higher wage claims.

Continued low inflation thanks to wage moderation

While broad inflation measures have converged, movements in import costs and profit margins have differed markedly across countries, which makes their contribution to lower inflation difficult to ascertain. As can be seen from Graph II.8, which evaluates movements in profit margins using an accounting framework based on total domestic and foreign sales (see the note to the graph), net pre-tax profits as well as net returns on sales seem to have grown in the United States. This is mainly because reductions in net interest payments and slow growth of labour costs have more than offset the effects of a marked rise in the

The behaviour of profits in the United States ...

Consumer prices and unit labour costs

Countries	Consumer prices					Unit labour costs[1]				
	1980–89	1990	1993	1994	1995	1980–89	1990	1993	1994	1995
	annual percentage changes									
United States	5.5	5.4	3.0	2.6	2.8	2.9	3.0	0.2	−1.3	−0.6
Japan	2.5	3.1	1.3	0.7	−0.1	1.0	2.1	5.3	−0.3	−2.0
Germany[2]	2.9	2.7	4.5	2.7	1.8	2.4	2.1	3.6	−6.1	1.1
France	7.3	3.4	2.1	1.7	1.8	4.6	3.3	2.2	−5.9	−1.7
Italy	11.2	6.1	4.2	3.9	5.4	8.3	6.9	2.6	−2.7	−4.3
United Kingdom	7.4	9.5	1.6	2.5	3.4	6.0	6.7	−0.2	0.0	3.3
Canada	6.5	4.8	1.8	0.2	2.2	4.9	3.4	−2.8	−1.8	−0.4
Belgium	4.9	3.5	2.8	2.4	1.5	1.3	6.0	0.9	−1.5	−0.3
Netherlands	2.8	2.5	2.6	2.8	1.9	0.5	1.3	1.5	−4.4	−5.3
Sweden	7.9	10.5	4.6	2.2	2.5	6.7	5.6	−6.2	−0.6	−0.7
Switzerland	3.3	5.4	3.3	0.9	1.8	1.8	3.1	0.1	−5.7	−2.7
Group of Ten[3]	*5.4*	*4.9*	*2.7*	*2.2*	*2.2*	*3.3*	*3.4*	*1.5*	*−2.1*	*−0.8*
Australia	8.4	7.3	1.8	1.9	4.6	7.9	3.9	−3.8	−3.6	−0.2
Austria	3.8	3.3	3.6	3.0	2.2	1.6	1.4	0.4	−3.5	−1.7
Denmark	6.9	2.6	1.3	2.0	2.1	5.5	6.4	−3.7	1.6	3.7
Finland	7.2	6.2	2.2	1.1	1.0	4.7	8.7	−6.2	−4.4	4.8
New Zealand	11.8	6.1	1.3	1.8	3.8	10.1	3.7	−0.4	−0.1	4.6
Norway	8.3	4.1	2.3	1.4	2.5	4.4	3.9	−0.1	0.4	3.1
Portugal	17.5	13.4	6.5	5.2	4.1	12.4	15.8	7.3	3.6	2.8
Spain	10.2	6.7	4.6	4.7	4.7	7.8	11.4	1.2	−4.9	0.8
All countries[3]	*5.7*	*5.0*	*2.8*	*2.3*	*2.4*	*3.6*	*3.8*	*1.4*	*−2.1*	*−0.7*

[1] In the manufacturing sector; definitions of series differ across countries. [2] For consumer prices (prior to 1993) and for unit labour costs, western Germany only. [3] Calculated using weights based on 1990 GDP and PPP exchange rates.

Sources: OECD Economic Outlook, national data and BIS estimates. Table II.5

use and cost of imports and kept the increase in total costs below that in output prices. Hence, in the limited context of this accounting framework, it could be concluded that the behaviour of profits during the recent expansion has, in some measure, contributed to inflation.

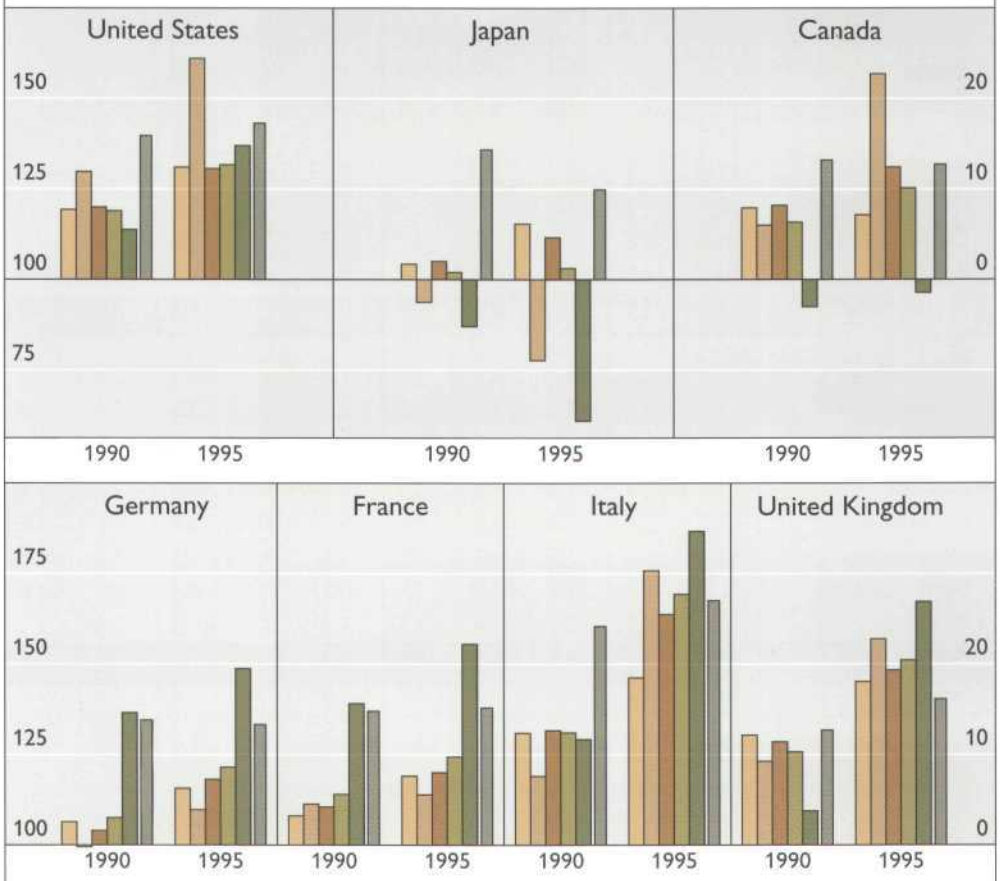
... Japan ...

Unlike enterprises in the United States, those in Japan, and to a much smaller extent in Canada, appear to have experienced a substantial decline in net profits and returns, in particular during the recent recession. While the rise in unit labour costs since 1990 has been less in Japan than in other countries, rising capital consumption allowances due to the earlier investment "bubble" have pushed up total costs and, together with more intense competition from low-cost imports, forced firms to cut their margins, notably on exports. As a result, profits per unit of output now seem to be some 35% lower than they were in 1985 while output prices have grown by only 4%. This profit squeeze during the recent recession has been a key factor in the disinflationary process in Japan, although it is equally clear that the latter has been a main factor behind the squeeze on profits.

... and Europe

In contrast, net profit margins have increased in all the major European countries. Despite the continuing high level of labour costs, enterprises in some

Indicators of output prices, costs and net profits



Note: Output, or gross sales, is measured as domestic demand plus exports in, respectively, constant and current prices, and prices are measured by the average deflator for exports and domestic demand. Total costs are measured as labour compensation, indirect taxes less subsidies, capital consumption and imports, all expressed per unit of output. Net profits are defined as the operating surplus less capital consumption and net interest payments, and measured per unit of output, and return is net profits as a percentage of total sales in current prices.

Sources: OECD National Accounts, national data and BIS estimates. Graph II.8

countries seem to have been able to partly restore earlier profit margins against the background of general wage moderation; the rise has been particularly steep in Italy and the United Kingdom. In the former case, this can largely be attributed to wage moderation since the 1992 incomes policy agreement and to the exceptional increase in both export volumes and export prices measured in local currency terms. Recently, profit margins of enterprises in France have also benefited from moderate labour cost increases, whereas in Germany high nominal wage growth has been compensated by rationalisation, lay-offs and faster productivity gains. Unlike developments in Italy and the United Kingdom, import costs have had a dampening effect on prices, notably in Germany.

Sectoral differences in profit growth

These indicators suggest that enterprise profits in Europe have benefited from but not contributed to the low-inflation environment of recent years. Aggregate indicators may, however, mask substantial sectoral differences. For

instance, in countries with depreciating exchange rates, profits in the exposed sectors have been particularly buoyant, while in Germany the sheltered sectors have seen larger profit gains than export-dependent sectors. In Japan, by contrast, it appears that, despite lower margins, large and export-oriented manufacturing enterprises have fared better than small to medium-sized non-manufacturing firms which have been more exposed to the effects of growing low-cost imports.

"Underlying" conditions and behaviour in product and labour markets

Structural changes in conditions of low inflation

While over the longer run a favourable inflation performance can primarily be attributed to the conduct of monetary policy, the short-run behaviour of prices and wages, and interactions between the two, are the principal element in the transmission mechanism. Central to this mechanism is the concept of the "natural" rate of unemployment; that is, the rate which is consistent with stable inflation. The natural rate is mostly determined by structural factors in the labour market. However, it also depends on the behaviour of prices and profits and, under certain conditions, on the trend rate of productivity growth, as well. In this framework, two questions are of particular interest. Has the natural rate of unemployment changed in recent years? And is the earlier empirical evidence of a symmetric short-run "trade-off" between inflation and output still valid?

The "natural" rate of unemployment

There seems little doubt that the natural rate in most continental European countries, as well as in Canada and Australia, is now higher than it was 10–15 years ago (see the previous section). In contrast, in the United States and the United Kingdom there is some evidence that the natural rate may recently have fallen somewhat. Both countries have seen a marked shift in bargaining power in favour of employers and the degree of relative wage flexibility is substantially higher than in most other countries. Wage inflation has also remained subdued in both countries although unemployment has fallen to levels which are low relative to recent historical experience. Even so, it is, of course, still too early to draw firm implications for policies.

Changes in profits, prices and trend productivity

It is also difficult to derive any firm conclusions regarding the underlying behaviour of prices, profits and trend productivity. On the one hand, heightened competition, both within and between countries, combined with the low-inflation environment, has made it harder to pass cost increases on to prices, providing firms with a strong incentive to keep costs low. On the other hand, as noted above, net profit margins in some countries appear to have widened in response to lower cost increases. Except in manufacturing, there is also little evidence of faster productivity growth, though it should be recognised that productivity gains in the services sector are likely to be higher than currently measured.

Evidence of an asymmetric trade-off ...

Until recently, most empirical analyses seemed to suggest that the *trade-off* between inflation and the ratio of actual to potential output was symmetric, implying that increases in inflation due to excess demand could be reversed without any net loss in output. This consensus contrasted with the view of most policy-makers, who, having experienced the large output costs associated with reversing inflationary forces over the last two decades, had become more aware of the need to avoid excess demand pressures. More recent research for the United States and the Group of Seven countries, showing that a positive demand shock may increase inflation by three times more than a corresponding negative

shock reduces it, tends to support the view of policy-makers. In fact, the experience of the United States and the United Kingdom in 1994–95, compared with the 1989–91 period, may be seen in the light of this new evidence. In 1988–89 both economies became overheated, and because restrictive measures were only applied *after* inflation had started to accelerate, the subsequent slowdown was severe and prolonged. In contrast, the rise in interest rates in early 1994, when inflation was still quite low but was expected to increase, removed inflationary pressures rather quickly without any major output and employment effects.

... with lessons for policy

World trade, current accounts and exchange rates

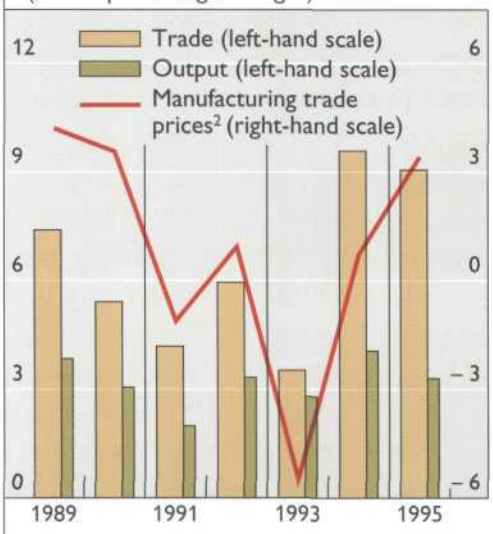
Developments in world trade

Reflecting the economic slowdown discussed above, the growth of foreign trade in goods and services of the industrial countries weakened last year. Nonetheless, at about 9%, trade volumes still expanded at more than twice the rate of aggregate GDP (Graph II.9). Despite the recession in some Latin American countries, the growth of the foreign trade of developing countries accelerated. This was partly the result of developments within the group, but was also attributable to the secular increase in import penetration into and outsourcing from the markets of the industrial countries. Trade prices (measured in SDRs) rose last year, following a cumulative decline of 5% since 1990. However, the increase was the net outcome of divergent patterns for different commodity groups. While the rise in manufacturing trade prices accelerated and oil prices partly reversed an earlier fall, the rate of increase in non-fuel commodity prices was markedly slower than in 1994.

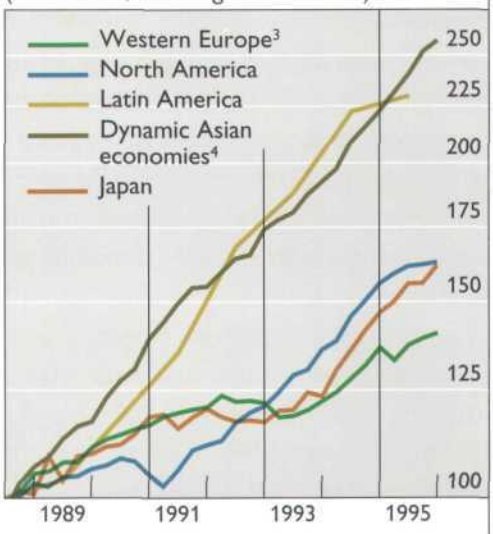
Recent changes in world trade and prices

Indicators of world trade

World trade volumes and prices[1]
(annual percentage changes)



Import volumes
(1988 = 100; semi-logarithmic scale)



[1] Excluding eastern Europe and the former Soviet Union. Output growth as measured by percentage changes in real GDP. [2] In SDR terms. [3] Belgium, France, Germany, Italy, the Netherlands, Spain, Sweden, Switzerland and the United Kingdom. [4] Hong Kong, Indonesia, Korea, Malaysia, Singapore, Taiwan and Thailand.

Graph II.9

Long-run patterns

Patterns of foreign trade as well as resource use have also been influenced by various longer-term trends, driven partly by new technologies and partly by changes in the availability of low-cost labour. New and cheaper communication technologies have provided enterprises in industrial countries with a strong incentive to outsource a range of activities to developing countries offering a skilled labour force at very competitive wages. Similarly, factories designed to assemble imported parts and export finished goods have grown up in border regions, with Mexico and some of the southern provinces of China the most prominent examples. Moreover, measured growth of foreign trade in services has for several years even outpaced that in goods, in spite of the fact that sales within countries by affiliates of foreign firms (accounting for about one-half of trade in services) are not counted as foreign trade. To these trends might be added the growing importance of cross-border flows within multinational enterprises, which are mostly determined by differences in taxes and other location-related costs, but, in part, can also be affected by exchange rate movements. Finally, as was especially evident last year in the case of Japan, measured trade flows can be significantly influenced by shifts of exports from domestic enterprises to transplant facilities located in the country of sale, and by surging imports from foreign-owned low-cost producers in developing countries.

Developments in current account positions

Divergent cyclical patterns, the lagged effects of past exchange rate movements and widening international investment positions generally had a significant bearing on current account positions last year. This was particularly evident in the two largest economies (Graph II.10).

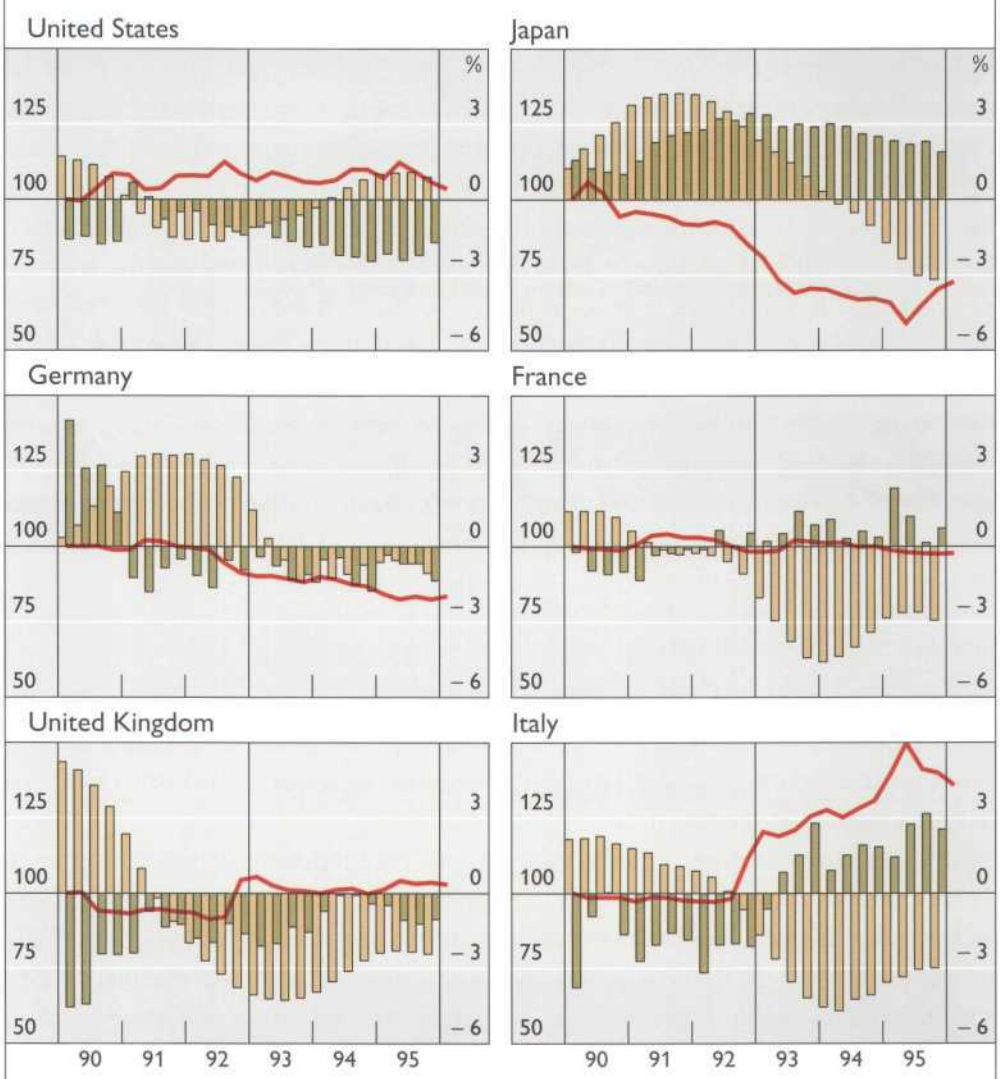
Buoyant US export growth but wider imbalances

In the United States, a gain in international competitiveness (some 10% since 1991), due in large part to the effective depreciation of the dollar, was instrumental in generating a rise of almost 15% in the volume of exports in 1995; in spite of a contraction in exports to Mexico, this brought the cumulative rise this decade to 65%. Nevertheless, reflecting the relatively advanced cyclical position of the United States and associated import penetration, the rate of growth of imports remained high. As a result, the US trade deficit rose to over $150 billion, the highest ever recorded (Table II.6) and, with growing net interest payments, the current account deficit also widened.

Surging imports in Japan due to currency appreciation and reforms ...

The fundamental factors mentioned above also dominated changes in the current account position of Japan, though with signs opposite to those observed for the United States. While the sluggish growth of domestic demand reduced the demand for imports, this was more than offset by the effects of the real effective appreciation of the yen (a cumulative 40% since 1991), so that the volume of imports rose by nearly 14% for the second consecutive year. Indeed, since the recession started in 1991, the total volume of imported goods and services has increased by almost 35% even though domestic demand has grown by only 2.5%. Moreover, reforms in the retail sector combined with a substantial rise in the share of manufactured goods in total imports suggest that there may be a permanent component to this increased import penetration. The effect of the yen's appreciation was also felt on the export side. Although the rise in exports was higher than in 1994, it still fell far short of demand growth in major

Competitiveness, cyclical positions and current account balances



[1] Measured as real effective exchange rates in terms of relative unit labour costs (first quarter 1990 = 100); an increase indicates an improvement. [2] Positive figures indicate excess demand. [3] As a percentage of GDP.

Sources: OECD Economic Outlook, national data and BIS calculations. Graph II.10

export markets, resulting in a further decline both in Japan's share of total world exports and in its trade surplus. At the same time, it should be noted that weaker export growth and, in particular, the narrowing of the trade surplus with the United States, reflected to a large extent the earlier shift by Japanese vehicle producers to US transplant facilities.

... lead to a lower external surplus

The external correction was even more pronounced for the overall current account of Japan, owing to growing tourist expenditure abroad and despite higher net investment income. In addition to net interest receipts, the latter development can be explained by higher profits from foreign direct investment, due to the aforementioned surge in imports from Japanese-owned enterprises and the shift of export production to overseas transplant facilities. Nonetheless,

the current account surplus measured in yen declined by 25% in the course of 1995, and, early this year, although only temporarily, Japan recorded a monthly deficit for the first time in more than five years.

Developments in domestic saving and investment

The widening US external imbalance can be attributed to the fact that changes in domestic saving have not kept pace with the rise in domestic investment. While the ratio of gross investment to GDP has increased by almost 3 percentage points since 1991 (when the current account was virtually in balance due to one-off payments following the Gulf war), gross national saving has remained largely constant, because lower government dissaving has been offset by lower household saving. Indeed, at only 4½% of disposable income, the US household saving rate is one of the lowest among the industrial countries; only Australia and Finland currently record lower rates. For Japan, the domestic trends are generally opposite in sign to those observed for the United States. Gross domestic investment has declined in proportion to GDP, but national saving has declined even more since lower government saving has been only partly compensated by higher household saving. Overall, a sustained correction of the US external imbalance thus requires a strengthening of saving, while further correction in Japan may call for a rise in private sector absorption as an offset to the planned removal of fiscal stimulus later this year.

Lower deficit in Germany

The real appreciation of the Deutsche Mark was larger than that of the yen last year, though the cumulative appreciation of the yen over the last few years has been significantly greater. Nonetheless, German exporters managed to maintain their share of total world exports in 1995 and, because import growth declined with the weakening of the domestic economy, the trade surplus rose. The current account position improved, even though a lower surplus on the investment balance had a partially offsetting effect.

Large swings in some European countries ...

In other European countries, swings in external imbalances this decade have been more pronounced. Benefiting from the depreciation of the lira, Italy has moved from a large deficit to an even larger surplus. However, despite the marked recovery of investment this year, most of this swing reflects a decline in the investment/GDP ratio. In contrast, the national saving rate has changed very little, as the fall in government dissaving has been largely offset by a trend decline in household saving. Other countries which experienced both a depreciating exchange rate and a relatively deep recession have also recorded considerable improvements in their current external accounts. Finland and Sweden, for instance, have strengthened their external positions by 8½ and 4½% of GDP respectively. As in Italy, the changes mostly reflect a decline in the investment/GDP ratio. Indeed, Sweden's national saving rate is still below its 1991 level, though recent fiscal measures appear to have reversed the previously negative trend. Spain, as well, recorded a marked improvement in its trade balance and has eliminated an earlier current account deficit.

... and growing surpluses in others ...

Large current account changes have not, however, been confined to countries with depreciating exchange rates. Belgium and Switzerland have both recorded growing current external surpluses for several years, thanks mainly to increasing investment income. The Netherlands has likewise seen a sizable and mostly rising current account surplus, with the trade account being largely responsible. Movements in the trade account similarly explain much of the

current account improvement in France, with a 3–4 percentage points widening of the output gap since 1991 likely to have been a major explanatory factor. Turkey, on the other hand, experienced a significant deterioration in its external position during 1991–93, mainly owing to a substantial increase in the government deficit. The stabilisation programme of April 1994 brought some relief, only to be followed by a 25% surge in imports and a consequent worsening of the trade and current accounts last year.

... but not in Turkey

In total, the aggregate current account position of the European countries has improved by close to $140 billion over the past four years, even though Germany, with a large current account surplus in 1990, has recorded a small deficit. This swing is far larger than that of Japan and is almost equivalent to the deterioration in the US external position over the same period.

In contrast to the European countries, Australia, Canada and New Zealand are all characterised by large deficits on their current accounts, due mainly to service payments on external debt. Recent movements in external positions have, however, differed between the three countries. Canada, benefiting from a strengthening competitive position and robust growth in the United States, has seen a marked reduction in its current account deficit despite an increasingly unfavourable net asset position and investment income balance. Moreover, this

Lower external deficit in Canada ...

Current account balances of the industrial countries

Countries and areas	Current account balance			of which					
				Trade balance			Balance on investment income		
	1991	1993	1995	1991	1993	1995	1991	1993	1995
	in billions of US dollars								
Industrial countries	–31.9	22.8	7.8	–11.9	76.3	96.6	– 9.2	– 4.3	–27.8
United States	– 7.4	–99.9	–152.9	–74.1	–132.6	–174.5	15.1	9.0	–11.4
Japan	72.9	131.4	110.6	103.0	141.5	134.9	26.7	41.4	45.1
Western Europe	–62.8	25.0	80.9	–49.6	58.7	119.1	–19.1	–23.5	–20.7
of which:									
France	– 6.5	9.1	16.8	– 9.0	8.6	12.1	– 5.1	– 8.2	– 6.2
Germany	–19.1	–16.1	– 17.3	18.4	39.7	68.5	19.7	13.8	1.8
Italy	–23.9	11.0	27.4	– 0.3	32.9	44.1	–17.4	–16.2	–15.6
United Kingdom	–14.7	–16.6	– 10.5	–18.3	– 20.1	– 18.2	– 1.1	2.8	10.5
Belgium-Luxembourg	4.7	11.2	16.5	– 0.4	3.6	7.0	1.4	3.0	4.2
Finland	– 6.7	– 1.1	4.7	1.1	5.4	9.9	– 4.6	– 5.0	– 4.3
Netherlands	7.7	11.7	14.2	10.7	14.6	19.0	1.0	0.9	1.8
Spain	–16.6	– 2.8	7.2	–30.3	– 14.9	– 17.7	– 4.5	– 3.6	– 5.3
Sweden	– 4.7	– 3.8	4.6	5.1	6.8	14.9	– 6.2	– 8.6	– 6.4
Switzerland	10.7	19.4	19.9	– 5.6	1.6	0.1	15.3	14.4	16.4
Turkey	0.3	– 6.4	– 2.3	– 7.3	– 14.2	– 13.2	– 1.9	– 1.5	– 1.9
Other industrial countries	–34.6	–33.7	– 30.8	8.8	8.8	17.2	–31.9	–31.2	–40.8
Australia	– 9.5	–10.0	– 18.7	3.5	– 0.2	– 4.3	–12.4	– 8.5	–13.1
Canada	–23.6	–22.4	– 9.4	3.2	7.2	20.7	–16.7	–20.2	–23.9
New Zealand	– 1.5	– 1.3	– 2.7	2.1	1.7	0.8	– 2.8	– 2.4	– 3.8

Sources: IMF Balance of Payments Statistics, OECD Economic Outlook, national data and BIS estimates. Table II.6

... but wider imbalances in Australia and New Zealand

improvement reflects a higher national saving rate, since the ratio of investment to GDP has been largely stable. Australia and New Zealand, on the other hand, have both recorded deteriorating current account positions. This has mostly resulted from relatively vigorous growth and weakening trade accounts, despite higher exports to Asia and a gradual shift towards exports of manufactured and semi-manufactured goods. Australia's external deficit, at more than 5% of GDP, seems to reflect two fundamental weaknesses: an unusually high and adverse cyclical sensitivity, and a trend deterioration in national saving, which mainly reflects household saving behaviour.

III. Developments in the rest of the world

Highlights

Aggregate output in the developing world grew almost as fast in 1995 as in 1994, the shortfall being mainly attributable to steep declines in demand in Mexico and Argentina. In the aftermath of the peso crisis, Mexico had to cope with a volatile exchange rate and sharp movements in interest rates which contributed to an atmosphere of financial instability. The banking system faced major difficulties and inflation remained very high. The recession in Argentina, the country most affected by contagion from Mexico, did not weaken the authorities' resolve to preserve the fixed dollar parity. Nor was Brazil's commitment to a firm exchange rate undermined, and inflation continued to fall as activity weakened. By early 1996, some signs of domestic recovery had begun to emerge in all three countries.

Structural reforms and more stable policies in a number of African countries have begun to revive activity, whereas the need to reduce large fiscal imbalances limited growth in the oil-exporting countries of the Middle East. In Asia, output grew at almost the same rapid pace last year as in 1994 despite some deceleration in China, Hong Kong, Singapore and Taiwan. GDP growth also increased in eastern Europe, and the decline in Russian output as measured in the official statistics was much smaller than in earlier years. The expansion of activity in Asia and in eastern Europe was again export-oriented: there were further inroads into industrial country markets and intra-regional trade also rose.

International financial linkages continued to deepen and private capital flows proved remarkably resilient to the Mexican crisis (see Chapter VII). With freer capital movements and with the implementation of monetary policy relying increasingly on market interest rates (rather than quantitative controls), maintaining an exchange rate target has become more difficult. Nonetheless, many developing countries continue to give exchange rate stability a high priority in the setting of monetary policy. One reason is that exchange rate movements remain of central importance in determining short-term inflation developments. In more extreme cases of hyperinflation, several countries have adopted a fixed or near-fixed exchange rate objective to break a vicious circle of devaluation and inflation.

Over the medium term, however, securing sustainable non-inflationary growth depends on domestic macroeconomic policies, and here recent developments suggest the need for vigilance. In a number of countries, fiscal deficits are large or are beginning to widen again; earlier deficit-reduction measures have sometimes been superficial or temporary, leaving the structural determinants (e.g. the scale of social security provision, the efficiency of state enterprises, public sector employment conditions) little changed. Those countries

where the fiscal position is most fragile often have low rates of private saving, although some have recently taken important structural measures to correct this. The policy dilemma in South-East Asia, a region unique in running fiscal surpluses and high saving rates, is more subtle. Several years of extremely rapid industrialisation have given rise to strong demand pressures and large current account deficits in some countries. Yet exchange rates have been held remarkably stable. Indeed, exchange rate objectives in some countries may have made it harder for monetary policy to play its required role in restraining excessive demand expansion and in avoiding an unsustainable growth of bank credit.

Growth, inflation and saving

	Real GDP			Consumer prices			Saving rate	
	1980–93	1994	1995	1980–93	1994	1995	1980–93	1994–95
	annual percentage changes						as a percentage of GDP	
China	9.4	11.9	10.2	8.1	24.9	17.0	34.7	45.8
India	5.3	6.3	6.2	8.8[1]	10.5[1]	9.3[1]	21.0	21.7
Other Asia[2]	6.6	7.5	7.7	7.5	6.5	6.4	30.7	31.9
Hong Kong	6.6	5.4	4.6	8.9	8.6	9.2	33.7	32.2
Korea	7.8	8.6	9.0	7.8	6.3	4.5	32.5	39.5
Singapore	7.4	10.2	8.9	2.8	3.1	1.7	43.4	53.0
Taiwan	7.5	6.5	6.1	4.2	4.1	3.7	32.8	26.3
Indonesia	6.1	7.5	8.1	9.3	8.5	9.4	30.7	30.3
Malaysia	6.6	9.2	9.5	3.7	3.7	3.4	33.3	36.7
Philippines	1.6	4.3	4.8	13.8	9.1	8.1	19.8	18.7
Thailand	7.7	8.5	8.6	5.4	5.1	5.8	28.8	32.4
Latin America[2]	2.3	4.5	0.2	152.0	276.3	42.2	22.9	19.7
Argentina	1.1	7.4	–4.4	284.1	4.2	3.4	20.8	17.3
Brazil	2.0	5.8	4.2	393.4	2,084.8	65.1	22.8	18.1
Chile	4.4	4.2	8.5	20.5	11.4	8.2	22.0	29.6
Colombia	3.5	5.7	5.5	24.5	23.8	21.0	20.8	19.9
Mexico	2.3	3.5	–6.9	50.1	7.0	35.0	23.7	20.5
Venezuela	1.6	– 2.8	2.2	25.5	60.8	59.9	24.7	18.9
Eastern Europe[2]	–0.5	4.2	5.5	37.6	24.2	23.2	28.4	18.4
Czech Republic[3]	–0.2	2.6	4.8	7.1	10.0	9.1	33.9	21.0
Hungary	–0.4	2.9	1.5	13.9	18.8	28.2	25.2	15.5
Poland	–0.8	5.2	7.0	61.3	32.2	27.8	27.1	18.2
Russian Federation[4]	0.1	–12.6	–4.0	98.1[5]	307.4	197.7	32.6	37.8
Africa	2.1	2.0	3.2	21.6	33.9	25.8	19.2	19.2
CFA countries	1.4	1.6	3.8	4.8	25.6	16.1	14.3	12.2
South Africa	1.4	2.7	3.3	14.2	9.0	8.6	26.5	19.1
Israel	3.9	6.5	7.0	73.5	12.3	10.0	12.0	16.0
Saudi Arabia	1.7	– 0.1	1.6	0.6	0.6	5.0	26.2	30.6

Note: Data for 1995 are partly estimated.

[1] Wholesale prices. [2] Average of the countries shown, calculated using weights based on 1990 GDP and PPP exchange rates. [3] Prior to 1985, Czechoslovakia. [4] Prior to 1986, the Soviet Union. [5] Average 1985–93.

Table III.1

Domestic demand, exports and policy responses

Divergent trends in domestic demand ...

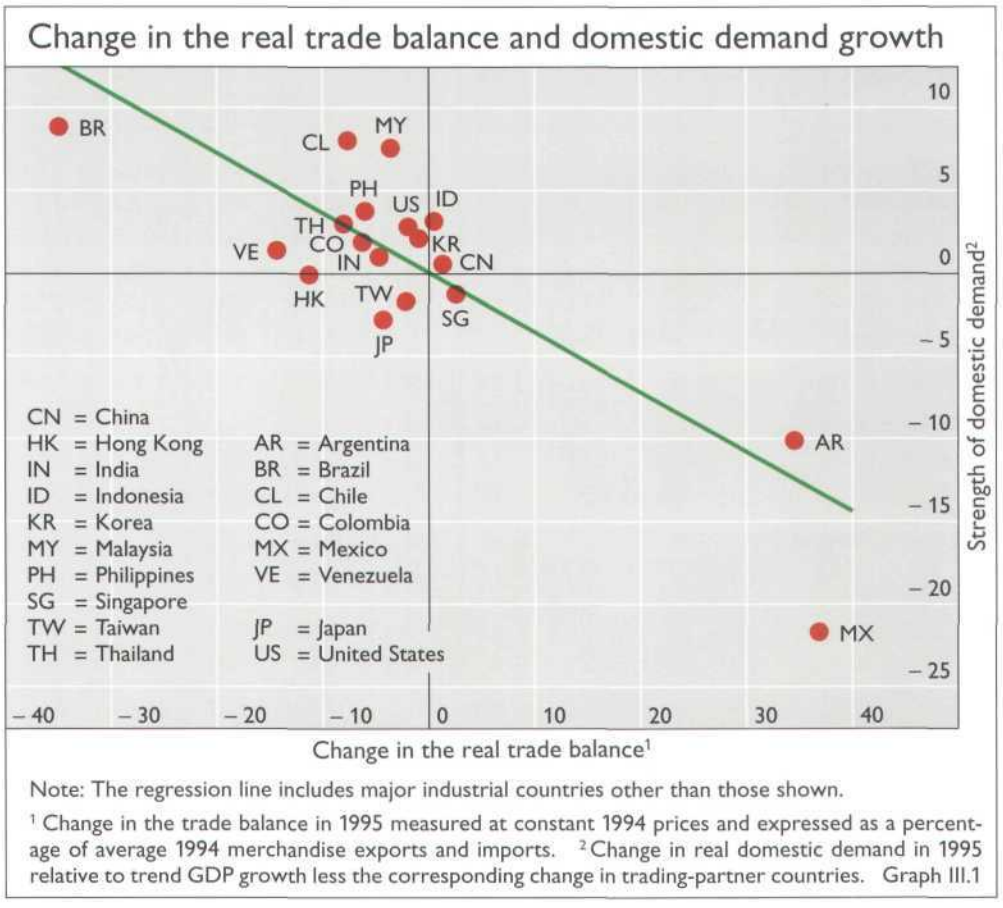
Rates of growth of domestic demand in the developing world diverged sharply last year. In many Asian countries, as well as in Chile and Israel, domestic demand remained buoyant, causing overheating in some economies. In contrast, domestic demand contracted in some of the larger Latin American countries. These divergent trends have had a pronounced impact on trade balances (Graph III.1). The depth of the recessions in Mexico (where domestic demand fell by 19%) and Argentina (a decline of 7%) last year helped to eliminate their trade deficits. On the other hand, the very rapid growth of domestic demand in Brazil in late 1994 and early 1995 led to a sizable deterioration of the trade balance. Strong domestic demand, in particular for import-intensive capital goods, has also led to significant adverse swings in the trade balances of some Asian economies, notably Malaysia and Thailand.

... and trade balances

Exports rise due to ...

A common engine of growth last year was exports. The volume of Latin American, Asian and eastern European exports rose strongly, while African exports picked up after years of stagnation. Industrial country import growth slowed in 1995, implying rather weaker export markets for the developing world. Nevertheless, this was partly offset by increased market penetration: the share of developing countries in the imports of the United States, Japan and Germany edged up further to close to one-third and the share of the transition economies in western Europe's imports rose markedly. During the last four years the value of the developing countries' exports to the industrial world has risen twice as

... further market penetration ...



Note: The regression line includes major industrial countries other than those shown.

[1] Change in the trade balance in 1995 measured at constant 1994 prices and expressed as a percentage of average 1994 merchandise exports and imports. [2] Change in real domestic demand in 1995 relative to trend GDP growth less the corresponding change in trading-partner countries. Graph III.1

fast as the growth of industrial country imports. At the same time, their imports from the major industrial countries have greatly expanded.

... and growing intra-regional trade

Moreover, intra-regional trade, in particular in Asia and southern Latin America, again contributed to the momentum of exports. Increased flows of foreign direct investment within these regions have helped this closer integration: nearly half of such investment in Indonesia, Malaysia, the Philippines and Thailand now comes from other emerging economies in the region.

Contribution of exports to growth

Some comparisons of the central role of exports in the growth process are shown in the last two columns of Table III.2. During the 1990s, exports have directly accounted for about 38% of the rise in aggregate demand in Asian economies other than China and India – not counting the indirect effects of increased investment and other domestic spending. The export boom has been highly import-intensive, with the volume of imports more than doubling. In Latin America, exports were 24% of incremental demand during the same period – well above the area's traditional low share of exports in demand. Eastern Europe and Africa have also seen a shift towards exports.

Shift to monetary restraint

The aim of reducing or containing inflation has recently dominated macroeconomic policies in Latin America. For a number of buoyant Asian economies, policies have been increasingly conditioned by the need not to let demand grow beyond potential output. Hence a widely shared feature of policy developments last year was a move towards monetary restraint. Real interest rates rose and, by late 1995, were positive in almost all countries. However, fiscal restraint was much less universal. The tightening of fiscal policy in Argentina and Mexico has been all the more significant in cyclically adjusted terms. But budget deficits in India, South Africa and Venezuela have remained large and there has been a considerable fiscal deterioration in Brazil and Malaysia. In some cases, monetary policy has had to assume all the burden of macro-economic stabilisation.

Exchange rate anchors

Exchange rate anchors have continued to guide monetary policy in a number of countries. With the adoption of a relatively narrow exchange rate band in the middle of last year, Russia joined the long list of countries using the exchange rate as a nominal anchor to stop hyperinflation. Both Brazil and Argentina have maintained their firm exchange rates; Argentina has now achieved one of the lowest rates of inflation in the world. China has also maintained an appreciating or stable exchange rate since late 1994 despite high inflation.

Exchange rate adjustment

Some other emerging economies, however, have made major exchange rate adjustments, sometimes as a result of market pressure, sometimes by design. The late-1994 crisis forced Mexico to move to a floating exchange rate regime which it subsequently maintained; official intervention was only occasional. Venezuela's overvalued official exchange rate was devalued in December 1995 and then, in April 1996, freed: by the end of April, the currency was trading at about 40% of the pre-December 1995 official exchange rate. After more than two years of exchange rate stability, the Indian rupee was allowed to float in September 1995. At the beginning of 1996, Indonesia widened its intervention band to allow somewhat greater exchange rate flexibility and increase the scope for more independent monetary policy. Heavy capital inflows prompted the Czech authorities to widen the exchange rate band in early 1996. And Chile changed

Current account balances and external trade

	Current account balance			Export volume growth			Export share of demand	
	Average 1980–93[1]	1994	1995	Average 1980–93[2]	1994	1995	Average[3]	Marginal[4]
	as a percentage of GDP			in percentages				
China	0.1	1.3	2.4	11.8	27.7	15.3	9.6	15.5
India	–1.6	–0.9	–1.5	6.9	17.0	22.0	5.6	18.6
Other Asia[5]	0.9	–0.1	–1.6	8.2	12.3	14.1	31.7	38.2
Hong Kong[6]	6.6	2.2	–2.3	5.7	– 2.3	2.9	52.4	–2.3
Korea	0.3	–1.0	–1.9	10.4	14.8	24.0	22.0	29.9
Singapore	5.0	17.3	20.4	11.5	28.6	15.8	58.3	90.3
Taiwan	7.6	2.5	1.9	9.4	6.1	4.8	33.5	24.4
Indonesia	–2.5	–1.6	–4.0	3.4	10.1	8.6	20.7	27.2
Malaysia	–3.4	–5.9	–8.4	11.0	19.4	18.8	43.0	51.6
Philippines	–3.8	–4.4	–3.7	7.1	13.1	19.4	14.6	37.9
Thailand	–5.1	–5.9	–8.1	13.1	18.4	18.8	20.9	35.0
Latin America[5]	–1.8	–2.9	–1.6	8.3	7.2	8.1	10.3	24.0
Argentina	–2.2	–3.3	–0.8	4.3	18.4	17.1	12.9	29.7
Brazil	–1.1	–0.2	–2.5	7.7	5.5	–2.8	7.4	14.0
Chile	–5.1	–1.5	0.2	7.5	8.6	12.5	23.3	28.4
Colombia	–1.7	–4.6	–5.6	9.3	–11.7	–0.3	12.8	13.7
Mexico	–3.2	–7.6	–0.3	11.9	11.8	24.5	9.8	48.2
Venezuela	1.7	4.3	2.0	1.9	8.8	5.4	25.7	49.4
Eastern Europe[5]	–1.1	–2.7	–2.9	11.9	22.1	20.4	16.4	74.9
Czech Republic	1.1	0.8	–3.2	15.6	11.3	11.8	23.6	95.1
Hungary	–2.6	–9.4	–5.7	3.1	27.8	16.7	25.3	162.5
Poland	–1.1	–1.0	–1.7	13.3	25.0	25.3	8.7	55.1
Russian Federation	0.2	–1.0	2.7	12.4	33.0	10.9	7.8	..
Africa	–2.3	–2.9	–3.3	1.5	– 0.4	4.2	16.4	24.6
Middle East	–0.8	–4.1	–3.4	–0.4	5.9	1.8	14.4	6.2

Note: Data for 1995 are partly estimated. Exports refer to merchandise exports.

[1] For China, 1982–93; for eastern Europe and the Russian Federation, 1984–93. [2] For eastern Europe, 1988–93; for the Russian Federation, 1990–93. [3] Exports as a percentage of total demand (GDP plus imports) in 1989; for the Russian Federation, 1990. For eastern Europe and the Russian Federation, trade in convertible currencies only. [4] Change in exports as a percentage of the change in total demand 1989–95, at constant prices (for eastern Europe and the Russian Federation, 1990–95). [5] Average of the countries shown, calculated using weights based on the dollar value of 1990 merchandise trade (for export volume growth) and on 1990 GDP and PPP exchange rates (for export shares of demand). [6] For Hong Kong, the balance of goods and non-factor services is shown; export volume growth refers to domestic exports only. Table III.2

the calculation of its reference exchange rate at the end of 1995 to permit greater real appreciation.

Devaluation improves trade performance ...

Correcting exchange rate overvaluation has helped to foster an orientation towards international markets and has contributed to a rapid reduction of sizable trade deficits in several countries. The sharp depreciation of the Mexican peso boosted export growth and helped to cut imports, so that a very large trade deficit was eliminated in less than a year. In India, the restoration of

competitiveness lost during the years of exchange rate stability allowed the strong growth of exports to continue. Substantial depreciations in the early transition years helped eastern Europe to develop new export markets to make up for the loss of directed Comecon trade. The 1994 devaluation of the CFA franc restored competitiveness and, together with more buoyant commodity prices, reduced large trade deficits. Output in this region expanded by close to 4% last year, more than double the average annual rate recorded in the preceding 15 years.

... but the feed-through into prices is large and rapid

Nevertheless, there are two reasons why discrete exchange rate adjustments and, a fortiori, a change in regime towards greater flexibility have been used with caution in the developing world. One is that depreciation tends to have a sizable and immediate impact on domestic prices. Table III.3 shows that prices in emerging economies are very sensitive and respond quickly to changes in exchange rates. In Mexico, the depreciation of the peso raised the rate of increase of consumer prices by 45 percentage points, fully two-fifths of the rate of depreciation. The acceleration in the rate of depreciation of the Hungarian forint from mid-1994 led to a sharp jump in the rate of price inflation, although an import surcharge also contributed to this. Conversely, a slower rate of depreciation of the Polish zloty led to a sharp drop in the rate of inflation.

In industrial countries, the exchange rate/price link appears to be much less close or less immediate. For example, despite a high import intensity of output, the European countries whose currencies depreciated sharply in the wake of the

Exchange rates and inflation in selected countries

	Depreciation[1]	Wholesale prices[2]	Consumer prices[2]	*Imports as a % of total expenditure*[3]
	percentage changes at annual rates			
Mexico				
Nov. 93–Nov. 94	8.9	8.1	7.0	
Nov. 94–Nov. 95	122.6	58.1	52.0	*15*
Difference	*+113.7*	*+50.0*	*+45.0*	
Hungary				
July 93–July 94	12.2	13.6	19.5	
July 94–July 95	34.0	30.2	29.2	*26*
Difference	*+ 21.8*	*+16.6*	*+ 9.7*	
Poland				
Jan. 93–Jan. 95	24.5	25.5	31.8	
Jan. 95–Jan. 96	4.3	13.8	20.4	*19*
Difference	*– 20.2*	*–11.7*	*–11.4*	
Memorandum item:				
Italy, Spain and Sweden[4]				
Aug. 91–Aug. 92	1.7	0.1	4.3	
Aug. 92–Aug. 93	27.5	5.4	4.3	*20*
Difference	*+ 25.8*	*+ 5.3*	*0.0*	

[1] Change in local currency per unit of foreign currency. For Mexico, against the US dollar; for Hungary and Poland, against the relevant baskets (respectively 70% ECU, 30% US dollar and 55% ECU, 45% US dollar); for Italy, Spain and Sweden, against the Deutsche Mark. [2] Lagged by one month. [3] 1994. [4] Unweighted average.

Table III.3

1992 exchange rate crisis experienced only a small rise in inflation rates. One possible reason for this difference is that the exchange rate in countries with a record of high or variable inflation is taken as an "inflation signal" in the setting of domestic prices. This is often reinforced by formal indexation mechanisms. Another factor is the elasticity of supply in the tradables sector: spare capacity and the greater diversification of the larger European economies made it possible to expand output, rather than raise prices, in response to devaluation. Finally, the stance of domestic macroeconomic policies has a major effect on inflation in the non-tradables sector.

Supporting policies essential

The second reason for caution is that a depreciated exchange rate or band, or even a general move towards greater exchange rate flexibility, can create doubts in the financial markets about the true intent and resolve of the authorities. This is especially likely where the commitment to macroeconomic stability is too recent to command widespread credibility by itself. A number of foreign exchange market crises last year demonstrated that lax fiscal policies, political difficulties in sustaining adjustment policies and financial system fragility can each undermine confidence in the official commitment to stability even when interest rates are kept high. The steep decline in the value of the Mexican peso in the autumn of 1995 reflected market doubts about the political sustainability of tight macroeconomic policies, particularly in the face of the unfolding banking crisis, which was itself magnified by the falling peso. In India the new policy of managed floating soon ran into turbulence because of worries about the size of the public sector deficit and uncertainty about how far the Government wanted the rupee to fall. The South African rand also experienced pronounced weakness in early 1996. Although in part a correction of the earlier real exchange rate appreciation, the extent of the depreciation also reflected growing concern about South Africa's large fiscal deficit (5½% of GDP in the last financial year) and uncertainty about the implementation of capital account liberalisation.

Major developments in individual countries

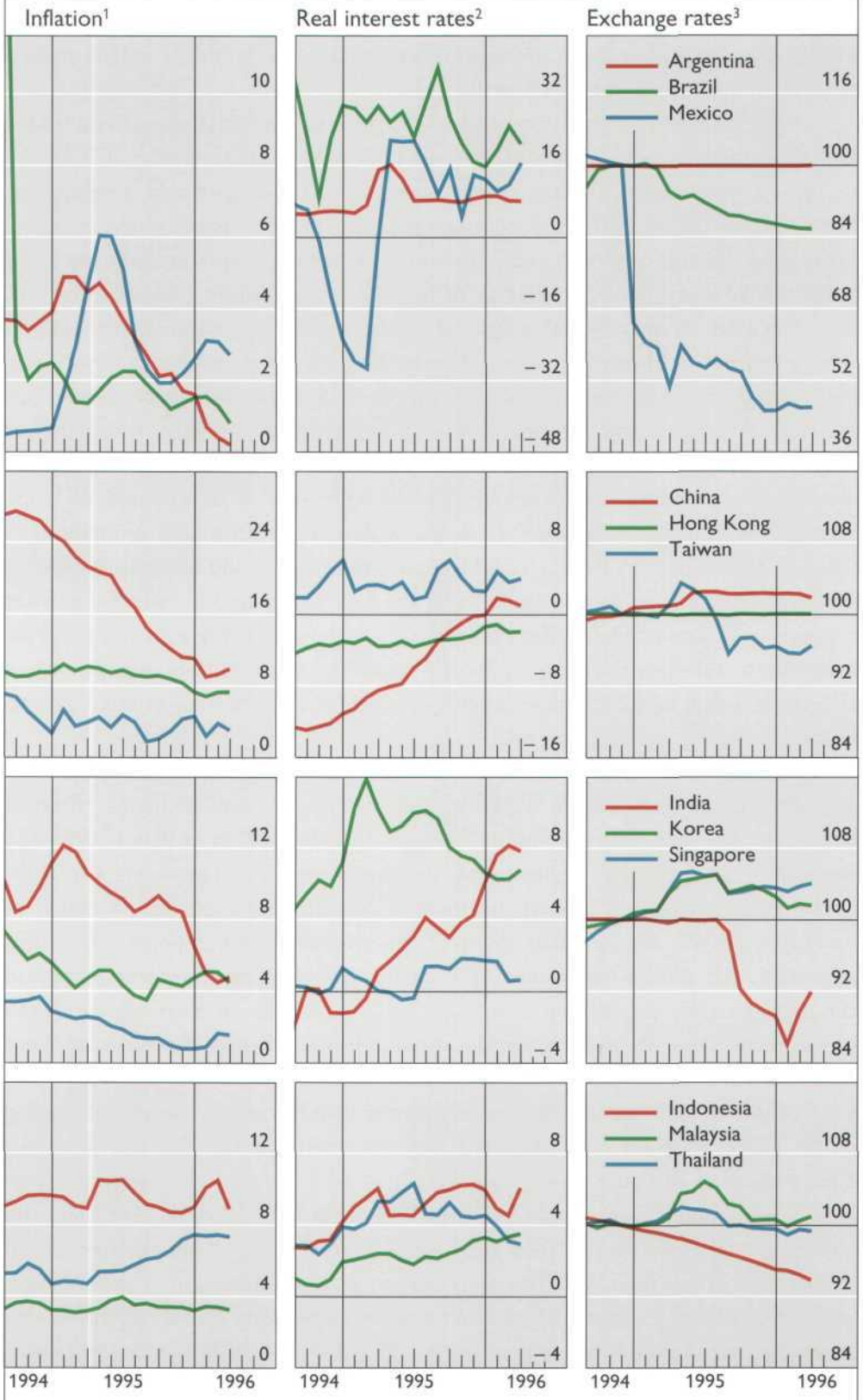
Mexico and Argentina

Crisis in early 1995 ...

In the wake of the run on the peso that began in late 1994, the *Mexican* authorities faced in 1995 the difficult task of rapidly restoring internal and external balance without the exchange rate anchor that had played such a central role in the stabilisation policies begun in the late 1980s. Moreover, the country's foreign exchange reserves were largely borrowed, heavy short-term dollar-linked debt had to be repaid and access to international capital markets had dried up. The exchange rate continued to fall in the early months of 1995 as the implementation of a stabilisation programme was delayed and doubts about the scale of external financial assistance persisted (Graph III.2). However, the early elimination of the trade deficit combined with a jump in short-term interest rates (to over 70% in March) helped to stabilise the currency. The markets were further reassured by the announcement of foreign official financial assistance on an unprecedented scale: net official funds drawn during the year amounted to about $26 billion. Just under $17 billion of dollar-linked tesobonos held by non-residents were redeemed during 1995 and gross foreign exchange reserves rose by $10 billion.

... followed by a slow return to greater stability

Inflation, real interest rates and exchange rates



[1] Annual percentage increase in consumer prices, except for Brazil and Mexico, where inflation is measured by the three-month moving average of monthly increases. [2] Short-term interest rates deflated by the annual rate of inflation, except for Brazil and Mexico, where they are deflated by the average annualised increase in subsequent months. [3] US dollars per unit of domestic currency, end-November 1994=100.

Graph III.2

The peso, which had fallen as low as 7.6 pesos to the dollar in March 1995, recovered and stabilised at between 6.0 and 6.5 from April to September and the monthly rate of inflation, which had risen as high as 8% in April, slowed to 2% by the summer. Interest rates were reduced more gradually and remained positive in real terms for much of the year.

A deep recession ...

Tight policies and the substantial exchange rate depreciation cut real wages and depressed domestic demand. By mid-1995, output was running 10% below its level a year earlier, private capital spending had collapsed and employment had declined sharply. In these circumstances, many bank loans became non-viable, prompting the authorities to adopt a number of schemes to help borrowers and lenders alike and so reduce the risk of banking system failure (see Chapter VII).

... and banking system problems ...

The absence of any reliable signs of an end to the deep recession by autumn 1995 and worries about the scale of the banking system problems raised doubts in financial markets about how far the firm anti-inflation policy could be maintained. Accordingly, the peso came under renewed pressure, falling to just over 8 pesos to the dollar in early November, when higher interest rates and intervention provided some respite for the currency. A new round of price increases accompanied the peso weakness, with monthly consumer price inflation rising to about 3½% by the turn of the year. The trough of the Mexican recession, however, appears to have passed, inflation has eased again, and the current account is in broad balance. Access to international capital markets has been re-established, although the country faces a heavy schedule of debt repayments in the years ahead; in such circumstances, retaining the confidence of international financial markets remains essential.

... cause turmoil in late 1995 ...

... but recovery now seems under way

Contagion affects Argentina ...

The country worst affected by the fallout from the Mexican crisis was *Argentina*. Large-scale capital outflows reduced the foreign exchange reserves from over $14 billion at the end of 1994 to under $9 billion in March 1995 and domestic currency bank deposits fell by about one-fifth. Defending the fixed exchange rate required a sharp increase in real interest rates to over 15% in early spring 1995. A substantial easing of reserve requirements helped the banks cope with the sudden withdrawal of deposits. The impact of reserve losses on the money supply was further cushioned by an expansion of dollar-denominated government paper as backing for the monetary base. Finally, the reserves were rebuilt by substantial borrowing, with foreign official creditors providing over $3½ billion in 1995 and public sector issuance of international bonds amounting to $5 billion. Interest rates declined, but remained around 10% in real terms during much of the year.

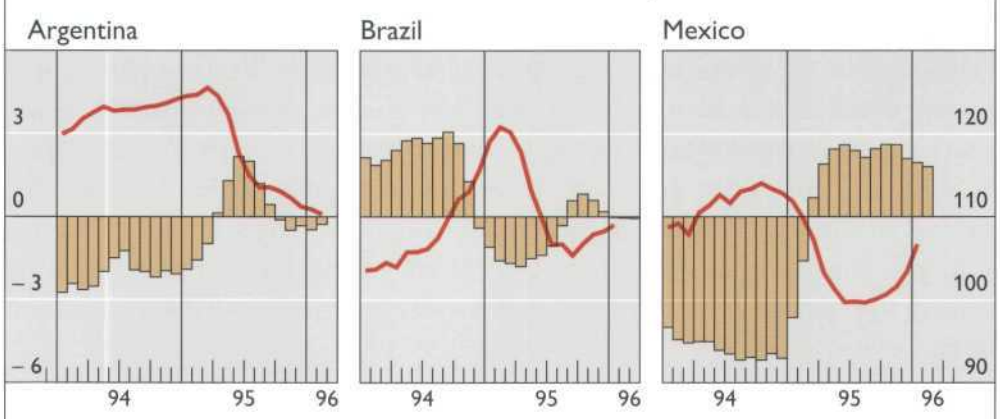
... resulting in recession ...

The economy contracted sharply in 1995, with GDP falling by 4½% and the unemployment rate rising steeply. By early 1996, inflation had declined to an annual rate of less than 1%. The combination of deep recession, a depreciation of the real effective exchange rate and stronger commodity prices, together with booming demand in Brazil up to early 1995, led to sizable trade surpluses. As the Brazilian market slowed, however, the trade surplus disappeared again (Graph III.3).

... and requiring strict fiscal discipline

In the context of an IMF stabilisation programme, the non-financial public sector budget deficit was held at 1% of GDP in 1995 despite the recession. This was supported by an increase in value added tax, proceeds from privatisation and

Trade balances and industrial output in Latin America



[1] Three-month moving averages. [2] As a percentage of 1994 GDP. Graph III.3

a tax amnesty. The official target for 1996 is to reach budget balance, including revenue from the sale of assets. To this end, the Administration was given greater discretionary power to increase taxes and cut spending.

Brazil

The Real Plan ...

Brazil's stabilisation policies, which led to the introduction of the Real Plan in July 1994, have been more successful than previous currency reforms. Three factors may explain this success. First, the measures taken to deal with inertial inflation at the start (by building acceptance of a unit of account linked to the exchange rate and by eliminating backward-looking indexation) avoided recourse to price and wage controls. Secondly, a balanced budget position supported the effective introduction of the reform. Finally, very high interest rates attracted capital inflows, leading to a substantial increase in the foreign exchange reserves. At the same time, some flexibility in the exchange rate was retained, allowing modest nominal appreciation in the initial stages and, from early 1995, controlled depreciation at a rate roughly in line with inflation as measured by the wholesale price index.

... at first overstimulates demand ...

Paradoxically, domestic demand expanded very rapidly despite high real interest rates in the initial reform stages. The main reasons were the greater stability of real household income brought about by the Real Plan and an inadequate realisation by consumers of just how high real interest rates had become. A very strong expansion of private spending followed, financed in large part by consumer credit. Moreover, between the first halves of 1994 and 1995, imports nearly doubled in dollar terms, leading to a trade deficit (Graph III.3).

... causing imbalances

Capital outflows provoked by the onset of the Mexican crisis sharply reduced the country's international reserves. To cope with widening external and internal imbalances, quotas and higher tariffs were imposed on imports and the exchange rate was allowed to drift down. In addition, monetary policy was tightened both through the use of quantitative controls and through higher interest rates (with real rates rising to well over 30%).

By mid-1995, these measures had succeeded in cooling domestic demand and in limiting the trade deficit. Once again, however, high interest rates and a relatively stable near-term exchange rate attracted heavy short-term inflows, leading to the imposition of further restrictions. By early 1996, the monthly rate of inflation had been brought down to less than 1% – a considerable achievement in a country so accustomed to hyperinflation. Nevertheless, keeping inflation low cannot indefinitely depend on maintaining real interest rates above 15%. It will also require sustained fiscal discipline and structural reform. After a small surplus in 1994, a budget deficit of almost 5% of GDP emerged in 1995. The enduring success of the Real Plan will depend on the Administration's success in dealing with the underlying issues such as the reform of the tax and social security system, the responsible control of state government finances and the privatisation of public enterprises.

A tight monetary policy stance ...

... requires fiscal support

Other Latin American countries

Growth remained strong last year in most other Latin American countries. With a healthy fiscal position, a high saving rate and moderate inflation, *Chile* recorded a further year of vigorous yet balanced expansion. Nevertheless, to avoid overheating, monetary policy was tightened and real interest rates rose at the end of 1995. The *Colombian* economy grew at about the same rate as in 1994 (5½%) and inflation fell slightly to 21%, close to the rate that has prevailed almost continuously since 1973. But both the budget and current account deficits widened. The greater buoyancy in the oil sector contributed to a modest rebound in *Venezuela* last year. The public sector deficit was still very large (over 6% of GDP) and the aftermath of the 1994 banking crisis made it difficult for monetary policy to deal effectively with inflation. Although rising, real interest rates remained significantly negative at the end of last year. In April 1996, a new comprehensive stabilisation programme was announced: the exchange rate and interest rates were freed and there were sizable increases in indirect taxes and petrol prices.

Chile

Colombia

Venezuela

East Asia

The stabilisation programme pursued in *China* since mid-1993 succeeded last year in moderating the pace of growth somewhat and in bringing down inflation. Administrative controls and restraints on credit availability slowed capital spending markedly (Table III.4). More restrictive monetary policy was implemented through a reduction in central bank loans to financial institutions and tighter credit ceilings, as well as by allowing interest rates to become positive in real terms by late 1995 as nominal rates were not reduced in line with falling inflation. In addition, the introduction of special premia on longer-term household savings deposits increased the real returns to holding bank deposits. Although slowing considerably, exports continued to grow faster than imports, leading to a widening of China's trade surplus to over $23 billion. The tendency for the domestic currency to appreciate in nominal terms and the continuing relatively high rate of inflation caused an increase in the real effective rate of 8% in 1995. This brought the total appreciation since the exchange rate unification of January 1994 to 25%, reversing much of the depreciation that had occurred in the early 1990s.

Stabilisation in China cuts inflation sharply ...

Indicators of demand pressure in 1995

	Growth of real GDP	Current account balance as a % of GDP	Growth of real fixed investment	Consumer price inflation[1]
	1995 minus 1990–94 average			
China	0.1	1.2	– 6.3	11.1
India	2.0	–0.2	7.3	6.5[2]
Other Asia[3]	0.8	–1.8	2.3	6.8
Hong Kong	– 0.7	–7.8	– 2.4	7.3
Korea	1.4	–0.8	4.0	4.7
Singapore	0.5	8.3	– 2.9	0.8
Taiwan	– 0.2	–2.4	– 2.5	4.6
Indonesia	1.2	–1.8	3.8	9.0
Malaysia	0.8	–3.4	3.1	3.2
Philippines	3.0	0.4	7.5	10.9
Thailand	– 0.3	–1.6	1.6	7.4
Latin America[3]	– 2.6	0.5	– 7.8	30.0
Argentina	–10.6	1.0	–32.7	1.6
Brazil	3.3	–2.5	15.3	22.0
Chile	2.1	2.2	3.1	8.2
Colombia	1.3	–5.1	– 3.5	19.4
Mexico	– 9.9	5.9	–33.7	52.0
Venezuela	– 1.7	–0.4	– 3.5	56.6

Note: Data for 1995 are partly estimated.

[1] December 1995/December 1994. [2] Wholesale prices. [3] Average of the countries shown, calculated using weights based on 1990 GDP and PPP exchange rates. Table III.4

... but several problems remain unresolved

As the year progressed, however, credit restraints appear to have become less effective. Limits on the growth of credit covered by the state plan were increasingly circumvented by a rapid expansion of non-plan bank credit and by a substantial build-up of inter-company debt (which is estimated to have risen by one-quarter to about 15% of GDP last year). Moreover, only slow progress has been made in strengthening the public finances and in reforming a large state-owned enterprise sector that is still not subject to binding budget constraints. Losses by state-owned industrial companies are reported to have increased by one-third to over $10 billion last year. Subsidies to cover these losses and a build-up of enterprise tax arrears kept the central government deficit large, despite a series of measures to widen the tax net and to raise the central government's share of revenues.

Hong Kong and Taiwan

Private consumer and capital spending weakened in both *Hong Kong* and *Taiwan*. The slowdown in Hong Kong was associated with the fall in construction spending and with stabilisation measures initiated in late 1994. In Taiwan, problems in the financial sector and a weak real estate market depressed spending. Both fiscal and monetary policies were eased. The central government deficit rose to 5% of GDP, while money growth was stimulated through interest rate reductions and lower reserve requirements. Despite a large current account surplus, political tensions provoked capital outflows: official reserves fell and the exchange rate came under downward pressure.

Faced with an acceleration in inflation in 1994, the monetary authorities in the *Republic of Korea* shifted to a restrictive stance; by early 1995 interest rates had risen sharply. As the economy cooled from the middle of the year and inflation fell, monetary policy was progressively eased. The economic slowdown moderated import growth and reduced the current account deficit.

Korea

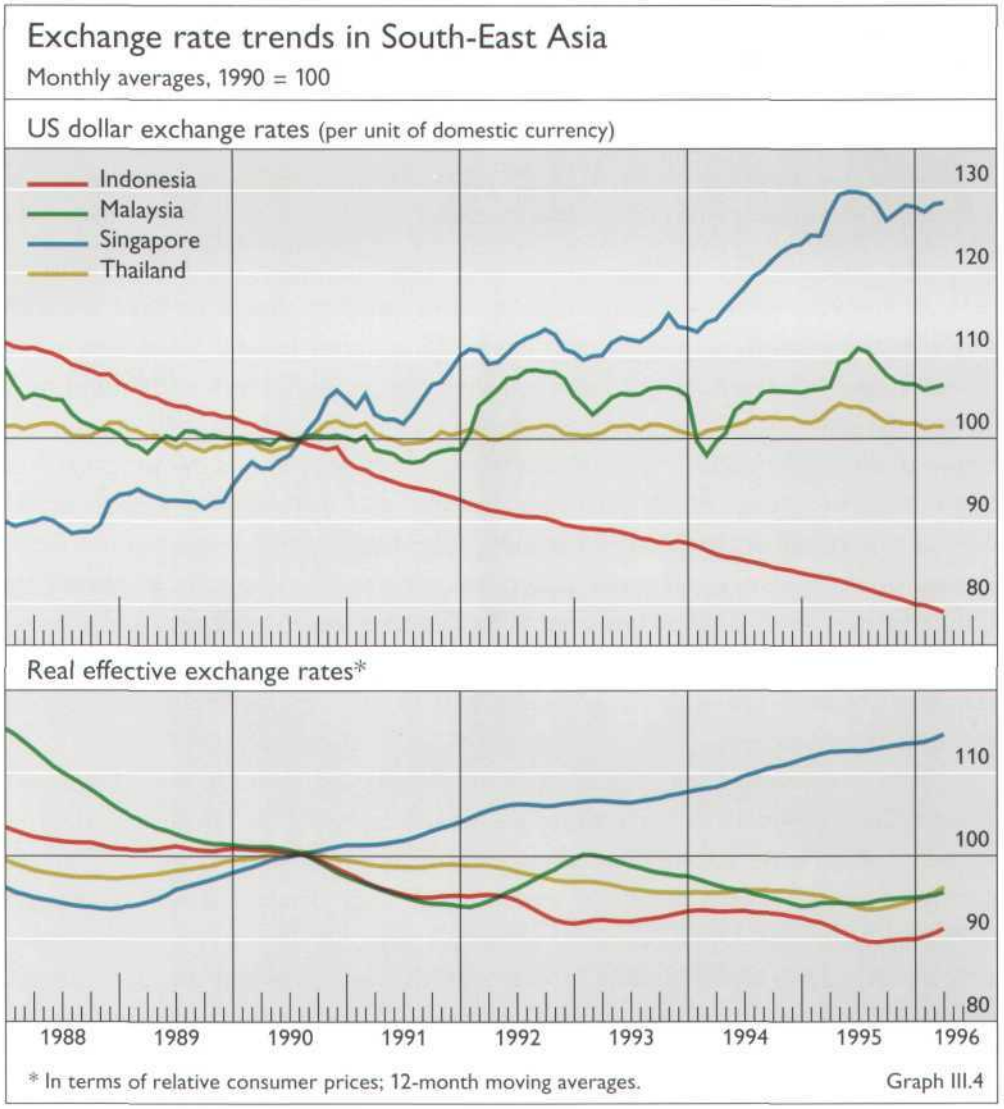
South-East Asia

In spite of heavy capital inflows and rapid industrialisation, the South-East Asian countries have maintained since the late 1980s exchange rates vis-à-vis the US dollar that either have been relatively stable (Thailand and Malaysia) or have changed at remarkably steady rates (the Singapore dollar appreciating and the Indonesian rupiah depreciating) (Graph III.4, top panel). With the exception of Singapore, real exchange rates (defined in terms of relative consumer prices) have also been quite stable despite rapidly rising productivity. Only in Singapore has a policy of steady exchange rate appreciation translated rising productivity and a large current account surplus into low domestic inflation – below 2% last year – while growth has remained strong.

Exchange rates rather stable ...

Exchange rate trends in South-East Asia

Monthly averages, 1990 = 100



* In terms of relative consumer prices; 12-month moving averages.

Graph III.4

... and growth rapid in South-East Asia

Last year's very rapid growth in Indonesia, Malaysia and Thailand was again led by buoyant exports and an investment boom, with spending on large-scale infrastructural projects rising sharply. Although needed to relieve the severe bottlenecks created by several years of rapid industrialisation, such investment has only an indirect and long-term impact on export growth.

Large external imbalances ...

All three countries at present face shortages of capacity and skilled labour. Excess demand pressures have been mirrored by the very sharp deterioration in their current account balances. The current account deficits of Malaysia and Thailand rose to around 8% of GDP. With much of the demand pressure spilling into the external account, domestic price inflation has remained rather moderate, although it accelerated appreciably in the course of the year in Thailand.

... and rapid credit growth lead to monetary policy tightening

The associated very rapid growth of credit to the private sector (see Table VII.6 in Chapter VII) led to a tightening of monetary policy, although the degree and timing of restraint varied between the countries (Graph III.2). Interest rates in Thailand were increased in early 1995 in order to protect its currency in the wake of the Mexican crisis. When capital inflows resumed as the year progressed, direct measures were adopted to limit credit growth and reduce the upward pressure on interest rates. Manufacturing production slowed and private investment lost some of its earlier momentum, but heavy inflows of foreign funds fuelled liquidity. At the end of the year, the authorities announced a further reduction in the targeted rate of growth of domestic credit. In addition, further steps were taken to stem capital inflows. In Indonesia, a more gradual tightening of monetary policy was implemented. In early 1996, reserve requirements were raised and more direct measures were taken to limit continuing strong credit growth. In Malaysia monetary conditions were tightened significantly only from late 1995. With the ringgit appreciating modestly up to mid-year, interest rates were not increased to counteract rising credit growth. When the currency fell back, the first line of defence was exchange rate intervention, with interest rate increases following only later.

India

Policies shift to restraining credit growth ...

Structural reform in India has fostered strong growth, with industrial production expanding at an annual rate of over 10% since mid-1994. The inflationary pressures associated with rapid output and investment growth led the monetary authorities to move towards greater restraint from late 1994. The Treasury bill rate rose steadily from under 8% in early 1994 (when it was negative in real terms) to 13% in October 1995, when a ceiling was effectively imposed on rates by central bank absorption of bills left unsold at auction. But higher interest rates did not prevent an acceleration in overall credit growth in 1995. In addition to a very rapid increase in credit to the commercial sector, there was a sharp rise in low-cost financing of the government sector by the central bank. Nevertheless, wholesale price inflation fell appreciably, slowing to just 6½% by the end of the year, with a cut in import tariffs and excise taxes and stability in administered prices making a significant contribution to the slowdown.

... and allowing greater exchange rate flexibility

The near-fixed exchange rate of the rupee, which had led to a marked loss of competitiveness, was replaced by a regime of managed floating in September 1995. By the end of the year, the rupee had depreciated against the dollar by

over 10% and in real effective terms by almost 7%. At the start of 1996 the rupee again came under heavy pressure and by early February had lost a further 7% before rebounding in response to Reserve Bank intervention and measures to increase the cost of trade financing. Proximate causes for the currency's weakness were election-related uncertainty and fears of a reintroduction of restrictive exchange control measures. Yet a more fundamental cause of financial market worries was the continuing large public sector deficit: although rapid growth has boosted tax receipts, the government deficit has been running at almost 6% of GDP and the rest of the public sector has substantial deficits. Moreover, slow progress in implementing reform in a number of sensitive areas (notably restructuring, including privatisation, of public sector enterprises, eliminating restrictive practices in some sectors of the labour market, and deregulation in the energy and transport sectors) may also have weakened confidence in financial markets.

Recurrent pressure on the rupee

Eastern Europe

Rapid export growth has supported expansion in a number of economies of eastern Europe. In the Czech Republic and Poland, this was reinforced last year by the strongest rise in domestic demand since the beginning of the transition process, while in Hungary the beginning of macroeconomic adjustment led to a marked contraction in both public and private consumption. GDP grew by 7% last year in Poland and by just under 5% in the Czech Republic, but by only 1½% in Hungary. Consumer price inflation in the Czech Republic slowed somewhat last year; inflation rose in Hungary but fell in Poland. This pattern partly reflects significant differences in exchange rate policies.

Strong export growth

A strong expansion of domestic demand in the *Czech Republic* last year boosted output. Given the country's good economic performance and prospects, the combination of a fixed exchange rate and high nominal interest rates triggered heavy capital inflows in 1995. This led to a doubling of the foreign exchange reserves and, despite sterilisation and other measures to limit liquidity expansion, to a continued rapid rise in the rate of growth of broad money. A liberalisation of capital account transactions in October 1995 allowed resident investment abroad; but high nominal interest rates continued to attract sizable inflows of capital. This pressure led the authorities to widen the exchange rate band from ± ½% to ± 7½% at the end of February 1996. A sharp initial fall in the exchange rate was quickly reversed and by mid-April the market rate was around the central parity. The stable nominal exchange rate during the last five years has helped to keep inflation lower than in most other countries in the region; a balanced fiscal position has supported this policy. Nevertheless, the strong expansion of domestic demand has also led to a marked widening in the trade deficit.

Czech Republic

Poland has also had to cope with foreign currency inflows, mainly arising from the very strong growth of exports, including unrecorded purchases by foreign tourists. With inflation running well above that in trading-partner countries, the fixed exchange rate adopted at the beginning of the reform process gave way in October 1991 to a crawling peg characterised by a pre-announced rate of depreciation set somewhat below the prevailing consumer price inflation

Poland

differential. In the years that followed, the rate of downward crawl was reduced in line with falling inflation, although an occasional step devaluation also occurred. This policy preserved Polish competitiveness, contributing to an 85% rise in the dollar value of recorded merchandise exports to the industrial world between 1992 and 1995.

The authorities intervened to resist upward pressure on the exchange rate and reserves rose rapidly in consequence. However, further heavy inflows in the early months of 1995 led in May to a widening of the effective exchange rate band. Despite a subsequent appreciation of the zloty, capital inflows continued. Accordingly, the central parity was appreciated by 6½% in December, and the downward crawl was reduced to 1% per month from January 1996. Sharp real appreciation of the currency has been avoided as inflation has continued to fall, although it remains relatively high.

Hungary

The need to correct both a large general government deficit (7½% of GDP in 1994) and a widening external imbalance dominates economic policy-making in *Hungary*. Some fiscal adjustment was achieved last year, and the announced measures are intended to continue this process in 1996: the official projection is for a deficit of less than 4% this year. A sizable real depreciation of the forint and an import surcharge introduced in March 1995 led to a sharp acceleration in inflation (Table III.1). Real wages fell by 12% and consumption and imports weakened. With the dollar value of exports to industrial countries rising by almost 17%, the combination of a narrowing current account deficit and privatisation-related capital inflows (over $3 billion in 1995) led to a $5 billion rise in official reserves. Nevertheless, the high and rapid pass-through of exchange rate depreciation to domestic prices underlines the need for continued tight policies.

Russia

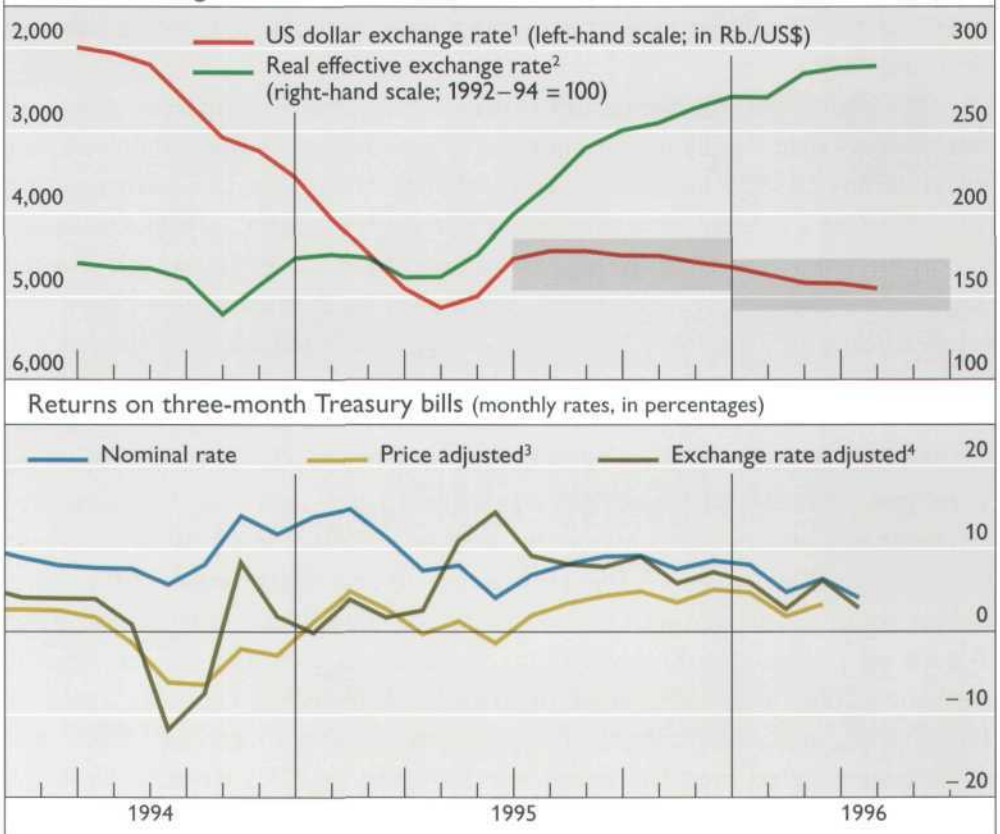
Restrictive fiscal and monetary policies ...

Russia faced a financial crisis at the beginning of 1995. The foreign exchange reserves were virtually exhausted and inflation had accelerated to a monthly rate of nearly 18%. The authorities responded by planning deep cuts in real federal spending, with the aim of reducing the budget deficit by about 5% of GDP. Moreover, increased reliance was to be placed on the issuance of short-term government securities to finance the budget deficit; recourse to central bank credit was to be curtailed. Although the initial market response was sceptical, this redirection of policy (supported by the announcement of a $6.8 billion loan from the IMF) eventually halted the slide in the rouble.

A sizable fiscal contraction was indeed achieved, helped by the temporary expedient of delaying the payment of wages to government employees. In addition, the monetary squeeze, which included a sharp rise in reserve requirements as well as high rates of return on rouble-denominated Treasury bills, provided Russian banks and others with a powerful incentive to transfer assets from dollars into roubles. Once expectations of near-term exchange rate stability began to take root, capital inflows increased and domestic flight capital returned. Accordingly, the rouble appreciated, giving the central bank an opportunity to rebuild depleted reserves. Partly to contain upward pressure on the exchange rate, and partly to make an anti-inflation anchor of the exchange

... and the adoption of an exchange rate band ...

The rouble and interest rates



[1] The shaded area represents the exchange rate band set by the monetary authorities. [2] In terms of relative consumer prices. [3] Adjusted for prices during the three subsequent months. [4] Adjusted for the current percentage change in the Rb./US$ exchange rate.

Graph III.5

rate, the authorities announced a band for the rouble for the second half of 1995, followed by a similar, but moderately depreciated, band for the first half of 1996 (Graph III.5). The value of the rouble doubled in real effective terms, albeit from a heavily depreciated level.

... help macroeconomic stability ...

The implementation of major macroeconomic adjustment reduced inflation to a monthly rate of under 3% by early 1996, the lowest rate since 1991. At the same time, the decline in output in 1995 and the beginning of 1996 was much smaller than in earlier years, with exports and residential construction boosting demand. Whether these more favourable trends can be sustained will depend on maintaining progress towards creating an environment of economic and financial stability. Much remains to be done to further structural reform, notably through effective privatisation. To support a medium-term programme aimed at macroeconomic stability and structural reform, the IMF approved a conditional credit of about $10 billion in March 1996.

... but tasks remain

Increasing saving rates

Importance of a high saving rate

Recent experience has underlined the central importance of national saving and investment rates in promoting growth. Moreover, a greater reliance on domestic, rather than foreign, saving reduces the risk of a financial crisis triggered by capital

outflows. Finally, financial systems in countries with high rates of saving are likely to be more resilient to economic shocks.

Markedly diverging saving rates in part due to ...

The sizable differences in saving and investment rates among the major regions of the developing world seen during the 1980s widened in the first half of the 1990s. With the exception of India and the Philippines, saving rates in Asia have risen to well above 30% of GDP. Saving rates in most of Africa and Latin America, however, are only around 20% of GDP (Table III.1) and insufficient capital spending has limited growth in consequence. One notable exception is Chile, where saving rates have reached Asian levels in recent years. These differences have been equally pronounced on the investment side, with investment rates in Asia exceeding those in the rest of the developing world by a wide margin.

... the pace of financial reform ...

Structural reforms, including major liberalisation of the financial sector, have stimulated not only capital spending but also private consumption, often fuelled by a rapid expansion of bank credit (see Table VII.6 in Chapter VII). How financial liberalisation affects aggregate saving is ambiguous. On the one hand, the easing of borrowing constraints on households may in the short run lower aggregate saving; on the other hand, a wider menu of financial instruments may encourage saving. In Asia, a mostly gradual process of liberalisation has been associated with higher saving. But elsewhere saving rates have fallen. Indeed, an appreciable decline in saving rates was one of the transitional difficulties of the Latin American stabilisation and liberalisation programmes of the early 1990s, as it had been for reforms in many industrial countries in the early 1980s. The implementation of the Real Plan in Brazil was likewise accompanied by a weakening of saving. Saving rates also fell in many countries outside Latin America. South Africa's saving rate has fallen well below the level needed to generate higher employment. In eastern Europe, not only did saving rates drop sharply on liberalisation (a normal reaction to the end of forced saving), but they have also remained low as the transition has progressed.

... and public sector finances

Since the mid-1980s, most of the developing world has sought to increase public sector saving (or lower dissaving). Significant medium-term fiscal consolidation in several Latin American economies has reduced the high rates of government dissaving recorded in the early and mid-1980s. Rigorous policies in some Asian economies (including building up large surpluses in state pension schemes) have given rise to very high rates of public sector saving.

In general, countries with high rates of public saving also have high rates of private saving. Countries with fiscal surpluses in the 1990s generally have high, and even rising, private saving rates (Chile, Korea, Malaysia before 1995, Singapore and Thailand). Conversely, countries with relatively low private saving rates tend to have much weaker fiscal positions (Brazil, Colombia, India, South Africa and Venezuela). Only in Argentina did a low private saving rate coincide with balanced government finances, but even there it has risen appreciably.

Although private saving rates are largely determined by structural factors (such as demographic trends) or slow-moving variables (such as the level of per capita income), public policy can still stimulate private saving. Reforming social security policies is an important aspect of this. The establishment of a compulsory fully-funded pension scheme is perhaps the most successful example. Such a

Fully-funded pension schemes ...

scheme, providing funding for a broad-based social security system, was introduced in Singapore as early as in 1955; Chile developed its scheme in the early 1980s. In Argentina, Colombia and Malaysia similar schemes have been established (sometimes coexisting with pay-as-you-go systems) in the more recent past. Pension reform is planned in Brazil and Mexico and is high on the agenda of some eastern European countries. Chile, Malaysia and Singapore have developed the most comprehensive pension schemes; annual saving generated by the schemes in Malaysia and Singapore accounts for about 10% of GDP.

... could promote private saving ...

Because of their largely illiquid character, compulsory retirement saving schemes are not likely to displace fully other, more liquid forms of household saving. Moreover, low-income groups participating in the compulsory saving schemes may have little discretionary saving to displace. An additional benefit is that, if the institutional investors who manage the pension funds are not overly restricted in their investment decisions (e.g. by having to buy government bonds), the development of domestic financial markets will be promoted. Investments by the Chilean pension funds, for example, have contributed to the development of the local corporate bond and equity markets and have supported the privatisation programmes. More generally, the creation of new saving instruments and financial market development in a stable macroeconomic environment could in turn further stimulate saving.

... and financial market development

Financial reform should in any case ensure that available savings are efficiently utilised. Of equal importance in ensuring the effective use of savings is a robust financial system, an important subject explored further in Chapter VII.

IV. Monetary policy in the industrial countries

Highlights

Monetary policy was eased in the major industrial countries last year, as evidenced by lower short-term interest rates and faster growth of the broad monetary aggregates, in the light of continuing progress towards achieving price stability and a slowdown in economic activity.

In the United States, the series of interest rate increases initiated in early 1994 came to an end as the economy showed signs of slowing in the spring of 1995. Policy was relaxed in July and December 1995 and again in January this year to support activity. In Japan, the stance of policy was eased significantly as the central bank took decisive measures to restart the modest expansion that had begun in 1994 but stalled in the first half of 1995. The discount rate was cut twice, from 1.75% at the beginning of the year to 0.5% by the early autumn. Reflecting the increased importance attached to the management of market interest rates as an instrument of monetary policy, short-term market rates were guided below the discount rate.

Policy was also generally relaxed in the countries participating in the European exchange rate mechanism (ERM), against a background of falling inflation, firm exchange rates, rising unemployment and, in Germany, M3 growth considerably below target. However, in the spring and autumn, policy was tightened temporarily in some ERM countries in response to exchange market pressures associated with movements in the dollar and concerns about budgetary policy, so as to demonstrate the authorities' commitment to maintaining exchange rates at or near their central parities.

In countries where monetary policy is guided by explicit or implicit targets for inflation, policy continued to be tightened in the first half of 1995 to counter a build-up of inflationary pressures. This tightening, together with the general slowing of economic activity, led to a more favourable outlook for inflation and to a relaxation of monetary policy in the second half of the year. Although inflation in these countries generally remained within the target ranges, it has also been moderate elsewhere. It is therefore too early to judge whether the announcement of formal inflation targets has had an impact on the inflation process.

Monetary policy in the three major economies

Price stability the primary objective of policy

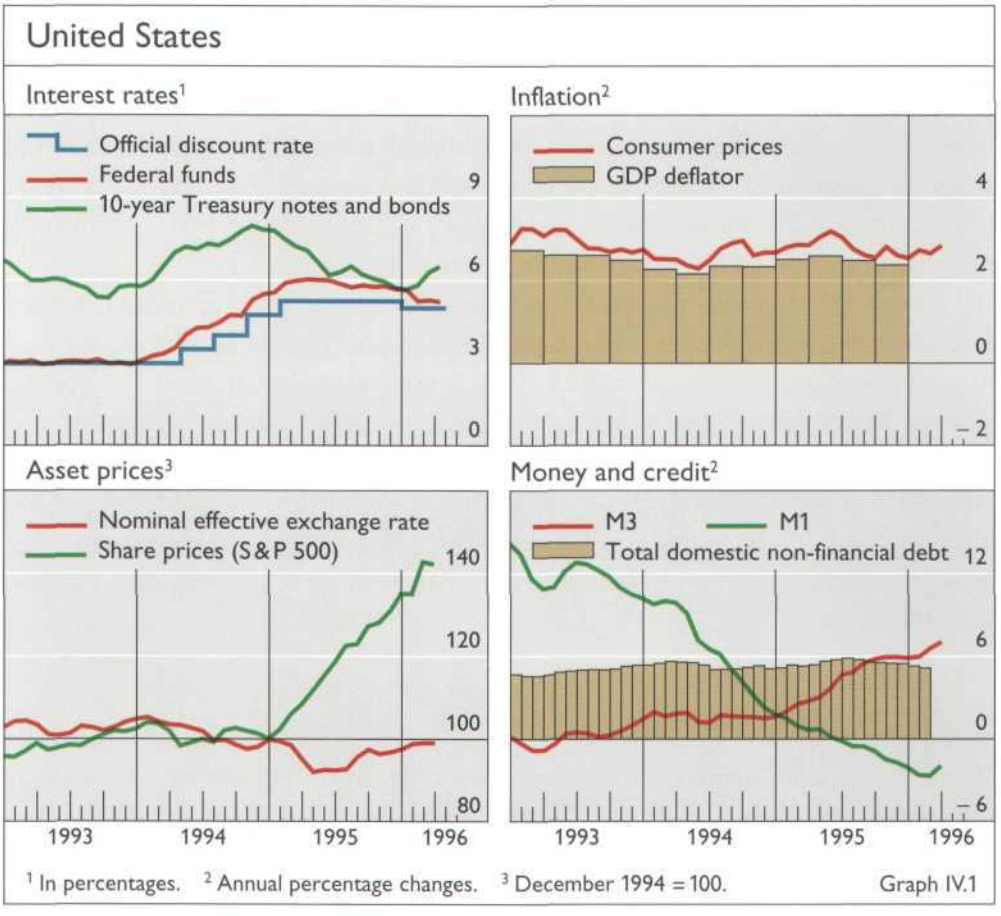
There is general agreement among the three major countries, as well as elsewhere, that price stability is the primary objective of monetary policy. The main differences in the operating frameworks of the three countries concern the transparency of the objective and whether the authorities use intermediate

objectives in the conduct of policy. In Germany, the Bundesbank has repeatedly stated that inflation above 2% a year is not compatible with price stability and sets a medium-term intermediate objective for M3 growth. In contrast, in the United States – where legislation to clarify the Federal Reserve's mandate has been proposed in Congress – and Japan policy is conducted in an eclectic way without an intermediate target and the authorities have not provided a quantitative definition of their policy objective. Policy was relaxed progressively in all three countries last year in a context of low inflation, a slowing of activity and, in Germany, M3 growth below target.

United States

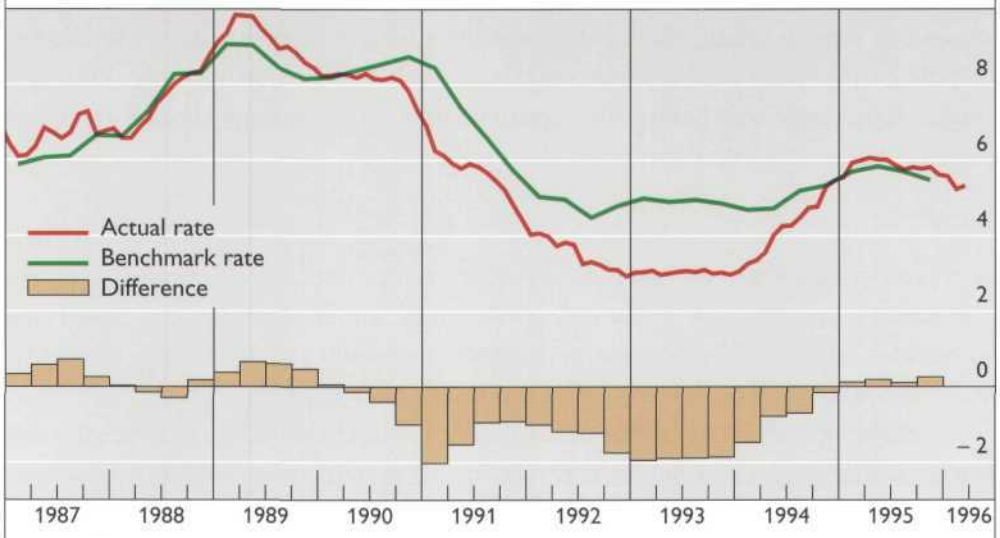
In the United States, the tightening of monetary policy that was initiated in early 1994 in response to rapid economic expansion and emerging inflationary pressures continued into early 1995. During this period the federal funds rate was raised on seven occasions, to reach 6% in February 1995. In the spring, however, activity decelerated and inflationary pressures abated, leading in the first quarter of 1995 to expectations in financial markets that monetary policy would be relaxed. As a result, long-term interest rates began to fall, the dollar depreciated, reaching historical lows against the yen and the Deutsche Mark, and stock prices started to increase. The Federal Reserve eased policy modestly in July, reducing the federal funds rate by 0.25 percentage points to 5.75%. While the dollar stabilised and appreciated from the summer onwards, partly in

Inflation abated and policy was eased



[1] In percentages. [2] Annual percentage changes. [3] December 1994 = 100. Graph IV.1

The US federal funds rate



Note: The benchmark federal funds rate equals 2.5 + *infl* + ½ (*gap* + (*infl* – 2)), where *gap* denotes the output gap and *infl* the four-quarter percentage change in the GDP deflator. Graph IV.2

response to a relaxation of monetary policy in Japan and Germany, long rates continued to fall during the autumn against the background of growing expectations of a further easing of policy and perceptions of improved prospects for an agreement between the Administration and Congress on balancing the budget. Since inflation continued to decline, a reduction in nominal interest rates was required to avoid an increase in real rates, and the federal funds rate was reduced further to 5.5% in December and to 5% in January this year. Stock market prices rose very substantially during the year and into the first quarter of 1996 as short-term rates fell. To the extent that the corresponding wealth increase helped underpin economic activity, this lessened the need for a further easing of policy.

Stock prices rose sharply

In early 1996 the gradual fall in long-term interest rates and the flattening of the yield curve were reversed. Long rates began to rise in the early spring, amid growing indications that a balanced budget agreement might not be achieved in the near term. Moreover, evidence of a recovery of economic activity led market participants to view a further easing of policy as increasingly unlikely.

Asymmetric policy adjustment

The relaxation of monetary policy between the summer of 1995 and the spring of 1996 was more modest and gradual than the tightening that had taken place between early 1994 and early 1995. Thus, while the steps to tighten policy involved changes in the federal funds rate of between 25 basis points initially and 75 basis points later, the moves to ease policy were limited to 25 basis points at a time. This asymmetry may in part reflect the authorities' intention to bring down the rate of inflation over time to levels compatible with price stability by reacting more firmly to increases than to reductions in inflationary pressures.

Interest rates unusually low in early 1994

An additional reason why the federal funds rate was raised by more than might have been expected on the basis of changes in inflation and in the output gap was that the Federal Reserve had reduced nominal and real short-term

interest rates to unusually low levels in 1991–93 against a background of high indebtedness in the non-financial sector and a certain unwillingness among lenders to extend credit. With these problems largely resolved, a greater degree of policy tightening was appropriate. Graph IV.2 shows that in early 1994 the federal funds rate was below the level implied by a simple benchmark which in the past has tracked the setting of the rate.

Japan

Policy relaxed considerably in Japan

The Bank of Japan relaxed its monetary policy stance considerably last year. While the easing was part of a series of measures undertaken by the monetary authorities and the Government to support economic activity, it also helped to alleviate weaknesses in the banking sector (see also Chapter V).

Following a sharp appreciation of the yen against the dollar in February and March and a large drop in share prices in the first quarter, evidence mounted that the modest recovery that had been under way since 1994 had stalled. With financial markets anticipating a relaxation of monetary policy, as suggested by a fall in long-term interest rates from 4.7% in January to 3.8% in March, the Bank of Japan guided money market rates lower in late March and cut the discount rate from a historical low of 1.75% to 1% in mid-April. The slowing of economic activity continued in the late spring, and consumer prices declined on a year-on-year basis for the first time in nearly a decade.

Money market rates guided below discount rate

In early July long-term interest rates reached a record low of 2.7% as the Bank of Japan encouraged short-term money market rates to move below the discount rate, which they had typically exceeded in the past. This relaxation of policy contributed to the subsequent depreciation of the yen against the dollar and a rebound in stock prices. Long-term interest rates also rose temporarily to 3.4% in August, before falling back to 2.8% in September. To provide additional support to the economy, the discount rate was cut by a further 0.5% in September.

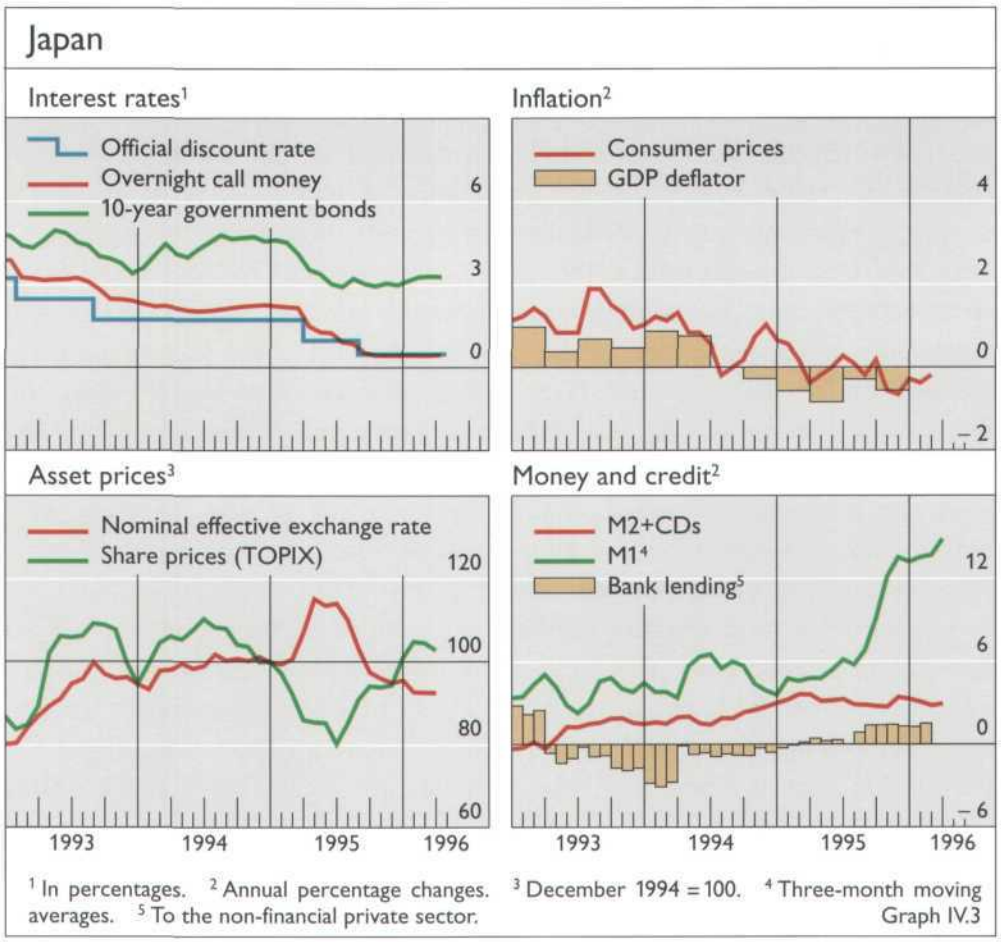
Real and nominal short-term interest rates both fell

Despite the fact that intermediation margins have increased in recent years, there is little doubt that the sharp decline in money market rates from the spring of 1995 implied a considerable reduction in real short-term bank lending rates. Rates on new short-term loans, for instance, fell by about 1.5 percentage points between the spring of 1995 and the spring of 1996. With year-on-year inflation as measured by the consumer price index or the GDP deflator close to zero, real and nominal short-term interest rates are likely to have fallen to roughly the same extent.

Rising long-term interest rates ...

While short-term rates remained at around 0.5% from the early autumn onwards, longer-term rates rose modestly, reaching 3.5% in late February this year. Although there are alternative explanations for the gradual steepening of the yield curve, the widening spread between long and short rates suggests that financial markets expected growth to take hold and policy to be tightened from its current strongly expansionary stance. With longer-term bank lending rates tied to long-term bond rates, such expectations lead to immediate increases in the cost of bank borrowing, which could hamper the recovery. In order to reduce the upward pressure on bond yields, the Bank of Japan has made it clear that it does not intend to tighten policy until the expansion is firmly under way. While

... could hamper recovery



this is appropriate in the current cyclical conditions, if short-term interest rates are maintained at such low levels for a prolonged period care will need to be taken to ensure that bond markets do not react in an unwarranted fashion to the eventual policy adjustment.

Although bank lending and credit to the non-financial private sector expanded last year, their growth rates remain modest owing to weak credit demand and some hesitancy on the part of banks to lend. This reluctance reflects both weakness in banks' and borrowers' balance sheets and the quality of collateral offered by borrowers. It may partly explain why the investment plans of small firms, which traditionally rely more on banks for financing, lag behind those of larger firms, which have better access to alternative sources of finance.

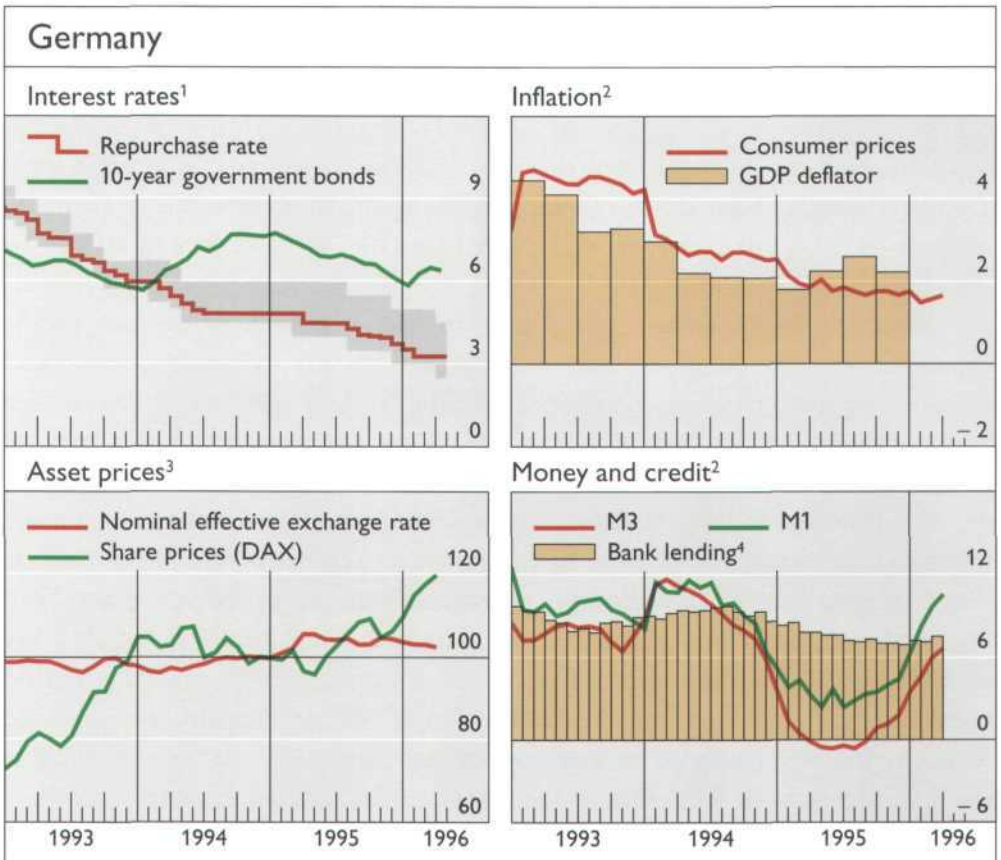
The behaviour of the monetary aggregates also suggests that the supply of intermediated credit may still be somewhat constrained. While M2+CDs grew by 3.1% in 1995, in line with the Bank of Japan's forecast, M1 growth increased considerably in the second half of 1995 (Graph IV.3) as depositors reallocated their portfolios in response to low interest rates and concerns about fragility in the banking system. The shift in preferences towards liquid assets could, if sustained, have implications for banks' ability to fund loans. In contrast, the rise in equity prices since mid-1995 has strengthened the balance sheets of banks and borrowers alike, which is likely to reinforce the stimulative effects of the current policy stance.

Germany

Policy relaxed in response to M3 growth ...

The process of interest rate reductions that was initiated in Germany in September 1992 continued in the period under review. The conduct of policy was guided by the weakness of M3 growth, used by the Bundesbank as an intermediate target, which signalled an absence of inflationary pressures and a slowing of economic activity. With monetary growth negative at the beginning of 1995, long-term interest rates fell from 7.8% at the end of 1994 to 7.3% in March as expectations of a relaxation of monetary policy gained ground. As M3 growth remained well below target in the first few months of the year, following a sharp appreciation of the Deutsche Mark, policy was eased in April, when the Bundesbank reduced the discount rate to 4%, the lombard rate to 6% and the rate applicable to fixed rate tenders from 4.85% to 4.5%. While the Bundesbank does not direct policy towards influencing the exchange rate, exchange rate movements have effects on the future path of inflation which are considered when determining the appropriate level of policy rates.

Repurchase rates and long bond yields remained unchanged after the April easing until August, when the Bundesbank lowered the discount and lombard rates by a further 0.5% against the background of still sluggish monetary growth and a persistently strong exchange rate. While monetary growth accelerated in the third quarter, it moderated later in the autumn as long-term interest rates



[1] In percentages; the shaded area represents the spread between the discount and lombard rates. [2] Annual percentage changes. [3] December 1994 = 100. [4] To the non-financial private sector.

Graph IV.4

continued to decline. Official rates were cut again in December, when the discount rate was reduced to 3%, the lombard rate to 5% and the repurchase rate for fixed rate tenders to 3.75%. Notwithstanding the relaxation of policy, the growth of M3 between the fourth quarter of 1994 and the fourth quarter of 1995 was only 2.1%, considerably below the target range of 4–6%.

... below target

The first quarter of 1996 saw a further rapid decline in the repurchase rate to 3.3% in early February. However, M3 growth strengthened in the first quarter and long rates started to rise in late January from a low of 5.8%, consistent with the view in financial markets that further easing was less likely (see also Chapter V). Nevertheless, in April the Bundesbank reduced the discount rate to 2.5% and the lombard rate to 4.5% in the light of the favourable outlook for inflation.

The yield curve complicates monetary targeting ...

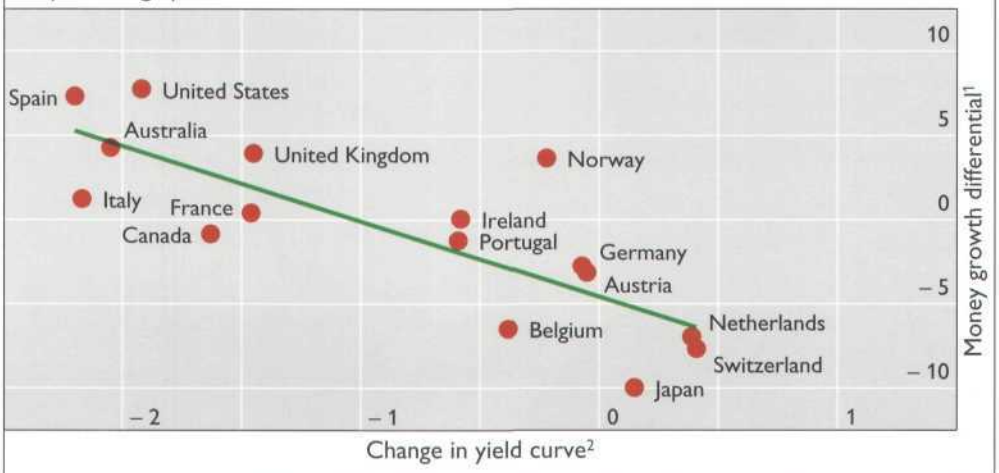
One factor that has complicated monetary targeting in Germany is changes in the slope of the yield curve, which affect the demand for M3. Since spreads between short and long-term interest rates are determined largely by financial market participants' expectations about future economic conditions, they are outside the direct control of the authorities. Shifting expectations may therefore cause monetary growth to deviate temporarily from the target path. Although this does not invalidate the strategy of monetary targeting, its credibility can be affected insofar as it is difficult for the authorities to explain to the public why monetary growth is outside the target range.

... and affects the information content of monetary aggregates

Changes in the slope of the yield curve also make the conduct of policy more difficult in countries where monetary aggregates are used primarily as information variables. Such changes affect the relative growth rates of different aggregates and thereby complicate their interpretation. A number of countries experienced divergent growth of broad and narrow monetary aggregates last year. In the United States and the United Kingdom, for instance, the growth of broad money exceeded that of narrow money by a considerable margin. However, in Japan, Switzerland and the Netherlands, narrow money grew much faster than broad money.

Money growth and the change in the yield curve

In percentage points



[1] Annual growth rate in 1995 of broad money minus that of narrow money. [2] Long minus short-term rate over four quarters to the fourth quarter of 1995.

Graph IV.5

While the diverging growth rates were due in part to special circumstances, such as financial innovation and changing public perceptions about the stability of the banking system, Graph IV.5 shows that a flattening of the yield curve in 1995 generally depressed the growth of narrow relative to broad money. Two factors explain this: first, reductions in long-term interest rates led to a shift away from non-monetary assets in favour of holdings of assets included in broad money; and, secondly, increases in short rates raised the return on the components of broader monetary aggregates, inducing shifts from narrow and more liquid aggregates.

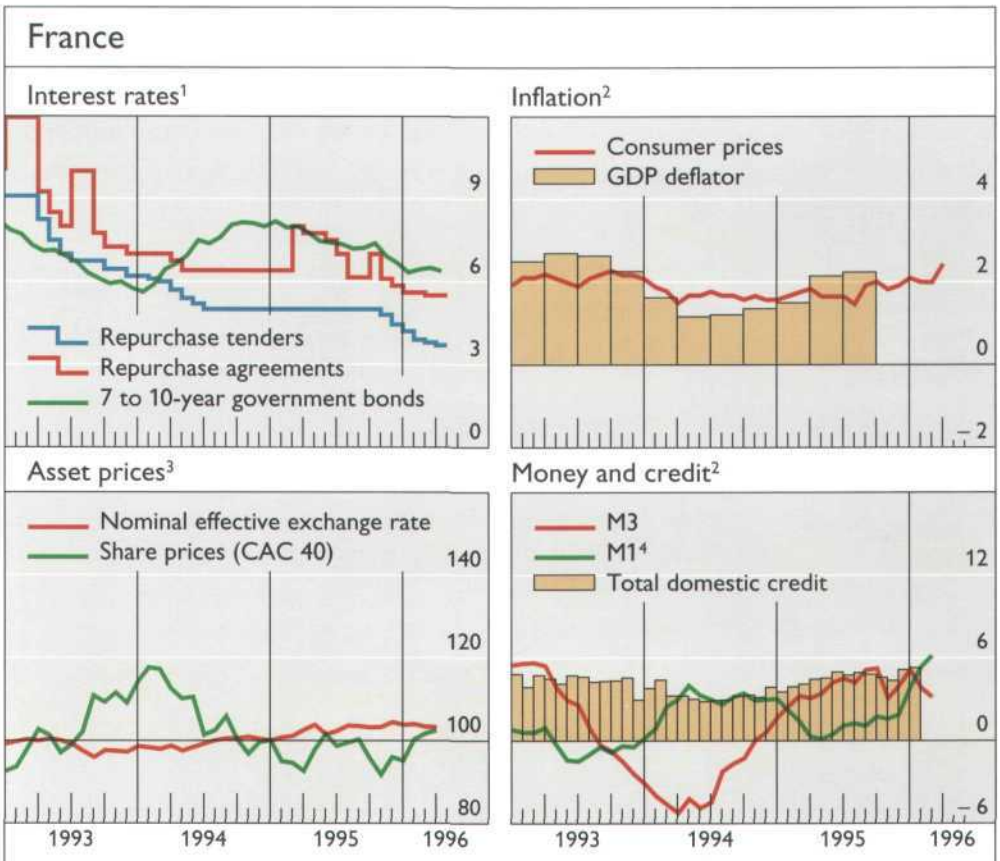
Policy in other ERM countries

In many western European countries the goal of price stability is pursued through an intermediate exchange rate objective within the ERM. In response to a decline in inflation rates to around 2% or less and a temporary pause in economic activity, and following reductions in German policy rates, these countries also relaxed their monetary policy overall in 1995.

France

Price stability the goal of policy

Monetary policy in France last year continued to be directed towards the objective of price stability, which the Bank of France has defined as measured inflation not exceeding 2% in the medium term. As in the past, this objective



Graph IV.6

was pursued through the use of two intermediate objectives: an external objective defined as a stable exchange rate against the most credible currencies in the ERM, and an internal one in the form of a medium-term growth trend for M3. However, the monetary growth objective has in the past tended to receive less weight in the formulation of policy than the exchange rate objective, which has been pursued since 1979 and has resulted in the central parity against the Deutsche Mark remaining unchanged for almost ten years.

Exchange rate commitment tested briefly

The exchange rate commitment was nevertheless tested briefly last year in the spring and autumn. Both international and domestic factors – the depreciation of the dollar and uncertainty concerning budgetary policy – appear to have played a role in triggering the pressures in the foreign exchange markets. In both episodes the Bank of France tightened monetary conditions and replaced its five to ten-day borrowing facility with a 24-hour facility, which increases the uncertainty regarding the potential cost of taking a position against the currency. These measures, together with changes in fiscal policy aimed at reducing future government deficits, were effective in restoring confidence in the franc. Market-determined short and long-term interest rates fell considerably in France in 1995, while the spread between French and German long rates remained broadly unchanged. This spread narrowed in early 1996 as long rates in France rose less than those in Germany and the franc appreciated against the Deutsche Mark.

The growth of M3 over the year was 4.1%, somewhat below the medium-term objective of 5%. Aggregate domestic debt, which plays an important role as an information variable, grew by 5%, although higher government borrowing accounted for virtually all of this.

Smaller ERM countries

Austria and the Netherlands

As in the past, the monetary policy of the smaller ERM members was dominated by developments in the larger countries. In Austria and the Netherlands, economic activity and inflation conditions continued to be closely linked to those in Germany. With inflation declining in 1995, the authorities in both countries relaxed monetary policy in the wake of the reduction of official rates in Germany. Given the strength of the guilder in the foreign exchange markets, the Netherlands Bank was also able to guide short-term rates below comparable German rates.

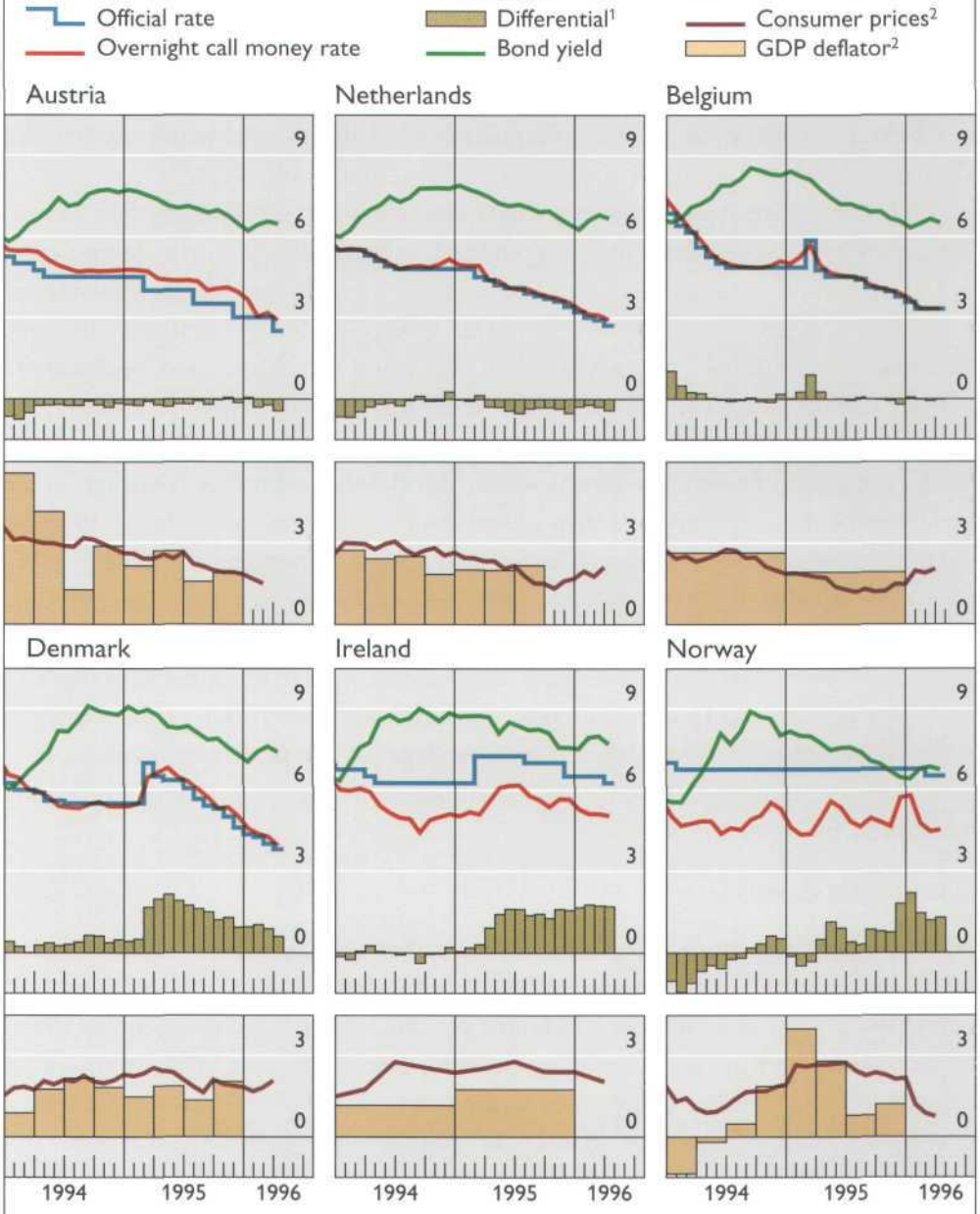
Belgium, Ireland and Denmark

Monetary policy in Belgium, Ireland and Denmark was also relaxed during the year as monetary conditions in Germany were eased. However, the Belgian franc came under some pressure during the period of ERM uncertainty starting in early March 1995, and the authorities tightened policy in order to keep the exchange rate close to its central parity vis-à-vis the Deutsche Mark. Pressures quickly abated in the course of the month, and the National Bank was able to follow the relaxation of policy in Germany. Policy in Denmark and Ireland was also heavily influenced by ERM developments during the spring. However, while the authorities in both countries were able subsequently to reduce administered rates to levels below those of the early spring, short-term spreads against German rates remained higher for much of the year.

Norway

Monetary policy was also eased in Norway, which, although not a member of the ERM, has since the 1992 crisis continued to orient its policy towards

Interest rates and inflation in selected countries



[1] In overnight call money rates, vis-à-vis the German rate. [2] Annual percentage changes. Graph IV.7

maintaining a stable exchange rate against the ECU at a level 3–5% below the earlier objective. With the exception of a brief period in the spring of 1995 when overnight rates rose in response to a temporary tightening of policy to halt the depreciation of the krone, money market rates fell gradually in the period under review.

Monetary policy in countries with inflation targets

Inflation close to target

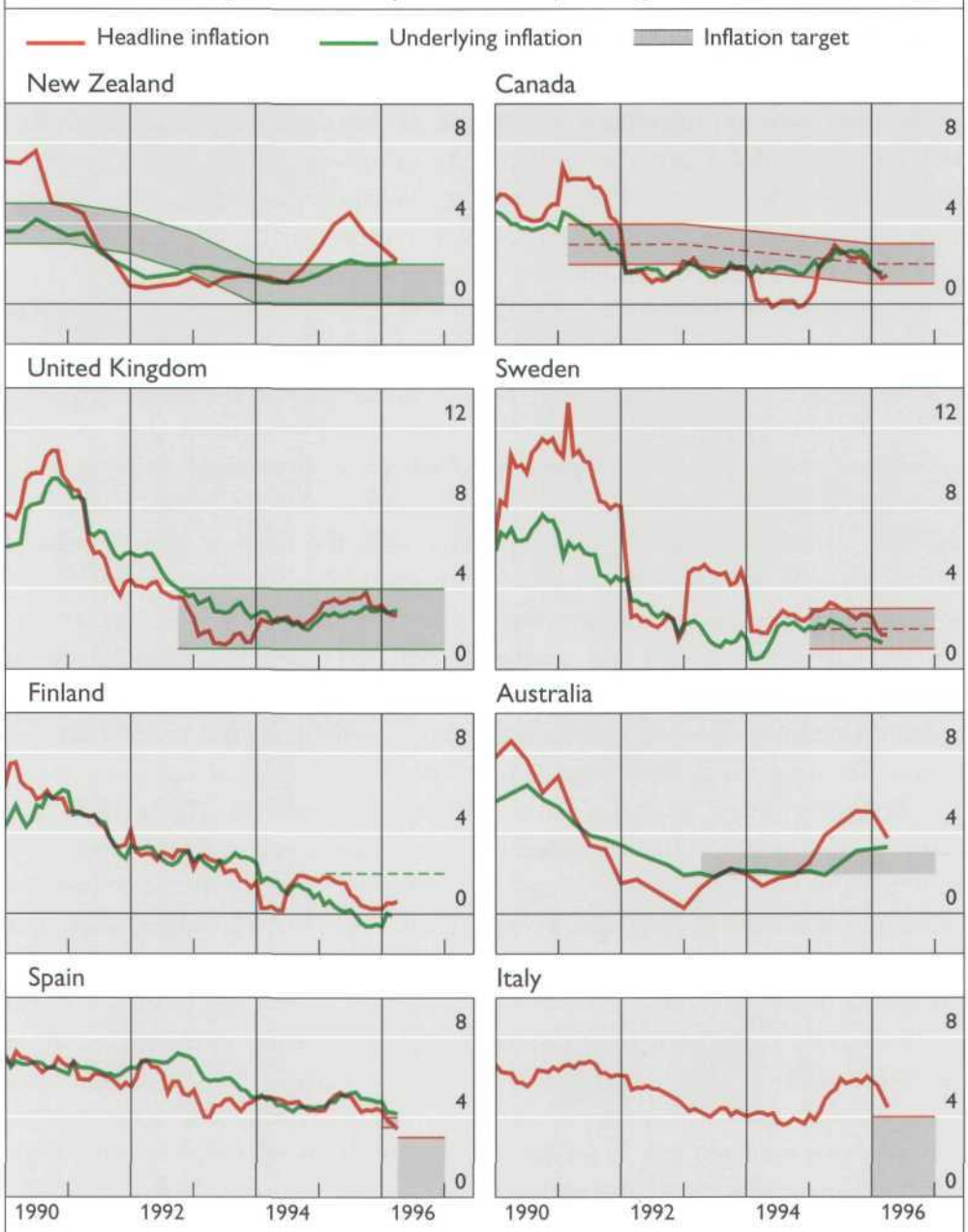
A number of countries – including New Zealand, Canada, the United Kingdom, Sweden, Finland, Australia and Spain – have recently adopted publicly announced targets for inflation, often after experiencing difficulties in implementing

intermediate targeting strategies. Graph IV.8 shows that in 1995 most of these countries held inflation close to the target rate. In New Zealand and Sweden the announced inflation band was temporarily breached in the late spring, while in Australia underlying inflation rose above the 2–3% medium-term objective at the end of the year. Although the Bank of Italy has not adopted an explicit inflation targeting framework, policy is aimed at reducing the inflation rate below 4% in 1996.

As policy changes influence inflation only with a long lag, central banks with inflation targets need to respond to projected rather than current inflation. Typically, a broad set of indicators such as the output gap, wage growth, exchange

Inflation and targets in selected countries

Twelve-month changes in consumer price indices, in percentages



Note: For an explanation of underlying inflation and targets, see Table IV.2. Graph IV.8

rates, monetary aggregates, asset prices and surveys of inflation expectations are relied on to assess the outlook for inflation. The relative importance of the different factors varies between countries and over time. In all countries aggregate supply and demand conditions are monitored closely, as they are among the most important near-term determinants of inflationary pressures. In addition, information derived from financial quantities and prices may be very useful, since it is available on a timely basis and may reflect private sector expectations, which are an important factor in the inflation mechanism.

Additional tightening is partially reversed

Generally speaking, the tightening of policy in countries with inflation targets, which had started in 1994, continued in the first half of 1995 as inflationary pressures persisted. Output gaps appeared to close quite quickly and the rise in commodity prices, together with generally weak currencies except in New Zealand and Finland, led to strong increases in producer and intermediate goods prices. To prevent these price rises from feeding through into general price inflation and to avoid an overshooting of the announced inflation targets, a tightening of monetary conditions was deemed necessary. An improved outlook for inflation after the summer brought a halt to the upward trend in policy rates and, more recently, a partial reversal of the tightening (Graph IV.9). To varying degrees, the disappearance of temporary inflationary factors, the general slowdown in economic activity and the earlier tightening of monetary policy all contributed to the improved inflation outlook.

Exchange market turbulence in early 1995

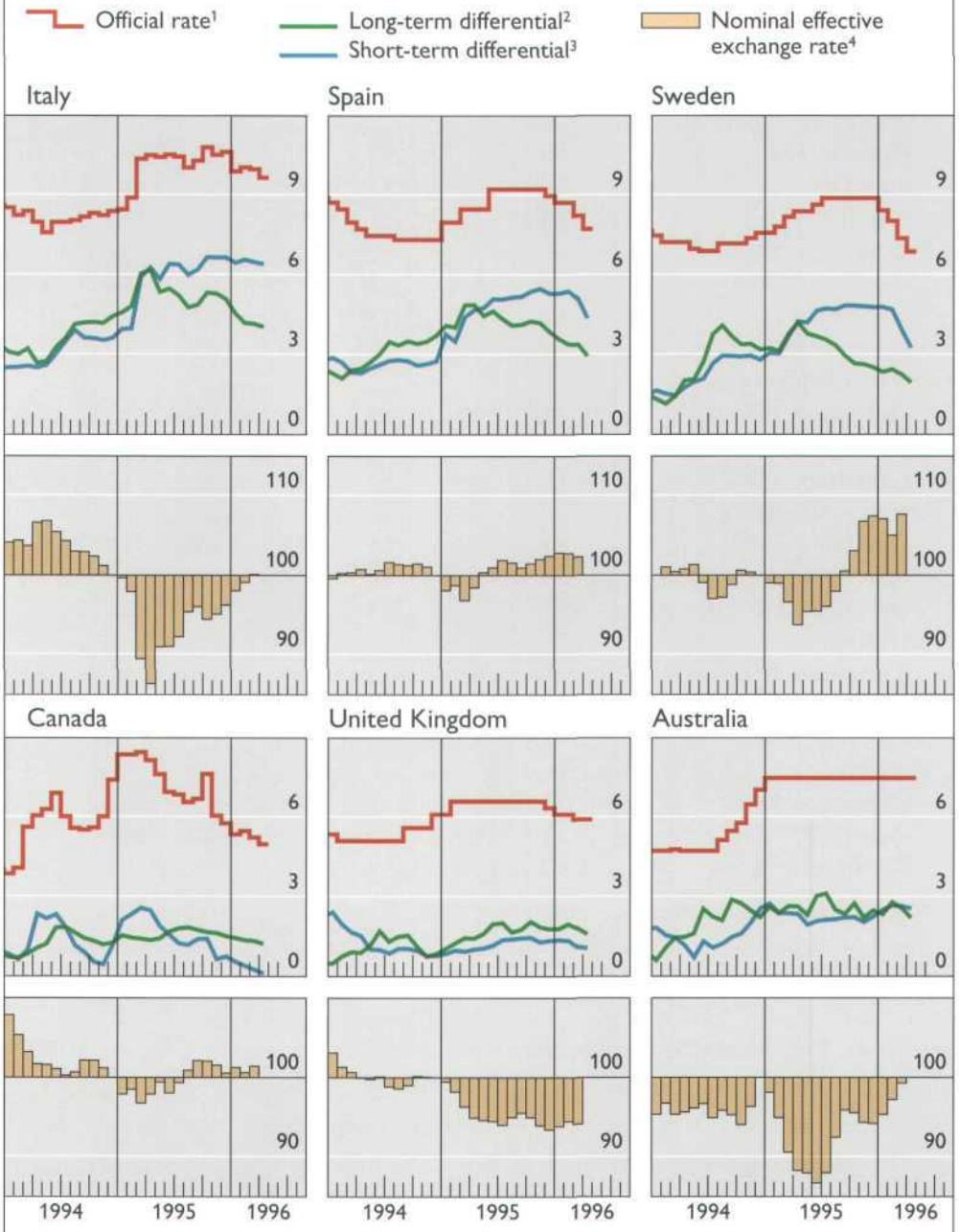
The timing of interest rate adjustments was often conditioned by volatile movements in asset prices. A prolonged period of weakness in foreign exchange and bond markets in early 1995 reflected the international impact of the Mexican crisis, together with growing market concerns about fiscal and political uncertainty in Canada, Italy, Spain and Sweden and external imbalances in Australia. Graph IV.9 shows that in many countries this led to an increase in short-term interest rates. Thus, in February 1995 the Bank of Italy raised the official discount rate and the rate on advances by 0.75 and 1.25 percentage points respectively. In Canada, the overnight money market rate rose by almost 3 percentage points in the first quarter of 1995, stabilising the Canadian dollar, which had started to weaken in October 1994. On the other hand, in Australia and the United Kingdom the monetary authorities did not raise rates, despite a substantial depreciation of the exchange rate.

Further tightening in Italy, Spain and Sweden ...

Following sharp increases in producer price inflation (Table IV.1), the authorities in Italy, Spain and Sweden took additional steps to tighten monetary conditions in the early summer. Together with their decision not to follow the relaxation of German policy rates in August, this improved the credibility of their inflation objectives and led to both an appreciation of the currency and a narrowing of the long-term interest rate differential against the Deutsche Mark. At the end of 1995 there were, however, clear differences between the three countries, with the decline in inflation expectations largest in Sweden and least pronounced in Italy. The stronger exchange rate in Sweden and Spain than in Italy was also reflected in a larger fall in producer price inflation and short-term inflation expectations after the summer.

The relative importance of the monetary policy framework and of market perceptions of the fiscal and political situation in explaining these differences is

Interest rates and exchange rates in selected countries



[1] For Italy, Spain and Sweden, repurchase rate; for Canada, bank rate; for the United Kingdom, Band 1 (bill purchase) rate; for Australia, unofficial cash rate. [2] In government bond yields. For Italy, Spain and Sweden, vis-à-vis the German rate; for the other countries, vis-à-vis the US rate. [3] In three-month rates; calculation as for long-term differentials. [4] December 1994 = 100. Graph IV.9

difficult to assess. In Sweden, inflation targets were announced shortly after the abandonment of the ECU peg in 1992, and 1995 was the first year to which the announced band applied. In Italy, greater attention had been paid to controlling the money supply following the departure of the lira from the ERM in September 1992. However, in 1994 and 1995 the growth rate of M2 fell below the target of 5%, mainly because of the widening differential between the rate on bank deposits and that on Treasury bills, forcing the Bank of Italy to focus more directly on its inflation goal and to monitor asset prices closely as indicators of inflationary

Indicators of future inflation in selected countries

	Italy	United Kingdom	Canada	Australia	Finland	New Zealand	Spain	Sweden
	percentage change over previous year							
1996 CPI forecasts								
January 1995	4.6	4.0	2.7	3.9	3.1	1.2	4.7	3.8
June 1995	5.6	3.8	2.8	3.6	3.2	1.3	5.2	3.6
March 1996	4.4	2.4	1.7	3.7	1.6	1.7	3.7	2.0
Producer prices								
December 1994	5.2	2.8	8.1	1.7	2.1	1.0	5.3	6.5
June 1995	12.4	4.2	8.7	3.9	0.1	0.7	7.1	11.5
February 1996	8.2	3.7	1.9	2.1	0.8	1.2[1]	2.7	1.5
1995 GDP forecasts								
December 1994	3.0	3.6	3.8	4.0	4.5	3.5	3.1	2.5
June 1995	3.0	3.2	2.6	3.5	4.7	3.9	3.2	2.5
December 1995	3.1	2.6	2.4	3.2	4.6	3.4	3.0	3.5
Narrow money								
December 1994	2.9	6.7	7.0	11.1	9.1	6.0	8.0	..
June 1995	−0.3	5.7	5.6	2.7	7.6	−1.4	3.8	..
February 1996	−1.1	6.0	5.9	9.4	12.6	1.0	2.4	..
Broad money								
December 1994	1.7	4.1	2.4	10.4	2.0	3.5	8.2	0.4
June 1995	−0.2	6.7	4.6	7.2	0.5	8.8	10.1	−2.6
February 1996	2.6	10.1	4.6	10.0	−0.7	11.2	8.4	5.5
Bank credit								
December 1994	1.0	4.0	9.8	12.2	−9.6	8.2	3.2	11.8
June 1995	2.0	7.1	5.8	9.3	−4.3	11.3	6.5	3.3
February 1996	2.3	9.4	7.5	12.5	−2.7[2]	12.3	5.9	3.7

[1] Fourth quarter 1995. [2] December 1995.

Sources: © Consensus Economics, London, © The Economist, London, and national data. Table IV.1

pressures. In contrast, Spain adopted an explicit inflation targeting regime in 1994 but also remained a member of the ERM, using the exchange rate band as a monitoring device in the pursuit of its inflation objective.

Fiscal consolidation was a necessary condition for improved credibility in each of these countries. Helped by stronger growth than initially expected, the government deficit in Sweden fell considerably in 1995. In Italy the deficit/GDP ratio also improved by more than had been anticipated, but political and fiscal uncertainty continued to put a discount on lira assets. In view of the improved inflation outlook, the Bank of Sweden reduced policy rates by almost 2 percentage points in early 1996, while the monetary authorities in Italy and Spain allowed a more limited easing of money market rates.

... but lower policy rates in Canada ...

In contrast to Italy, Spain and Sweden, where growth expectations were met, it became increasingly clear after the summer that growth in Canada and the United Kingdom would remain below expectations (Table IV.1). In Canada, an incipient strengthening of the currency after the first quarter of 1995 was used as an opportunity to reduce the abnormally high short-term interest rate differential vis-à-vis the United States and to rebalance the mix of monetary conditions towards lower interest rates. A widening output gap continued to

place downward pressure on prices and wages. However, after a fall in early 1995, real M1 growth picked up again, suggesting that the slowdown in economic activity might be temporary.

One difficulty in evaluating the Canadian inflation outlook lay in assessing how much the currency depreciation in 1994 and the rise in commodity prices in 1994 and 1995 had contributed to the increase in inflation. The Bank of Canada estimates that most of the temporary rise in underlying inflation in mid-1995 was due to such pass-through effects. In contrast, inflation expectations as captured by surveys and the differential between real and nominal bond rates fell throughout most of 1995 and M2+ has been growing at a rate of 3–5%, which is consistent with a trend inflation rate of under 2%.

... and the United Kingdom

Short and medium-term inflation expectations also fell in the United Kingdom in response to a slowing of the economy, although long-term inflation expectations appear to have actually risen, which may have contributed to the considerable effective depreciation of sterling in 1995. Both narrow and broad monetary aggregates have been rising above their monitoring ranges. While narrow money was a good statistical leading indicator of inflation in the past, the relationship has weakened in recent years.

Exchange rates and the monetary policy stance

In open economies where inflation is targeted directly, the exchange rate plays a prominent role as an indicator because of its importance for the monetary transmission mechanism. Recognising this, several countries, including Canada, Finland, Iceland, Norway and Sweden, are employing a monetary conditions index (MCI) to assess the stance of policy, and New Zealand is considering doing so. Generally speaking, the MCI is a weighted average of changes in a short-term interest rate and an effective exchange rate, in which the weights capture the relative importance of the interest rate and the exchange rate channels in the transmission process.

Difficulties in controlling the mix ...

Although the effects of exchange rate shocks on monetary conditions can in principle be offset by changes in domestic policy rates, foreign exchange market turbulence complicates the conduct of policy in various ways. First, large exchange rate movements may lead to an undesirable mix of monetary conditions. The weakness of the currency in some countries with inflation targets in the first half of 1995 contributed to the dual nature of the economic recovery. While exchange rate depreciation stimulates the traded goods sector, high domestic interest rates contribute to weaker consumption growth, in particular in those countries where households are still burdened by relatively high debt ratios, such as Canada, Sweden and the United Kingdom. Only when some of the weaknesses affecting the exchange rate are addressed will central banks be able to reverse the mix of monetary conditions and reduce domestic interest rates, as was done recently in Sweden and Canada.

Difficulties in controlling the mix of monetary conditions are also apparent in New Zealand. Given that the source of much of the recent inflationary pressure in that country lies in the services and housing sectors, which is also reflected in continuing strong growth of bank lending, it might have been advantageous if the recent tightening had taken the form of a

sharper rise in interest rates and a more modest appreciation of the exchange rate.

... and level of monetary conditions

Secondly, the extent to which the authorities can control the level of the MCI may depend on the credibility of their inflation objectives and the general policy framework. A warranted easing of monetary policy may be difficult to implement if the relaxation is interpreted as a shift in the inflation objective and leads to an excessive fall in the exchange rate. Over the course of the last three years the Bank of Canada has repeatedly tried to guide short-term interest rates below rates in the United States given the larger output gap and lower inflation in Canada. In at least two instances, these attempts failed as exchange market pressures associated with fiscal and political uncertainty forced the authorities to increase short-term interest rates dramatically. In contrast, when a depreciation is caused by a crisis of confidence due to high unemployment or a weak banking sector, a sharp rise in interest rates may be difficult to implement if market participants take the view that this will only aggravate the situation. However, as the structural weaknesses are addressed and credibility improves, the problem of controlling monetary conditions should diminish.

Issues in inflation targeting

Inflation targets as a monetary policy framework

Two common features: publicly announced inflation targets ...

Two features are common to the inflation targeting regimes announced in the past few years. First, the goal of price stability, implicit in many central bank charters, is made explicit in the form of a quantified and publicly announced target for inflation. Inflation objectives are generally expressed as multi-year targets in recognition of the fact that monetary policy affects inflation with a considerable lag. Setting such a target indicates clearly that the primary objective of monetary policy is price stability and creates a more transparent framework for policy. In Sweden and Australia, for example, this facilitated public acceptance of the need not to follow the fall in policy rates in Germany and the United States in 1995. It also provides a focal point for inflation expectations and increases the accountability of policy-makers.

... and an absence of intermediate targets

A second feature of these regimes is the absence of an intermediate target. This increases the degree of discretion which monetary authorities need to exercise in setting policy instruments and may thus reduce transparency. Most central banks have sought to minimise this problem by publishing regular monetary policy or inflation reports in which the outlook for inflation is documented and policy actions are explained. Transparency regarding the policy actions taken to achieve price stability may also increase the speed with which an anti-inflation reputation is acquired and help avoid credibility problems if policy errors are made. Nevertheless, compared with targeting a variable which is directly observable, such as the exchange rate or the money supply, the inherent uncertainty of inflation forecasts may make credibility harder to acquire, in particular when the views of policy-makers and the private sector on the inflation outlook differ.

At the same time, one should not overstate the differences between inflation targeting and other monetary policy frameworks, which in many cases quantify

inflation objectives in setting intermediate targets. Although the room for exercising discretion is substantially reduced if the central bank is committed to a narrow exchange rate band, countries which rely on monetary growth targets, such as Germany and Switzerland, allow deviations from these targets if necessary in order to achieve the overriding price stability objective. Similarly, countries which use an inflation targeting framework, such as the United Kingdom and Spain, also find it useful to set guideposts for monetary aggregates and/or the exchange rate. Nor does establishing explicit targets for the primary objective of price stability in itself make the exercise of discretion easier.

As the countries with inflation targets have not yet gone through a full business cycle, it is still too early to fully assess the effectiveness of the inflation targeting regimes. A criticism often implicit in assessments of inflation targeting regimes is that they do not pay enough attention to output developments. This characterisation is not accurate. Since the output gap affects future inflation, inflation targeting ensures a significant degree of automatic countercyclical stabilisation. As for supply shocks, the first-round effects of such shocks are accommodated in most of the current regimes.

The design of an inflation targeting framework

The establishment of an inflation targeting framework requires decisions on several issues: whether to target the price level or the inflation rate, the price index used, the exemptions and caveats applied, and the midpoint and width of the target band. These choices involve a trade-off between a potential loss of credibility if the goals prove too ambitious and a failure to establish credibility if the overall framework provides insufficient discipline for monetary policy-makers and consequently does not anchor inflation expectations. A careful consideration of this trade-off is important when introducing the new framework. Over time, the meeting of announced commitments in the short run is likely to become less essential for credibility if the track record demonstrates that any temporary deviation from target will not be abused to allow higher inflation on average.

Choices concern price level versus inflation targets ...

As can be seen from Table IV.2, all countries specify the target in terms of the rate of inflation and not the price level, implying that overshooting of the inflation rate does not need to be compensated for by subsequent undershooting or vice versa. While the issues of the optimal rate of inflation and whether to target the price level or the inflation rate remain unresolved, there is some consensus that targeting a low but positive inflation rate is a useful and feasible first step in establishing anti-inflation credibility. Accumulating experience of policy-making in a low-inflation regime and more research on the extent and causes of nominal rigidities may subsequently shed light on the desirability of going a step further.

... the target midpoint ...

Both theoretical and statistical arguments have been advanced in favour of an inflation target which is positive but very low. The economic arguments have been based on downward rigidities in prices and wages and the fact that the nominal interest rate cannot fall below zero. At zero or negative inflation rates it may be difficult to engineer lower real wages or low real interest rates. However, the limited data available on the distribution of goods prices do not provide much evidence of such downward rigidities. Although there may be more

Characteristics of inflation targets in selected countries

Countries	Target first announced	Current target range	Target details a. Target variable b. Other caveats c. Set by d. Target horizon
New Zealand	March 1990	0–2% band; no explicit midpoint	a. Consumer price index (CPI) excluding interest cost components, government charges, indirect taxes and subsidies and significant changes in import or export prices. b. Natural disasters. c. Policy Target Agreement (PTA) between Finance Minister and central bank Governor. d. PTA for the five-year tenure of the Governor.
Canada	February 1991	midpoint 2%; ±1% band	a. CPI. b. Food and energy prices, indirect taxes, natural disasters. c. Finance Minister and central bank Governor. d. December 1993: 1995–98 target; new target by end-1997.
United Kingdom	October 1992	1–4% band; 1–2.5% by 1997	a. Retail price index excluding mortgage interest payments. b. Indirect taxes and subsidies. c. Chancellor of the Exchequer. d. <2.5% beyond 1997.
Sweden	January 1993	midpoint 2%; ±1% band	a. CPI. b. Indirect taxes and subsidies, interest costs and effects of depreciation after the move to a flexible exchange rate. c. Bank of Sweden. d. "in 1995 and beyond".
Finland	February 1993	2%; no explicit band	a. CPI excluding indirect taxes, subsidies and housing-related capital costs. b. – c. Bank of Finland. d. "permanently".
Australia	1993	average of 2–3% over the medium term	a. CPI excluding fruit and vegetables, petrol, interest costs, public sector prices and other volatile prices. b. – c. Reserve Bank of Australia. d. Indefinite.
Spain	Summer 1994	3.5–4% by first quarter 1996; <3% by late 1997	a. CPI. b. – c. Bank of Spain. d. Medium-term objective for 1997.

Table IV.2

evidence for nominal wage rigidities (in particular in Europe), these should be less of a problem in the presence of productivity growth, which permits reductions in unit labour costs even if nominal labour costs do not fall. The statistical arguments for a low, positive rate of inflation are based on various biases that exist in the consumer or retail price index. Most central banks employ this index because of its timely availability, reliability and widespread use in a variety of contracts.

... exemptions and caveats ...

Central banks have generally dealt with the fact that they can control inflation only imperfectly in the short run in two ways: by excluding particular shocks or prices from the targeted index and by establishing an explicit or implicit band defining acceptable inflation performance. Often an underlying or core rate of inflation is calculated and the target set in terms of an adjusted consumer price index which excludes the effects on measured inflation of interest rate changes, volatile components such as food and energy prices and the price level effects of supply shocks such as tax changes or terms-of-trade shocks (Table IV.2). The first-round effects of supply shocks can also be accommodated by listing them explicitly as caveats to the announced target band. This second approach provides an intermediate course between adherence to a fixed rule and the need for flexibility, without impairing the credibility of the central bank's commitment to price stability, if the contingencies are clearly spelled out. Some shocks, such as tax changes, are easily identifiable and can thus be accommodated, as is done in most countries. With others, such as terms-of-trade shocks, the distinction between first and second-round effects is less clear, and this can give rise to credibility problems if the monetary authorities choose to accommodate these shocks.

... and the band width

With the exception of Finland and Australia, central banks have also established explicit inflation bands as a guide for policy. In view of central banks' imperfect short-term control over inflation, announcing an explicit band may be preferable if it increases accountability by forcing the central bank to explain the reasons for any overshooting. However, a possible advantage of a point target is that a single number may provide a firmer anchor for inflation expectations. The Bank of Canada and the Bank of Sweden have attempted to gain the benefits of both approaches by selecting the midpoint of the target range as the focus of their inflation targeting framework.

The width of the band is an important choice variable and is directly related to the time horizon over which the central bank hopes to re-establish the inflation target in the face of short-term deviations. A narrow band may improve policy credibility by helping to focus price expectations and to pin down the inflation preferences of the monetary authorities. However, it does so at the cost of flexibility and can easily lead to a stop-go policy if the lags between inflation and policy action are relatively long. It may also imply that more reliance needs to be placed on the exchange rate channel, which allows for a faster effect on prices, as in New Zealand and Sweden last year. Conversely, a broader band allows a more flexible response to unexpected inflation developments, potentially taking account of output developments on the way back to the inflation target. Historical experience with inflation, as well as counterfactual simulation studies, suggest that typical fluctuations in inflation have a wider amplitude than the current bands of 2–3 percentage points would allow. However, historical experience may not be a good guide to the future given the magnitude of the oil price shocks in the 1970s. Moreover, inflation variability can be expected to be lower if current low inflation rates are maintained. On balance, a relatively narrow band may be tractable and appropriate, particularly if it helps to establish the central bank's reputation and contributes to a clean break with an inflationary past.

V. Domestic asset markets and financial institutions in industrial countries

Highlights

The period under review was one of varying fortunes for investors in financial and real assets. Bond prices rose from late 1994 or early 1995 until the beginning of 1996. The bull market was then suddenly interrupted by a sharp and global reversal which revived uncomfortable memories of the market turbulence of February 1994. A comparison of the two episodes suggests that, despite strong similarities in terms of broad movements and timing, there were in fact several significant differences. In particular, in the more recent case there was less evidence of prior overvaluation, leverage appears to have played a smaller role in exacerbating price changes and the intensity of the initial drop seems to have primarily reflected fragile market sentiment. In the United States and, to some extent, in Japan the shift in mood was subsequently validated by news that economic activity was stronger than expected. Equity prices generally rose from the beginning of 1995 but their performance appeared to be closely tied to that of the bond market. In contrast, property prices, while typically firming compared with 1994, had another lacklustre year.

Against the background of a generally favourable evolution of asset prices and monetary policy easing, bank profitability tended to improve in 1995 in comparison with the previous year. This improvement, however, should not be allowed to mask the longer-term need for restructuring and consolidation facing the industry in the light of the continuing pressures generated by deregulation and advances in technology. The second part of this chapter considers this process more closely. It describes its key features, evaluates the changes that have already taken place and identifies the challenges ahead for both market participants and policy-makers.

Asset prices

Bonds

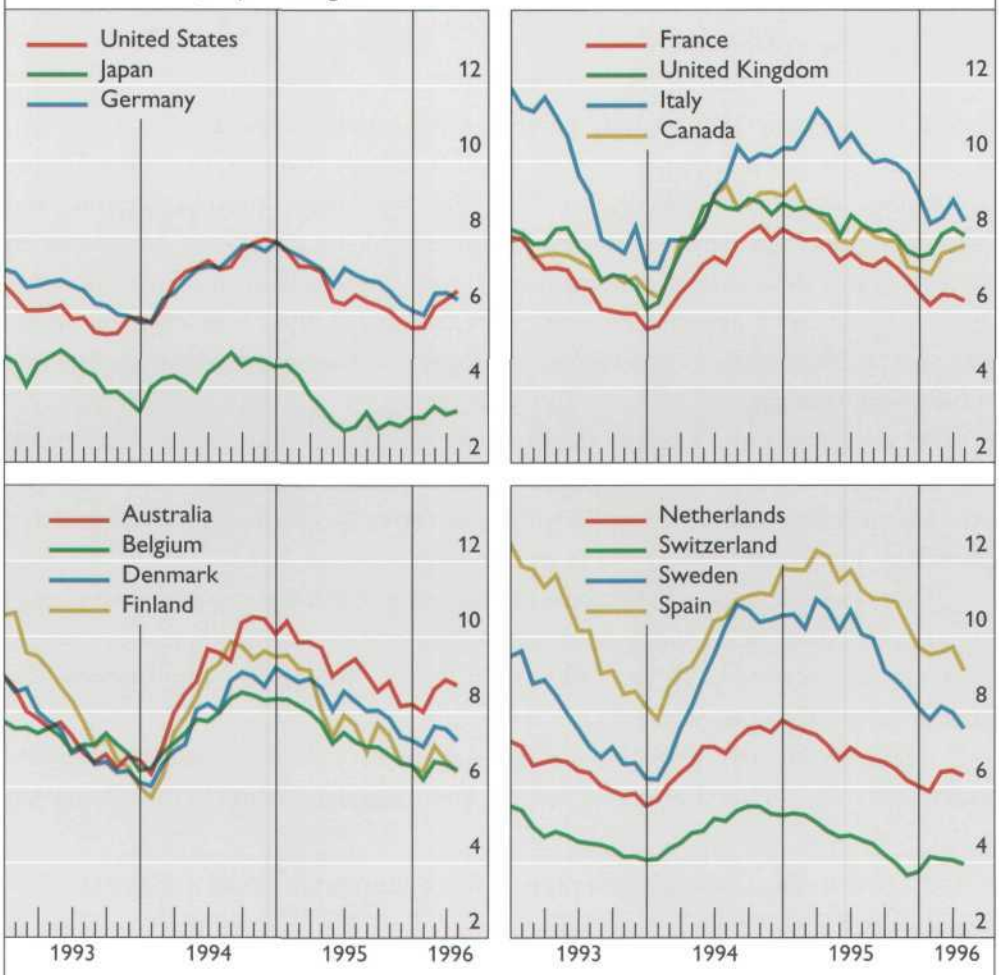
The generalised decline in bond yields ...

The generalised bull bond market which followed the sharp increase in rates in 1994 extended into early 1996 (Graph V.1). By January 1996 yields typically stood at levels broadly comparable with those prevailing before the bond market turbulence of early 1994, especially in key markets such as the United States, Germany and Japan. They were still somewhat higher in "high-yielding" markets, notably Italy, Spain and Sweden. The main forces behind this trend decline in bond rates in most countries were the continued easing of monetary policy and slower-than-expected growth and inflation.

Several incidents during 1995 gave the impression that the bull market might be faltering. Early in the year upward pressure on the Deutsche Mark led to

Bond yields*

At end of month, in percentages



* Yields on ten-year government bonds or their closest equivalent. Graph V.1

strains in the ERM and induced temporary increases in bond yields in most European countries. Against the background of a deteriorating outlook for inflation, currency depreciation and the reverberations of the Mexican crisis, the rise in bond rates was larger and more sustained in high-yielding markets; the subsequent progressive monetary policy tightening that took place in those countries into the late spring helped to reverse the increase (see Chapter IV). In May indications that inflation was picking up again and concerns about political pressures on the central bank triggered a short-lived upswing in bond yields in the United Kingdom. In Europe more generally the decline stalled briefly again in September, when markets became concerned about a possible delay in economic and monetary union and insufficient fiscal adjustment in a number of countries. In the United States expectations of rebounding growth depressed bond prices in July, an episode which seemed to be echoed in Canada and Australia. At around the same time yields also rose in Japan. On the whole, however, these incidents were isolated and of limited geographical scope and did not signal a profound change in market sentiment.

A sharper and more global reversal occurred in early 1996. Yields had already started to rise in Japan in December. They turned up in Europe in January and climbed steeply everywhere in February, as markets appeared to react to a sharp increase in US bond yields.

... was reversed in early 1996

The sizable decline in bond yields in 1995 as a whole and their subsequent abrupt rise in early 1996 evoked parallels with developments two years earlier, when a protracted bull market had also been suddenly reversed on a global scale. Similarities were not difficult to find: the favourable macroeconomic and monetary policy background fuelling the initial fall in yields; the narrowing of interest rate differentials between high and low-yielding markets, possibly indicating a growing appetite for risk (see Chapter IV); the historically low levels reached by bond rates in several key markets; and the speed of the decline and subsequent increase.

A comparison with the 1994 reversal points to ...

At the same time, a closer examination reveals some significant differences. At least four pieces of evidence suggest that the vulnerability in the more recent episode probably had less to do with speculative excesses and overextended portfolios than with fragile market psychology.

First, the evidence of initial overvaluation at the latest trough is less clear. Inflation-adjusted yields were consistently higher than at the previous trough, generally by between 50 and 100 basis points. Moreover, the outlook for economic activity was weaker.

... less overextension ...

Secondly, in early 1996 the portfolios of market participants appeared less exposed to a fall in bond prices in general, and to developments in the US market

Selected indicators of leverage in international bond markets

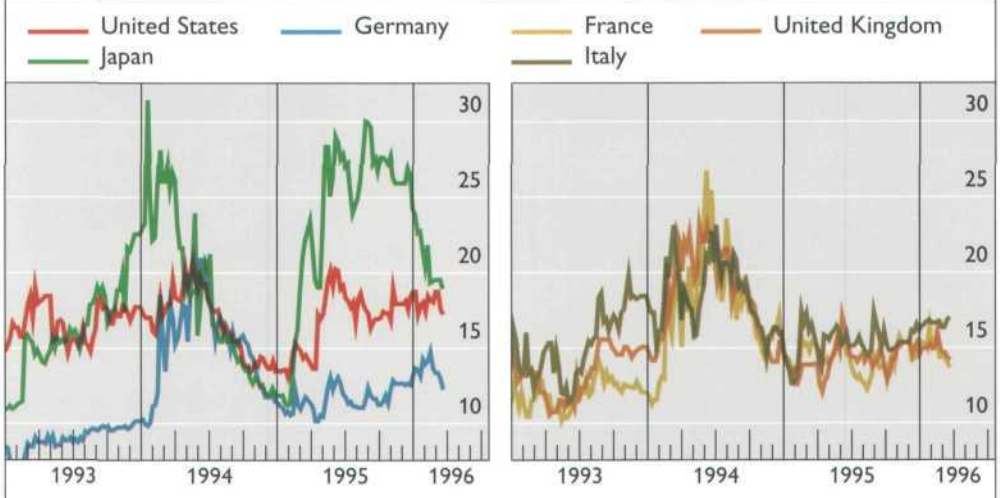
Bond purchases	1991–92 total	1993	1994	1995			
				Q1	Q2	Q3	Q4
	in billions of US dollars						
United States[1]	232	82	–65	19	46	2	41
Commercial banks	216	73	–27	12	11	5	0
Securities dealers	16	9	–39	7	35	–3	41
United Kingdom	72	126	–28	29	12	17	24
Banks:[2] gilts	4	16	4	–2	1	–1	4
foreign bonds	39	51	20	18	8	4	8
Securities dealers: foreign bonds	29	59	–51	13	3	14	12
Total	304	208	–93	48	58	19	64
Memorandum items:							
Interbank financed[3]	*61*	*183*	*–85*	*16*	*32*	*24*	*40*
Repo financed:[4]							
Spain	*8*	*24*	*–22*	*0.4*	*6*	*6*	*1*
Sweden	..	*13*	*–12*	*0.4*	*1*	*0.2*	*2*

[1] For banks, Treasury and agency securities; for securities dealers, including also corporate and foreign bonds. [2] Including building societies. [3] Cross-border interbank domestic currency lending by banks in Europe as an indicator of movements in non-residents' bond purchases hedged against exchange rate risk. [4] Indicators of Treasury bond purchases by non-residents financed through repos.

Sources: National data and BIS. Table V.1

Bond yield volatility*

In percentage points



* Yield volatility implied in three-month over-the-counter, at-the-money option contracts on ten-year benchmark government bonds.

Source: J.P. Morgan. Graph V.2

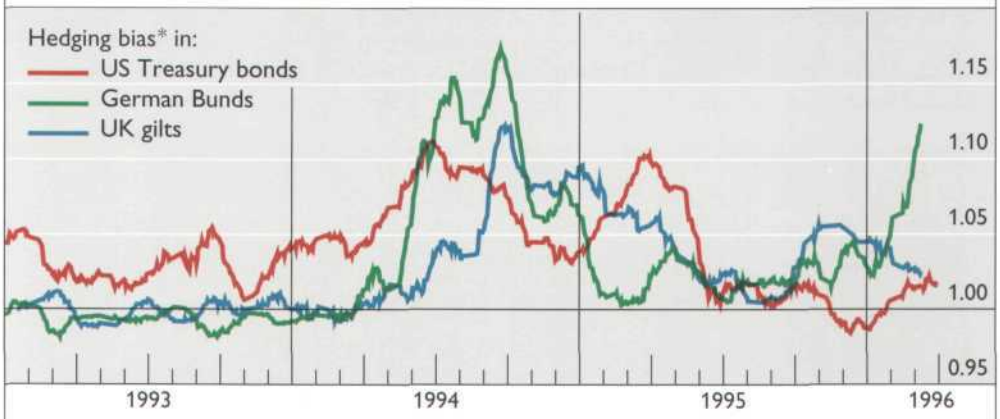
in particular. In 1993 participants had taken advantage of the persistence of an unusually high yield spread in the United States to leverage up their portfolios and had subsequently searched for higher yields overseas, notably in Europe and Latin America (Table V.1). In 1995 leverage was not used to the same extent and non-US markets were less dependent on US investment flows. Reportedly, a common strategy of some leveraged international investors was to finance purchases of US bonds at the very low yen short-term rates, but the amounts involved were thought to be modest relative to the leveraged trading two years previously (see Chapters VI and VIII).

... and greater nervousness in markets in the recent episode

Thirdly, while the generalised turbulence in 1994 had been triggered by a tightening of US monetary policy, the initial increase in bond yields in the more recent episode primarily reflected a swing in market sentiment prompted by rather tenuous pieces of information. Factors included: shifting views about the prospects for monetary union in Europe based on isolated official statements; emerging but fragile concerns about a future tightening of monetary policy in Japan as the economy appeared to firm; worries about the lack of agreement on the budget and about monetary easing having been excessive in the United States; and similar concerns regarding monetary policy in the United Kingdom, heightened by political uncertainty.

Finally, several financial indicators confirm the generalised nervousness prevailing in the markets. In contrast to the period preceding the sharp reversal of yields in February 1994, surveys point to an "underweighting" of bonds in the portfolios of institutional investors in 1995, hardly a sign of confidence in the bull market. Similarly, volatility was on average generally higher in the more recent phase of declining yields than two years earlier, indicating greater uncertainty about the market's underlying strength (Graph V.2). Indeed, in both the United States and Japan the yield volatility implied in option prices was almost as high

Hedging bias in selected bond markets



* Estimate of the ratio of the fall to the rise in the futures price, over the remaining life of the option contract, that ("risk-neutral") market participants view as having a 10% probability of occurring. A value greater than one indicates that large downward movements in bond prices are more expensive to hedge against than equivalent upward movements. Twenty-one working day moving averages.

Sources: Chicago Mercantile Exchange, LIFFE and BIS calculations. Graph V.3

in the second half of 1995 as during the bear market turbulence of 1994. Moreover, an analysis of option prices suggests that around the same time participants were more eager to hedge against large upward yield movements than against equivalent downward movements, at least in key European markets (Graph V.3). No such asymmetry could be discerned prior to February 1994. It is as if the large losses incurred during the turbulence of 1994 had made participants more sensitive to the possibility of further pain. A partial exception to this pattern is the United States, where by autumn 1995 this bias seems to have dwindled away.

The further evolution of yields in March and early April this year was mainly influenced by information about the underlying strength of economic activity. In

Stock market indices

Countries	Dec. 1993	Jan.	March	June	Sept.	Dec.	Jan.	March
		1995					1996	
	end-December 1994 = 100							
United States	102	102	109	119	127	134	138	141
Japan	92	94	84	77	92	101	103	105
Germany	108	96	91	99	104	107	117	118
France	121	96	99	99	95	100	107	109
Italy	97	104	95	96	97	93	98	92
United Kingdom	111	97	101	107	114	118	121	121
Canada	103	95	102	107	108	112	118	118
Australia	114	96	100	105	112	115	120	116
Belgium	106	97	94	103	105	112	122	119
Netherlands	97	101	98	106	114	118	124	133
Spain	113	99	94	103	107	112	116	120
Sweden	95	103	99	112	125	118	120	129
Switzerland	108	96	95	108	114	123	123	135

Source: National data. Table V.2

the United States two sets of surprisingly strong employment statistics in early March and April rocked the market, validating previous increases and pushing yields up sharply. In Japan yields stabilised as new data confirmed that economic recovery was under way. In Germany weak industrial production and employment figures halted any additional increases. As a result of these contrasting movements, by mid-April US ten-year government bond yields had again edged up above the equivalent German rates.

Equities

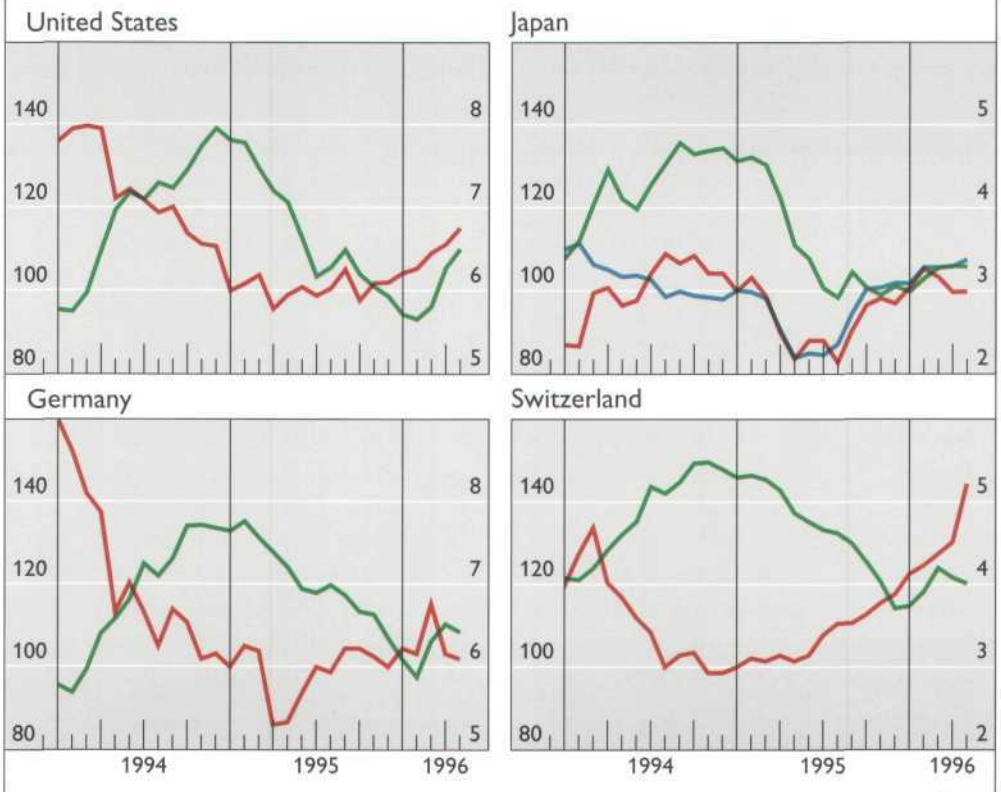
Buoyant equity markets

Following a subdued performance in 1994, equity markets generally made substantial gains in the period under review (Table V.2). Gains were largest in the United States, where the S&P 500 index increased by almost 40% between the beginning of 1995 and January 1996. They were smallest in Japan, where equity prices barely rose. The Italian stock market actually fell slightly over the period, partly reflecting political uncertainty. All markets suffered somewhat in February and March 1996, as bond yields rose sharply, but the decline was only temporary: with few exceptions, by the end of the first quarter prices had risen further. In April, however, equity prices fell again in the United States.

The main factors sustaining the markets in 1995 were generally improving earnings, favoured in several countries by industrial restructuring, and, above all,

Price/earnings ratios and bond yields

Price/earnings ratio (left-hand scale; December 1994 = 100)
Bond yield (right-hand scale; in percentages)
Memorandum item (Japan only): *Exchange rate (left-hand scale; in yen/US dollar)*



Sources: Datastream and national data. Graph V.4

the trend decline in bond rates. Indeed, throughout the year equity prices appeared to be particularly responsive to short-term movements in bond yields. This was most evident on 18th December, when a sizable but short-lived drop in US Treasury bond prices triggered a 102 point fall in the Dow Jones index, the second largest in four years.

Just as in 1994, fluctuations in the Japanese market were less sensitive to international trends. In particular, the main driving force behind movements in the equity index in Japan appears to have been evolving apprehensions about deflation, fuelled by the weak state of the banking system and exchange rate changes. This is borne out by the strong *positive* correlation between the level of bond yields and price/earnings ratios during the period under review: declines in the rates tended to coincide with an appreciating currency and hence could be taken as a sign of concerns about a weakening economy and of worsening prospects for earnings (Graph V.4). This relationship is in marked contrast to the *negative* correlation observed in other countries, where lower bond yields tended to prompt substitution into equities, helping to push up their price.

Concerns about overvaluation of the US market

The particularly strong performance of the US market raised questions about the extent to which the rise was consistent with justifiable prospects for earnings and with yields on alternative assets. Indicators of fundamental value provide mixed signals in this respect. By early 1996, the market's price/earnings ratio was only somewhat higher than the long-term average and below previous peaks (Table V.3). Moreover, in parallel with the equivalent ratios for most other industrial countries, it had not changed much since the beginning of 1994. On the other hand, earnings were exceptionally high and the room for further sustained expansion was unclear given the uncertainty about the level of excess capacity in the economy. Similarly, by the end of March the market's inflation-adjusted dividend yield gap was in line with historical standards and lower than a year earlier, suggesting that there was little reason to believe that equities were

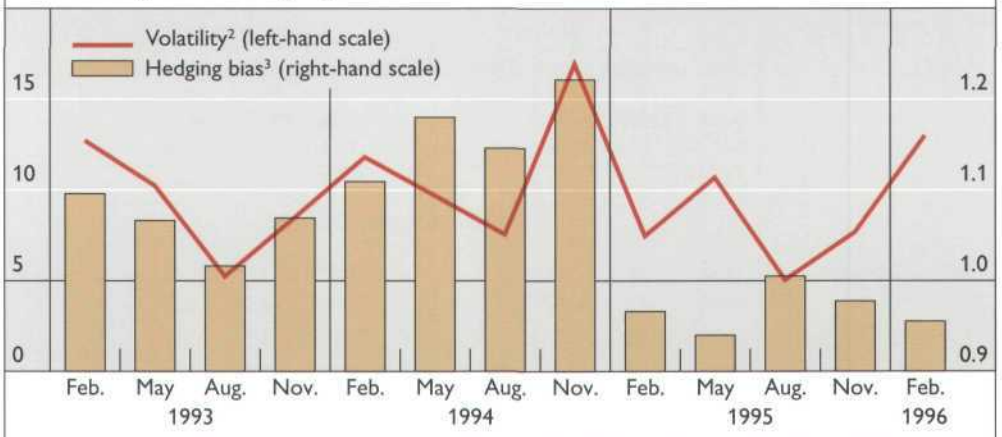
Indicators of valuation of share prices

Countries	Price/earnings ratios[1]						Inflation-adjusted dividend yield gaps[2]					
	Peak 1983–93		Average 1983–93	Dec. 1994	Jan. 1996	March 1996	Peak 1983–93		Average 1983–93	Dec. 1994	Jan. 1996	March 1996
	level	date					level	date				
United States	26	1992	16	17	17	18	5.1	1983	1.5	2.2	0.6	1.2
Japan[3]	74	1987	44	66	70	66	5.4	1987	3.3	3.1	2.8	2.8
Germany	25	1993	14	16	16	16	5.6	1986	2.5	3.2	2.4	3.1
France	17	1993	12	14	13	15	5.1	1987	2.0	3.2	0.8	0.8
Italy	26	1986	16[4]	18	15	16	4.5	1987	2.4	3.8	0.4	1.8
United Kingdom	21	1993	14	18	17	17	4.2	1986	0.7	1.7	0.7	1.6
Canada	104[5]	1993	30	22	14	16	6.0	1984	2.5	6.4	3.2	4.0
Belgium	16	1993	11	15	15	16	4.4	1986	2.0	3.3	1.3	1.7
Netherlands	16	1993	11	14	13	15	3.7	1987	1.3	1.7	0.8	1.3
Switzerland	17	1993	11	14	18	19	2.3	1986	–0.6	2.9	0.7	1.6

[1] Ratio of price to reported earnings per share. [2] Long-term interest rate minus dividend yield minus 12-month inflation rate. [3] Price/earnings ratios are very high by international standards owing to extensive cross-shareholdings and accounting conventions. [4] July 1986–December 1993. [5] Exceptionally high owing to very low or negative earnings.

Sources: Datastream and national data. Table V.3

Volatility and hedging bias in the US stock market[1]



[1] S&P 500. [2] Measured as the annualised standard deviation of daily percentage changes during calendar months. [3] For an explanation, see the footnote to Graph V.3; the hedging bias is calculated on the basis of contracts with 35 days to expiration.

Sources: Chicago Mercantile Exchange and BIS calculations. Graph V.5

overvalued relative to long-term fixed income assets. It had, however, more than doubled since the beginning of 1996, as the equity market had shrugged off the increase in bond yields.

Equally mixed is the evidence relating to market sentiment. Volatility increased considerably in early 1996, pointing to greater uncertainty about prospective yields (Graph V.5). At the same time, market participants did not appear to be particularly apprehensive about a market drop. In fact, the dispersion of option prices suggests that participants with a one-month horizon were willing to pay a higher premium for hedging against large upward movements than against similar downward movements in share prices, in contrast to the 1993–94 period. Indeed, the estimates imply that at least until early February 1996 investors became increasingly confident as equity prices gathered momentum from the second half of 1995.

Real estate prices

Property prices had a lacklustre year ...

In contrast to the overall buoyancy in bond and equity markets during much of the period under review, real estate markets had a lacklustre year in 1995, although their performance generally improved compared with 1994. This accords with historical experience: property prices typically lag equity prices and are more responsive to contemporaneous, rather than prospective, economic activity. But in addition, several markets were still suffering from past excesses, when prices had reached levels hardly justifiable on the basis of the anticipated income from the assets.

While in most countries residential property price indices showed some increase, only in a handful of cases was the rise sufficient to compensate for inflation (Table V.4). The recent recovery in house prices faltered in the English-speaking countries but continued in most of the Nordic markets; countries in these two groups, together with Japan, had experienced the largest rises and subsequent declines in the 1980s and early 1990s. Prices also rose somewhat in

Nominal and inflation-adjusted real estate prices

Countries and cities	Nominal prices					Inflation-adjusted prices				
	year of peak since 1980	trough to peak	peak to most recent	1994	1995	year of peak since 1980	trough to peak	peak to most recent	1994	1995
		percentage changes					percentage changes			
	Residential property prices									
United States	1995	91	–	2	2	1988	15	– 4	0	– 1
Japan[1]	1990	130	–21	– 2	– 3	1990	88	–26	– 2	– 3
United Kingdom	1989	190	– 8	2	0	1989	89	–29	– 1	– 4
Canada	1994	105	– 5	3	– 5	1989	55	–13	3	– 7
Australia	1995	216	–	8	3	1994	43	– 1	6	– 1
Germany[2]	1994	59	– 1	2	– 1	1992	36	– 8	– 1	– 3
France	1992	51	– 3	– 2	0	1990	25	– 9	– 3	– 2
Belgium	1995	96	–	8	4	1995	55	–	5	2
Netherlands	1995	34	–	3	4	1995	13	–	0	2
Sweden	1991	117	–15	5	1	1990	38	–26	2	– 2
Norway	1988	155	– 8	10	8	1987	46	–27	9	6
Finland	1989	268	–38	6	– 4	1989	105	–48	5	– 5
	Commercial property prices: major cities									
United States[3]	1989	67	–42	– 4	– 2	1987	24	–56	– 7	– 5
Tokyo[1]	1990	276	–57	–15	–17	1990	207	–60	–16	–17
London	1988	221	–40	25	7	1988	101	–57	22	3
Toronto[4]	1989	51	–50	–12	– 8	1989	28	–57	–12	–10
Sydney	1989	405	–50	21	6	1988	157	–60	18	1
Frankfurt	1991	259	–40	–11	– 3	1991	184	–47	–13	– 4
Paris	1990	350	–48	– 6	–11	1990	144	–53	– 7	–12
Milan	1990	178	–43	–15	0	1990	111	–55	–18	– 5
Madrid	1990	827	–64	2	3	1990	323	–72	– 3	– 1
Brussels	1990	224	–25	– 6	0	1989	110	–34	– 8	– 1
Stockholm	1989	875	–47	31	29	1989	418	–61	28	26
Oslo	1986	233	–30	8	8	1986	129	–51	7	5
Helsinki	1989	657	–27	14	3	1989	321	–38	13	2

[1] Land prices. [2] Four major cities. [3] North-East. [4] Price index for offices in Ontario.

Sources: National Association of Realtors, Frank Russell, National Council of Real Estate Investment Fiduciaries, Jones Lang Wootton, Ministère de l'Équipement, du Logement et des Transports/ECLN, OPAK, various private real estate associations and national data. Table V.4

continental European countries, such as the Netherlands and Belgium, where previous increases had been most subdued.

The overall performance of the commercial property segment was mixed. Against the background of slower-than-expected economic growth, persistently high vacancy rates and stable take-up rates, prices in the main cities declined or remained flat in a majority of countries. Prices were again comparatively buoyant in the Nordic region, with Stockholm recording a rise of close to 30%. Prices also increased, albeit moderately, in London and Sydney. Property values were relatively soft in continental Europe, owing to the cyclical position of the economies. They were particularly weak in Paris, where the rate of decline actually accelerated to exceed 10%.

... and were especially weak in Japan

The country that saw the largest fall in property prices in 1995 was Japan. This was the fifth consecutive year of declining prices. The cumulative reduction from the previous peak as measured by officially recorded residential and commercial land values reached over 20% and close to 60% respectively. Very low turnover complicated the assessment of the underlying weakness in the market, but a further decline was expected, particularly in the commercial property segment. The very weak property market continued to exacerbate the serious difficulties faced by the banking industry and to cast a shadow over the recovery of the economy.

The banking industry

Recent performance

Despite a fairly general improvement in bank profits ...

With some notable exceptions, bank profits generally improved last year compared with 1994 (Table V.5). Much of the improvement reflected conjunctural developments or one-off factors. The favourable evolution of bond and equity markets, monetary policy easing and, in some cases, a pick-up in loan demand had a positive influence on net interest and non-interest income. In addition, in a number of countries banks reduced loan loss provisions, helped in a few cases by firming commercial real estate prices. At the same time, many banks reaped the benefits of longer-term efforts to cut operating costs.

Bank profits were comparatively high and in some cases recorded significant improvements in English-speaking countries, the first to emerge from the latest recession and among the most determined in pursuing cost reductions. A large swing in net results also took place in the Nordic countries. In Denmark a major

Profitability of major banks in 1994 and 1995

Countries	Number of banks	Return on assets[1]		Loan loss provisions		Net interest margin		Operating costs	
		1994	1995	1994	1995	1994	1995	1994	1995
		as a percentage of total assets							
United States	12	1.81	1.87	0.33	0.31	3.57	3.35	3.80	3.49
Japan[2, 3]	21	−0.21	−0.75	0.88	2.03	0.90	1.01	0.74	0.74
Germany	2	0.52	0.56	0.35	0.23	1.82	1.57	2.06	1.98
France	6	0.17	0.27	0.63	0.39	1.60	1.54	2.04	2.00
United Kingdom	4	1.22	1.27	0.31	0.34	2.45	2.44	3.02	2.98
Canada[3]	6	1.12	1.16	0.51	0.34	2.84	2.62	2.70	2.50
Australia[3]	4	1.60	1.82	0.43	0.21	3.45	3.53	3.39	3.27
Denmark[4]	2	0.29	1.20	0.61	0.42	2.85	2.55	2.20	2.07
Finland[5]	2	−0.69	−0.16	1.65	0.60	1.98	1.57	2.30	2.21
Netherlands	3	0.69	0.72	..	..	2.27	2.18	2.17	2.26
Norway	4	1.31	1.81	0.16	−0.38	2.96	2.86	2.82	3.01
Spain	6	0.70	0.79	0.52	0.45	2.47	2.46	2.45	2.62
Sweden	4	0.55	1.23	1.09	0.59	2.34	2.39	1.76	1.81
Switzerland	3	0.63	0.52	0.30	0.33	1.17	1.07	2.17	2.18

[1] Pre-tax profit. [2] Combination of half-year results at an annual rate and IBCA estimates. [3] Fiscal years. [4] The portfolio of securities is marked to market. [5] 1994 and 1995 results are not fully comparable owing to a break in series.

Source: IBCA Ltd. Table V.5

increase in profits mirrored the buoyancy of securities prices, given the reliance on mark-to-market accounting; in Norway, Sweden and Finland the size of the swing varied depending on the extent to which banks had overcome the recent banking crisis. In Sweden the end of the crisis was marked by the Government's decision to remove the general guarantee on banks' liabilities by July 1996; in Finland, in contrast, despite much lower provisions, banks recorded further losses. In a number of countries in these two groups the recovery in nominal commercial property prices was a significant factor behind the better performance.

Profits also rose somewhat in most continental European markets, but the rise was not always sufficient to prevent a further narrowing of margins. In Italy the improvement from a low level masked a deterioration in asset quality, as non-performing loans, mainly backed by real estate collateral, continued to increase. In France profits remained very low, reflecting high operating costs and declining property valuations, and one large bank incurred losses.

The poorest results last year were recorded by Japanese banks, still grappling with the serious difficulties that have plagued the banking industry for some time. In the most recent accounting period banks, especially the larger ones, made the biggest strides to date in setting provisions and writing off loans, highlighting a more transparent attitude towards the underlying asset quality problems. Public attention focused on the handling of the crisis surrounding the failed "jusen", or housing loan companies. An initial government plan unveiled in December met with opposition over the extent to which the losses should ultimately be borne by taxpayers rather than by the founders and creditors of the jusen, essentially banks and agricultural cooperatives. This was taken as the litmus test of the

Long-term accounting indicators of banks' performance[1]

Countries	Pre-tax profits			Non-interest income		
	1980–82[2]	1986–88	1992–94	1980–82[2]	1986–88	1992–94
	as a percentage of assets			as a percentage of gross income		
United States	1.0	0.7	1.6	24	30	35
Japan[3]	0.5	0.6	0.2	14	24	1
Germany	0.5	0.7	0.5	29	30	29
France	0.4	0.4	–0.1	16	17	46
Italy	0.7	1.0	0.8	26	29	26
United Kingdom	1.1	1.0	0.7	29	37	43
Canada[3]	0.5	1.0	1.1	22	27	36
Australia	0.9	1.2	0.7	..	40	42
Belgium	0.4	0.4	0.3	15	22	26
Finland	0.5	0.5	–1.6	49	58	53
Netherlands	0.3	0.7	0.6	25	26	30
Norway	0.6	0.0	0.2	27	30	29
Spain	0.7	1.1	0.6	18	20	27
Sweden	0.3	0.8	0.5	30	31	44
Switzerland	0.6	0.7	0.6	47	49	51

[1] For Australia, Belgium, the Netherlands and Switzerland, all banks; for other countries, commercial banks only. [2] For France, Australia and Belgium, 1981–82; for Canada, 1982. [3] Fiscal years.

Source: OECD. Table V.6

Government's scope for using public money, should the need arise, to solve the difficulties of the banking industry more generally; movements in the premium paid on interbank funding by Japanese banks in international markets tended to mirror in part such evolving concerns (see Chapter VIII). By early spring 1996 the final outcome of the political conflict over the jusen was still somewhat unclear.

The need for longer-term restructuring

The fact that last year the profitability of banks typically improved should not obscure the serious challenges facing the industry. Viewed in a longer-term perspective, profit margins have tended to decline at least since the mid-1980s (Table V.6), bank share prices have lagged behind the overall index in a majority of countries (Table V.7) and credit ratings have generally weakened. The widespread further narrowing of net interest margins last year underscores the longer-term loss of profitability on traditional intermediation activities (Table V.5).

... the banking industry needs to restructure and consolidate ...

The underlying reasons for these developments are well known: banks have been facing an increasingly competitive environment in the wake of wide-ranging deregulation and a quickening pace of financial innovation. The lifting of constraints on balance sheets, interest rates and commissions, the reduction in geographical and functional barriers and technological advances have unleashed unprecedented forces working towards a major restructuring and consolidation in the banking industry.

Some of the pressures for restructuring and consolidation have been of a short or medium-term nature. In particular, the relaxation of financing constraints following deregulation contributed significantly to the pronounced asset price/credit cycle of the 1980s and early 1990s which was at the origin of the

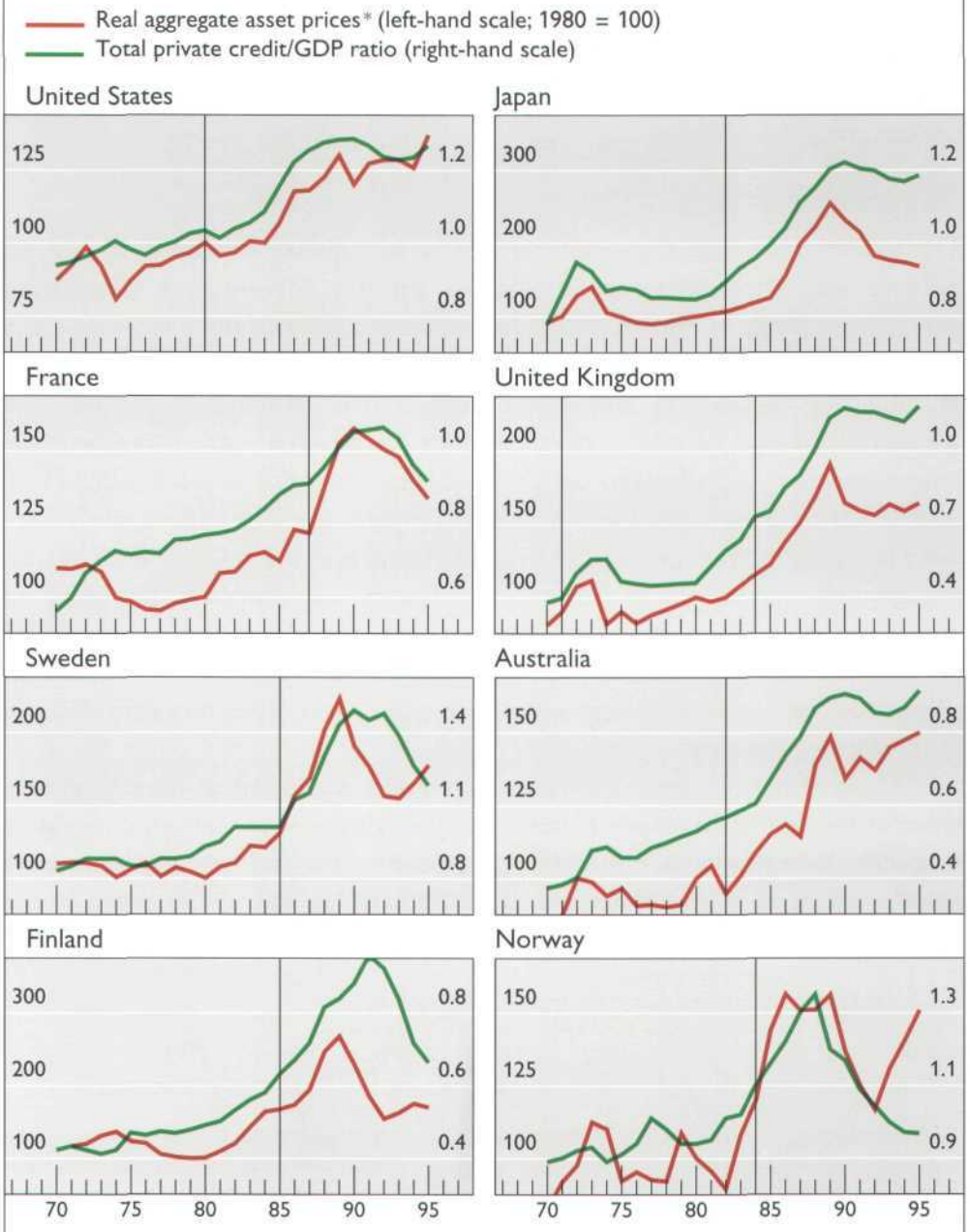
Long-term movements in bank share prices

Countries	1970	1980–82	1984–86	1990–92	1993–95	1995
	ratio of bank index[1] to overall index, 1980 = 100					
United States	142	111	120	69	92	96
Japan	71	103	158[2]	189	196	194
Germany	93	94	83	75	78	72
Italy	..	138	96	86	72	67
United Kingdom	85	97	90	83	118	127
Canada	113	106	107	124	127	127
Australia	103	131	153	150	154	163
Belgium	110	97	92	88	107	112
Finland	85	98	84	47	22	15
Netherlands	..	92	77	56	61	60
Norway	101	103	67	17	9	9
Spain	56	112	78	85	76	72
Sweden	66	99	84	68	66	61
Switzerland	64	99	92	59	60	55

[1] For Japan (prior to 1983), Belgium and the Netherlands, including other financial institutions. [2] The rise in the mid-1980s is largely due to the breakdown of restrictive arrangements aimed at controlling bank share prices.

Source: National data. Table V.7

Credit and real aggregate asset prices



Note: The vertical lines indicate the initial years of significant financial reform.

*Weighted average of equity and residential and commercial real estate price indices deflated by consumer prices. The weights are based on the composition of private sector wealth.

Sources: National data and BIS estimates. Graph V.6

most serious episodes of financial distress since the widespread instability of the interwar years: lenders, borrowers and even policy-makers have had to learn how to operate in the new environment (see Graph V.6 and the discussion in the 62nd and 63rd Annual Reports). But other forces are of a much more permanent character. In a fundamental sense, all forms of financial capital have irreversibly become more expensive at the margin: the cost of retail funds has increased; collateralisation of interbank and other wholesale funding has spread,

as exemplified by the rapid development of repo markets; and shareholders, notably institutional investors, have become more assertive in upholding their interests vis-à-vis management. And just as providers of financial resources have grown more demanding regarding the returns required on their funds, regulators and supervisors have become more alert to the need for banks to operate with adequate minimum levels of capital.

... in response to deregulation and technological change

Looking ahead, there is little reason to believe that the forces of change will abate. Deregulation has not yet fully run its course. In Japan and the United States functional barriers between commercial banking, securities business and insurance are expected to come down further. In the United States branching restrictions will be removed completely next year. In the European Union it is probably only a matter of time before the pension fund and mortgage lending sectors are exposed more fully to the rigours of competition in the single internal market. Moreover, the pace of technological change and innovation is unlikely to slow down. In particular, the longer-term impact of various forms of "electronic banking" could be far-reaching, especially in the retail sector. The direct online provision of financial services, including payment services, could profoundly alter the shape of the industry: it makes banks vulnerable to a new set of potential competitors, such as software houses and network providers, and is bound to put increasing pressure on traditional bricks-and-mortar branch networks. The first "virtual banks", delivering services exclusively online, were launched in the United States in the past year. Considerable progress is also being made in ensuring the security of electronic payments, including electronic substitutes for cash. The implication of these powerful trends in deregulation and technology is that the restructuring and consolidation under way in the banking industry will extend well into the future.

Features of the restructuring

As a preliminary step towards assessing the restructuring that has taken place so far, it may be useful to ask what the shape of the industry is likely to be in the future. The number of institutions is expected to decline and their average size to increase. This should facilitate a reduction of the excess capacity prevailing in several industry segments, help to counterbalance rising competitive pressures and, especially in the wholesale markets, provide the critical size that will permit the required expenditure on infrastructure. Branch networks will shrink. At least in the medium term, employment will fall and skills will have to be upgraded. In those countries where lines of business have been more restricted, despecialisation may continue. Markets are likely to expand further relative to traditional non-traded instruments such as bank loans: on the supply side, market participants' ability to price and unbundle risks will undoubtedly improve, facilitating the process of standardisation or "commoditisation" of financial claims; on the demand side, the institutionalisation of savings still has a long way to go, as national pay-as-you-go pension systems come under growing strain. As a result, an increasing proportion of banks' income will derive from non-interest sources (Table V.6). Less clear are the speed and limits of these trends. Although, say, large and small institutions as well as "supermarkets" and "niche" players will undoubtedly coexist, the precise contours of the industry remain highly uncertain.

Indeed, questions can even be raised regarding the very boundary between financial and non-financial businesses.

The consolidation under way has been uneven

A review of the restructuring process under way confirms the breadth and depth of the forces at work. At the same time, it also indicates that consolidation and rationalisation have been uneven across countries and market segments. This reflects differences not only in initial conditions but also, and more significantly perhaps, in the strength of the obstacles to the required adjustment.

The statistics already point to a generalised tendency for the number of deposit-taking institutions to fall and for size concentration to increase (Table V.8). Branch networks, too, have typically been cut, the main exceptions being those countries where branching restrictions have been lifted more slowly or only recently, such as Italy, the United States and Japan (Table V.9). Employment in the industry has declined virtually everywhere (Table V.10).

The above indicators suggest that consolidation has proceeded fastest and in some respects furthest in those Nordic countries that have recently experienced a banking crisis. Indeed, the ratio of staff costs to gross income – perhaps the most comparable, albeit rough, index of efficiency across countries – has fallen steeply to the lowest levels internationally (Table V.10). The same statistics also indicate that the restructuring in most of continental Europe and

Banks' restructuring: number of institutions and size concentration[1]

Countries	Number of institutions						Concentration: top five (top ten)		
	1980[2]	1990	1995[3]	Peak (since 1980)			1980[4]	1990	1995[5]
	number				year	% change[6]	percentage share in total assets		
United States[7]	35,875	27,864	23,854	35,875	1980	−34	9 (14)	9 (15)	13 (21)
Japan	618	605	571	618	1980	− 8	25 (40)	30 (45)	27 (43)
Germany[8]	5,355	4,180	3,487	5,355	1980	−35	..	..	17 (28)
France	1,033	786	593	1,033	1984	−43	57 (69)	52 (66)	47 (63)
Italy	1,071	1,067	941	1,109	1987	−15	26 (42)	24 (39)	29 (45)
United Kingdom	796	665	560	796	1983	−30	63 (80)	58 (79)	57 (78)
Canada	1,671	1,307	1,030	1,671	1984	−38	..	55 (78)	65 (88)
Australia	812	481	370	812	1980	−54	62 (80)	65 (79)	67 (79)
Belgium	148	129	150	163	1992	− 8	64 (76)	58 (74)	59 (73)
Finland	631	498	352	631	1985	−44	63 (68)	65 (69)	74 (83)
Netherlands	200	180	174	200	1980	−13	73 (81)	77 (86)	81 (89)
Norway	346	165	148	346	1980	−57	63 (74)	68 (79)	58 (71)
Spain[9]	357	327	318	378	1982	−16	38 (58)	38 (58)	49 (62)
Sweden	598	498	112	598	1980	−81	64 (71)	70 (82)	86 (93)
Switzerland	478	499	415	499	1990	−17	45 (56)	45 (57)	50 (62)

[1] Deposit-taking institutions, generally including commercial, savings and various types of mutual and cooperative banks; for Japan, excluding various types of credit cooperative; for Canada, excluding trust and loan companies (in 1994, 83 institutions). [2] For France and Canada, 1984; for the United Kingdom, 1983; for Finland, 1985; for Spain, 1981. [3] For Japan, Finland and Sweden, 1994. [4] For France, 1986; for Italy, 1983; for Finland and the Netherlands, 1985; for Switzerland, 1987. [5] For Japan, the United Kingdom, Belgium and Switzerland, 1994; for Finland, 1993. [6] From peak to most recent observation where applicable. [7] Excluding credit unions: 1995, 12,067; percentage change, −36%. [8] For number of institutions, western Germany only. Data for the whole of Germany: 1995, 3,784; percentage change, −30%. [9] Concentration data for commercial and savings banks only.

Sources: British Bankers' Association, Building Societies' Association and national data. Table V.8

Banks' restructuring: number of branches[1]

Countries	1980[2]	1990	1995[3]	Peak		
	number (in thousands)				year	% change[4]
United States	58.3	67.7	69.6	69.6	1994	–
Japan	18.5	24.8	25.7	25.7	1994	–
Germany[5]	39.3	39.8	37.9	40.0	1985	– 5
France	24.3	25.7	25.5	25.9	1987	– 2
Italy	12.2	17.7	23.9	23.9	1995	–
United Kingdom	20.4	19.0	16.6	21.2	1985	–22
Canada	8.8	8.7	9.4	9.4	1994	–
Australia	6.3	6.9	6.7	7.1	1993	– 6
Belgium	7.8	8.3	7.8	8.5	1989	– 8
Finland	3.4	3.3	2.1	3.5	1988	–39
Netherlands	6.6	8.0	7.3	8.5	1986	–14
Norway	1.9	1.8	1.6	2.2	1987	–27
Spain	25.8	35.2	36.0	36.0	1995	–
Sweden	3.7	3.3	2.7	3.7	1980	–27
Switzerland	3.7	4.2	3.8	4.2	1990	–10

[1] Deposit-taking institutions; for the United States, Japan and Australia, excluding various types of credit cooperative; for Canada, excluding trust and loan companies (in 1994, 908 branches). [2] For France and the Netherlands, 1981; for Australia, 1987. [3] For the United States, Japan, the United Kingdom, Canada, Belgium, Finland, the Netherlands, Sweden and Switzerland, 1994. [4] From peak to most recent observation where applicable. [5] Western Germany only, excluding commission agencies of Bausparkassen. Data for the whole of Germany: 1995, 48.2; percentage change, –2%.

Sources: British Bankers' Association, Building Societies' Association and national data. Table V.9

Japan has so far lagged somewhat behind that in English-speaking countries; in Japan, Germany and Italy, for instance, employment has shown hardly any decline. While disentangling structural from conjunctural factors is very difficult, accounting returns on equity and the behaviour of equity prices (Table V.7) are broadly consistent with this view. An important influence behind this uneven pace of change is differences in the ability to effect the required cuts in employment and remuneration, stemming primarily from labour market arrangements.

In terms of the reduction in the number of institutions, though not necessarily in employment, consolidation has been most substantial among savings, cooperative and mutual banks. This trend, however, has often involved a shift of resources into the middle and higher market segments, exacerbating competition and excess capacity there. Prospectively, this shift is likely to be particularly pronounced in the United Kingdom, where a number of building societies are planning to abandon their mutual status in order to expand their capital base and diversify their business. Excess capacity has been especially persistent in the wholesale and international markets.

Risks in the restructuring process

From a policy perspective, a key issue is whether the restructuring is likely to proceed smoothly and at a sufficient pace. The episodes of financial instability that have accompanied the transformation of the industry have shown that the benefits of a liberalised environment are not a free good. Strains may reappear

Banks' restructuring: employment and staff costs

Countries	Employment[1]						Staff costs[2]		
	1980[3]	1990	1994[4]	Peak			1980–82[5]	1986–88	1992–94
	number (in thousands)				year	% change[6]	as a percentage of gross income		
United States[7]	1,900	1,979	1,891	2,136	1987	– 12	36	31	27
Japan	612	597	618	622	1993	–0.6	44	33	39
Germany[8]	533	621	658	658	1994	–	48	44	39
France	399	399	382	401	1988	– 5	47	44	44
Italy	277	324	332	333	1993	–0.3	46	48	44
United Kingdom	324	425	368	430	1989	– 15	47	38	36
Canada	170	211	202	211	1990	– 4	42	33	33
Australia	265	356	311	356	1990	– 13	..	..	..
Belgium	68	79	76	79	1990	– 5	41	33	34[9]
Finland	42	50	36	53	1989	– 32	43	33	24
Netherlands	113	118	112	119	1991	– 6	42	41	38
Norway	24	31	23	35	1987	– 34	42	35	30
Spain	252	252	245	256	1991	– 4	47	43	37
Sweden	39	45	42	46	1991	– 5	29	23	22
Switzerland	84	120	112	120	1990	– 7	40	37	33

[1] In deposit-taking institutions; for Japan, excluding various types of credit cooperative; for Canada, excluding trust and loan companies (employment in 1995, 25,000); for Australia, finance and insurance industry. [2] For Belgium, the Netherlands and Switzerland, all banks; for other countries, commercial banks (OECD definitions). [3] For France, 1985; for Australia, the Netherlands and Sweden, 1984; for Spain, 1981. [4] For Italy, Australia, Norway and Spain, 1995. [5] For France and Belgium, 1981–82; for Canada, 1982. [6] From peak to most recent observation where applicable. [7] Employment data excluding credit unions: 1994, 1,732; percentage change, –14%. [8] For employment, western Germany only. (Data for the whole of Germany: 1994, 728.) [9] 1992.

Sources: For staff costs, OECD; for employment, British Bankers' Association, Building Societies' Association, national data and BIS estimates. Table V.10

Obstacles to the restructuring ...

as competitive pressures interact with stubborn cost structures. Factors hindering a smooth process fall into two categories: those pertaining to *any* restructuring process and those *specific* to the banking industry.

The restructuring process in any industry is fraught with difficulties. For an individual firm, the choice of the right combination and scale of activities is no easy task. Moreover, there is an inherent conflict between each individual firm's ambitions and expectations, on the one hand, and the dynamics of growth and competition, on the other. These dynamics place limitations on the size and number of firms that an industry can sustain, generally more stringent ones than those envisaged by individual participants. Hence, for instance, the widespread conviction that international financial markets will be dominated by a handful of very large players and the ingrained view of too many firms that they will be members of that restricted group. This inherent conflict is often amplified by a tendency on the part of management to favour size and growth over profitability. This tendency hinders the scaling-down of unprofitable operations and the withdrawal from markets. It complicates the restructuring necessary to reap the benefits of completed mergers and acquisitions (M&As). And it adds to the other long-standing obstacles to cost-cutting, ranging from rigidities in the labour markets to broader social and political influences.

... are especially strong in banking ...

Several factors specific to the financial industry exacerbate the pitfalls of the restructuring process. First, the common traits shared by all forms of financial activity multiply the *potential* for exploiting technological, organisational, marketing and informational synergies; the convergence between banking and insurance activities is a typical example. By the same token, however, they also increase the scope for error. The rediscovery by many players of the value of specialisation is a sign that organisational diseconomies have often been underestimated. Secondly, the opaqueness of financial activity and the typically high fragmentation of debt and equity claims on individual firms, particularly banks, hamper creditor and shareholder discipline. Opaqueness affects traditional activities, such as the valuation of loan portfolios, as well as new ones, such as the assessment of the risk profile associated with derivatives. The high fragmentation of claims weakens the incentives and ability to monitor and control the institutions. Finally, government intervention can weaken discipline further. Those explicit or implicit forms of government protection designed to limit the consequences of financial disruptions are a clear case in point. Similarly, in several countries extensive public ownership has shielded parts of the banking industry from the full impact of competitive pressures, while possibly exacerbating such pressures on the private segment.

... owing to an "exit" problem

The implication is that the banking industry is arguably characterised by an "exit" problem. Firms are less subject than in other sectors to the market mechanisms designed to discipline behaviour. This can bias the industry's configuration towards a permanent state of excess capacity even in the absence of technological pressures. It can thereby also heighten the potential for financial strains.

Evaluating the risks

Contrasting signs regarding recent developments

Viewed in the light of these risks, the current restructuring presents a contrasting picture. Positive signs can be clearly discerned. In particular, the need to earn an adequate return on capital with due regard for risk has gained new prominence among the priorities of banks' management. Typical elements include a more critical attitude towards the merits of functional and geographical expansion, closer attention to cost-cutting and the share repurchase programmes of US and UK banks. The renewed attention to profitability has also been reflected in the more positive assessment of the current M&A wave by rating agencies and, more selectively, by markets at large (Table V.11). At least in the United States, upgradings of the new entities have far outnumbered downgradings. Moreover, it has not been uncommon for the share price of both firms involved in the transactions to show returns in excess of the average for the banking sector around the time of their announcement. This has been especially true in some of the most highly publicised deals (Graph V.7).

Equally, there are good reasons for being cautious. First, the scale of the necessary consolidation should not be underestimated, not least in terms of employment. Secondly, the assessment of M&As has not been uniformly positive (Graph V.7). In fact, in the United States the share prices of bidding companies have on balance underperformed the industry index, a sign of overpayment typical of past M&A waves. Elsewhere, risks have been factored in too, especially

Merger and acquisition activity in banking[1]

Countries	Number				Value							
					in billions of US dollars				as a percentage[2]			
	1989–90	1991–92	1993–94	1995–96[3]	1989–90	1991–92	1993–94	1995–96[3]	1989–90	1991–92	1993–94	1995–96[3]
United States	1,501	1,354	1,477	1,176	37.8	56.8	55.3	82.5	7.3	18.7	9.0	13.5
Japan	8	22	8	17	31.2	0.0	2.2	33.8	71.8	0.3	18.8	77.0
Germany	19	71	83	27	1.1	3.5	1.9	0.7	4.5	6.5	7.6	3.5
France	52	133	71	43	2.7	2.4	0.5	3.2	5.1	4.3	1.0	10.4
Italy	41	122	105	65	8.2	5.3	6.1	3.0	22.7	15.6	17.7	19.7
United Kingdom	86	71	40	28	6.4	7.5	3.3	21.7	2.6	6.5	3.4	12.4
Canada	13	29	31	14	0.8	0.5	1.8	0.1	1.3	1.9	4.1	0.3
Australia	23	19	20	9	2.3	0.9	1.5	2.5	4.3	3.6	5.7	5.8
Belgium	11	22	18	12	0.0	1.0	0.6	0.4	0.2	14.1	7.0	7.9
Finland	6	51	16	4	0.4	0.9	1.0	0.8	13.9	22.3	21.7	11.3
Netherlands	12	20	13	7	10.9	0.1	0.1	0.8	56.3	0.2	0.5	9.5
Norway	12	23	24	2	0.4	0.1	0.2	0.4	9.2	1.2	5.7	4.4
Spain	30	76	44	26	4.0	4.3	4.5	2.1	18.5	13.5	21.5	34.1
Sweden	10	38	23	8	2.0	1.1	0.4	0.1	8.8	3.8	2.0	0.4
Switzerland	31	47	59	14	0.5	0.4	3.9	0.7	4.7	9.5	43.4	1.6
Total	1,855	2,098	2,032	1,452	108.6	84.7	83.2	153.0	9.6	11.7	8.5	14.0
Memo item: Total non-bank financial	*2,075*	*2,723*	*3,267*	*2,267*	*99.0*	*63.7*	*122.2*	*90.7*	*8.8*	*8.8*	*12.5*	*8.3*

[1] Classified by the industry of the target; only completed or pending deals; announcement date volumes. [2] Of mergers and acquisitions in all industries. [3] As at 4th April 1996.

Source: Securities Data Company. Table V.11

when takeovers have occured as part of rescue packages in the absence of the preconditions for carrying out the necessary structural adjustment, not least for shedding labour. Thirdly, a positive assessment of M&As as reflected in share prices may not translate into subsequent success. Past evidence indicates that market expectations have often been too sanguine. Fourthly, experience suggests that in too many instances a crisis has been necessary to bring about the required restructuring, as witness the events in a number of Nordic and English-speaking countries. The risk is that consolidation will proceed too slowly to prevent a build-up of imbalances in those countries needing it most. Finally, even the healthy side-effects of a crisis may not be sufficiently long-lasting. Consolidation efforts could falter once the painful memory of recent losses fades.

Policy challenges

The key policy challenge in the years ahead is to facilitate the orderly restructuring of the financial industry. This means strengthening and complementing those market mechanisms that discipline individual institutions while at the same time improving the safeguards against systemic risk. Much has been written in previous Annual Reports about the work under way to upgrade the supervisory framework and to ensure sound payment and settlement systems. Higher capital standards, for instance, have been instrumental in bringing

about the renewed focus on risk-adjusted profitability on the part of both management and the markets at large. That work is of course continuing, partly under the aegis of the BIS (see "Activities of the Bank" at the end of the Report). From the point of view of the longer-term restructuring, however, other policies also merit attention. All of them involve giving market participants the means and/or the incentive to exert discipline.

Policies to facilitate an orderly restructuring ...

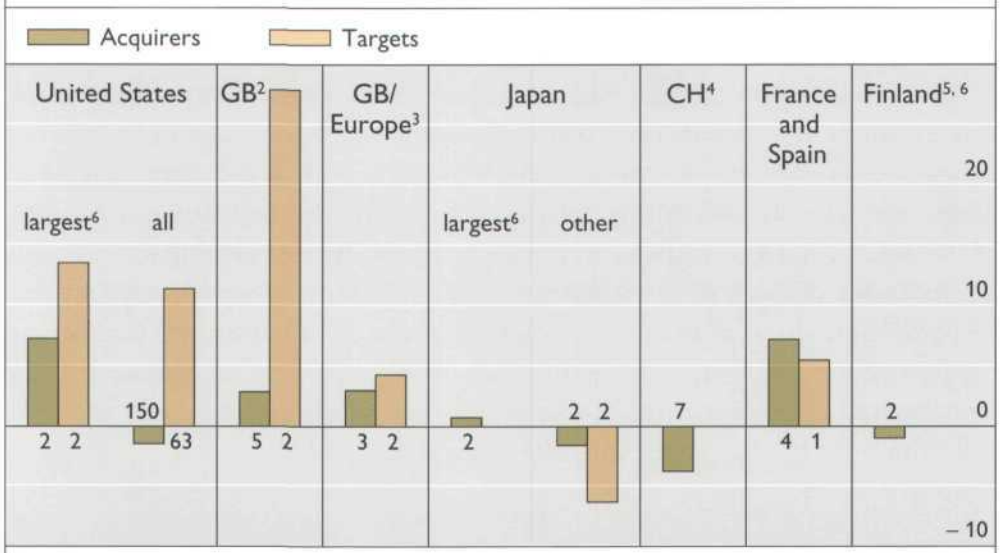
One such policy is to change the structure of ownership of institutions, favouring those forms that are more sensitive to the operation of market forces; privatisation is important in this context. A second is to lessen the obstacles to the adjustment of capital and labour, notably by easing regulatory constraints on the takeover mechanism and reducing inflexibilities in the labour market. A third, crucial policy is to ensure that market participants have the necessary information to exert discipline; enhancing public disclosure is vital. A fourth, equally important approach is to limit those forms of official intervention that provide protection without commensurate oversight, thereby reducing market participants' incentives to restrain imprudent behaviour. Various forms of implicit or explicit government guarantee are obvious cases in point. A final set of policies involves managing financial distress in a way consistent with the principles just outlined. This implies not only limiting the insulation of market participants from losses on outstanding contracts but also underpinning the restructuring of portfolios with measures that tackle the root cause of the problem. From this perspective, the reduction of excess capacity is essential.

... have partly been followed ...

There is no doubt that progress has been made on all of these fronts in recent years. In a few countries privatisation has been stepped up; in Australia, for example, one of the largest banks is due to be fully privatised by July 1996.

Comparative share price responses to mergers and acquisitions[1]

In percentage points



[1] Average returns in excess of the banking sector index over a two-month window centred on the announcement date of the transaction; January 1994–March 1996. The figures in the graph indicate the number of cases for which share prices were available. [2] United Kingdom. [3] Acquisitions of specialist financial firms in London by German and Swiss universal banks. [4] Switzerland: acquisitions of cantonal banks by large universal banks. [5] Merger of two largest banks. [6] One merger of equals.

Sources: IFR Securities Data, Datastream and BIS calculations. Graph V.7

A growing number of institutions, especially savings banks, have changed their status and been floated in the open markets. Specific rigidities are being tackled at source: in Japan, for instance, there are plans to remove long-standing legal constraints on organisational restructurings following M&As, thereby facilitating the achievement of efficiency gains. A series of private and official initiatives have aimed at improving public disclosure of financial institutions' balance sheets and risk management practices. The 1994 report on public disclosure of market and credit risk by the Group of Ten central banks and guidelines published by the Basle Committee on Banking Supervision and the International Organization of Securities Commissions (IOSCO) in November 1995 are important examples. Deposit insurance schemes have come under more critical scrutiny, as highlighted by the adoption of risk-related premiums in the United States in 1993. More generally, central banks have sought to ensure that banks carry a greater share of the responsibility for managing liquidity and credit risk in payment and settlement systems. And in a number of cases of widespread financial distress the authorities have promoted the rationalisation of the banking industry, most notably in some of the Nordic countries.

... but more needs to be done

Nevertheless, more needs to be done. In some countries, such as Italy, privatisation efforts have faltered. Regulatory and other, less transparent obstacles to hostile takeovers in the banking industry, especially across borders, deserve more attention. Steps to improve disclosure are still hampered by controversial questions concerning the range and nature of the information to be disseminated, the means of enforcement and the costs involved. There is scope for considerable progress in enhancing the comparability of accounting frameworks, an increasingly important issue in global markets. And it is far from clear whether the authorities' handling of financial distress has always been fully consistent with the need to promote adjustment: action has sometimes been delayed and in a number of cases the elimination of excess capacity has not as yet been pursued with sufficient vigour and due regard for competitive equality between the private and public sectors.

It is too early to attempt a definitive assessment of the restructuring under way. However, it is already clear that how market participants and policy-makers choose to manage the forces unleashed by deregulation and technology will determine not only individual success or failure, but also the balance of benefits of the restructuring process for society as a whole. Recent experience has seen the fulfilment of some of the initial promise, in the form of a more efficient and responsive provision of financial services to final users. At the same time, it has highlighted the possible costs. Awareness of the risks and recognition of the fundamental coincidence of the interests of market participants and the authorities are the key to meeting the challenges ahead.

VI. Exchange rates and capital flows in the industrial world

Highlights

In early 1995 the US dollar sank to all-time lows against the Japanese yen and the Deutsche Mark, and most European currencies touched record lows against the Deutsche Mark. At the same time, currency option prices pointed to extraordinarily diffuse exchange rate expectations and stronger apprehensions of further large depreciations, both of the dollar against the yen and the Deutsche Mark and of some European currencies against the Deutsche Mark, than of large appreciations. Over the succeeding 12 months, exchange rates retreated from these extreme levels. In addition, exchange rate expectations regained focus and balance.

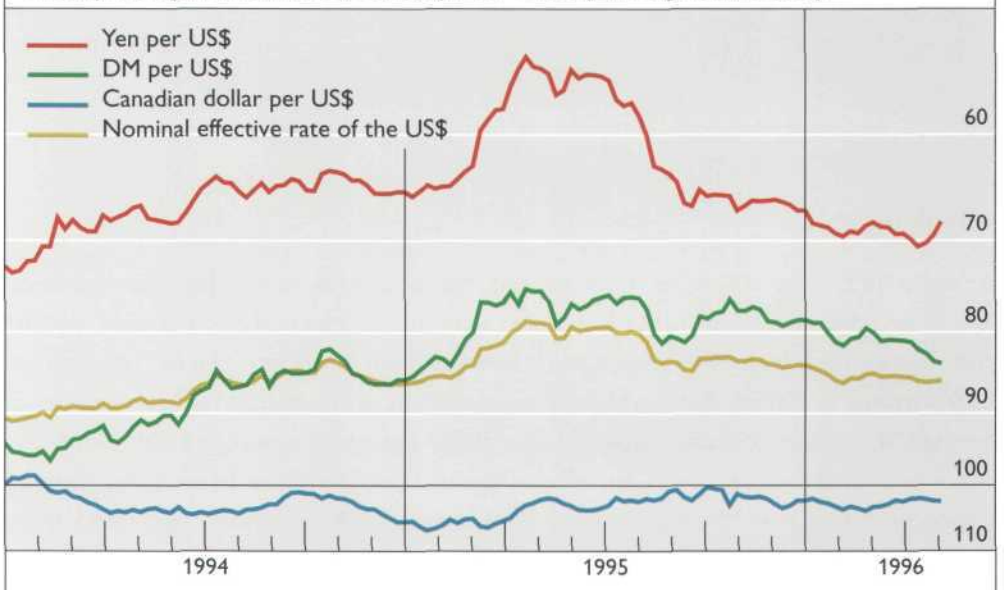
These developments all took place in a global market-place showing buoyant growth in trading, as documented by the 1995 central bank foreign exchange market survey. The survey results pointed both to a stable share of the dollar in overall trading and to the growing importance of derivative instruments in the foreign exchange market. In the light of this latter finding, and of the increased attention paid to the impact of derivatives on foreign exchange developments, this chapter complements traditional indicators with information obtained from options markets. It thus allows a more comprehensive analysis of exchange rate movements over the 16 months to April 1996. The reliability of this information depends, of course, upon the validity of the assumptions made in extracting it from market prices.

Capital flows and relative economic growth offer some explanation for the movements in the level of the dollar in relation to the yen and the Deutsche Mark last year. In early 1995 a drying-up of capital flows from Japan sent the yen higher against the dollar. The dollar also weakened against both the yen and the Deutsche Mark as market participants perceived a deceleration of the pace of US economic growth, leading to a striking fall in forward US money market rates. Cuts in German and Japanese official rates in late March and mid-April 1995 respectively, reinforced in Japan's case by a further easing of interbank rates, helped to arrest the dollar's slide.

The dollar recovered against the yen as capital flows from Japan temporarily revived and then as the Japanese authorities lowered the discount rate further to ½%. Against the Deutsche Mark, the dollar drew strength from increasing concerns about the lack of vigour of the expansion in Europe, which led to a series of cuts in German official rates. Official Japanese policies to encourage capital outflows did not prevent Japanese institutions from selling US bonds heavily in the autumn, and US speculators seemed to substitute for the Japanese institutions in holding dollar assets against yen liabilities. Signs of autonomous

Selected currencies against the US dollar and its nominal effective exchange rate

Weekly averages, third week of February 1987 = 100 (semi-logarithmic scale)



Note: A decline indicates a dollar appreciation. Graph VI.1

Japanese demand growth in early 1996 cast doubts both on the persistence of Japan's low interest rates and on the durability of the speculative recycling of the country's international surplus. Renewed upward pressure on the yen prompted strong intervention by the Bank of Japan in February and early March.

Changes in market participants' uncertainty during the period under review, and changes in the balance of apprehensions about large exchange rate movements, generally tracked movements in the spot rate. Essentially, uncertainty regarding future exchange rates intensifies when an exchange rate moves outside recent trading ranges, particularly into uncharted waters. Thus, extreme uncertainty prevailed in early 1995 as the dollar hit all-time lows; in the following 12 months, uncertainty moderated as exchange rates returned to more familiar levels. Similarly, changes in the balance of apprehensions regarding large exchange rate movements tend to extrapolate developments in the spot market; accordingly, increased fears of a further large depreciation of the dollar in early 1995 yielded to a more balanced outlook as the dollar subsequently recovered.

With large-scale intervention in support of the dollar by the Japanese authorities and revived capital flows to developing countries, official reserves grew strongly in 1995. Indeed, official flows financed most of the US current account deficit and recycled much of the Japanese current account surplus. Dollar holdings continued to bulk large in official reserves. A popular view maintains that the dollar share of official reserves is unsustainably high and that the dollar may therefore fall substantially. This view's popularity makes it timely to assess the dollar's value against its fundamental determinants. Measures based on purchasing power, the sustainability of international deficits and broad portfolio balance do not support the view that the dollar is overvalued.

The recovery of most European currencies against the Deutsche Mark paralleled the dollar's recovery. In addition, some European currencies benefited from a noticeable widening of the spread of their short-term interest rates over German rates and a tightening of fiscal policy. The failure of the Swiss franc to fall back, and the pound sterling to recover – their typical movements against the Deutsche Mark at a time of dollar recovery – seemed to reflect investors' concerns about European economic and monetary union and about political uncertainties respectively.

The retreat of the yen and the Deutsche Mark from historical highs might signal calmer foreign exchange markets. Some forces, however, could disrupt this tranquillity. Private investors' financing of the US current account deficit remains problematic. Moreover, the events of 1995 suggest that any unforeseen, abrupt change in market sentiment concerning intra-European exchange rates could also affect other currencies.

The 1995 foreign exchange market survey

The fourth triennial survey ...

In April 1995 the central banks and monetary authorities of 26 countries conducted the fourth triennial survey of foreign exchange transactions. The survey asked 2,414 commercial banks, investment houses and other financial institutions to provide gross turnover figures on all spot, outright forward and foreign exchange swap transactions concluded during that month, specifying the type of transaction, the counterparty and the currency.

... puts daily trading at $1.2 trillion, with swaps setting the pace

Daily global foreign exchange market turnover reached an average $1,190 billion in April 1995 (Table VI.1), up by around 30% from 1992 when evaluated at constant exchange rates. The particularly rapid growth of short-term currency swaps highlights the foreign exchange market's role in transferring liquidity from one currency to another. Thus, a Japanese bank that enjoys ample yen liquidity but needs dollars to fund its dollar assets can arrange a swap: exchanging yen for dollars immediately and agreeing to reverse the transaction a week later.

The dollar's role expands in Europe ...

The dollar maintained its dominant position, followed by the Deutsche Mark and the yen. Among currency pairs, Deutsche Mark/dollar trading retained the largest market share, followed by yen/dollar transactions. The loosening of the European exchange rate mechanism (ERM) since 1993 has been associated with a rise in the dollar's relative role in European currency trading. In European centres, trading of local currency against the dollar grew faster in 1992–95 than that of local currency against the Deutsche Mark. This applies in particular to trading in sterling in London and in lire in Milan, where exchanges of the respective currencies for Deutsche Mark fell in dollar terms. Market share gains by the dollar in Europe mirror an increased sensitivity of exchange rates within Europe to changes in the Deutsche Mark/dollar exchange rate, as described below. London continued to gain market share from Tokyo. The slower turnover growth in Tokyo reflects the retrenchment of Japanese institutions from foreign securities markets in the 1990s.

... while London gains market share

In April 1995 a notional value of $42 billion of predominantly over-the-counter currency options changed hands each day. Option dealers and their

Foreign exchange trading over the counter

	1989	1992	1995	Percentage change 1989–92	Percentage change 1992–95
	Turnover by transaction type[1, 2]				
	daily averages, in billions of US dollars				
Estimated global turnover	590	820	1,190	39	45
Spot transactions	350 (59)	400 (49)	520 (44)	14	30
Outright forwards	28 (5)	64 (8)	101 (8)	129	58
Foreign exchange swaps	212 (36)	356 (43)	569 (48)	68	60
Memorandum items:					
Futures	*2*	*5*	*6*	*150*	*20*
Options	*16[3]*	*38*	*42*	*138*	*11*
	Shares by currency[4]				
US dollar	90	82	84	−8	2
of which: Deutsche Mark/dollar		*26*	*23*		*−3*
Yen/dollar		*19*	*21*		*2*
Deutsche Mark	27	40	37	13	−3
Yen	27	22	24	−5	2
Memorandum items:					
Shares of local currency trading					
ERM centres:[5]					
Against the US dollar		*53*	*61*		*8*
Against the Deutsche Mark		*35*	*31*		*−4*
London and Milan:					
Against the US dollar		*70*	*72*		*2*
Against the Deutsche Mark		*23*	*20*		*−3*
	Turnover by location[2, 6]				
	daily averages, in billions of US dollars				
London	184 (26)	290 (27)	464 (30)	58	60
New York	115 (16)	167 (16)	244 (16)	45	46
Tokyo	111 (15)	120 (11)	161 (10)	8	34

[1] Adjusted for local and cross-border double-counting and estimated gaps in reporting. [2] Percentage shares are in brackets. [3] Estimate. [4] As a percentage of foreign exchange market turnover adjusted for local double-counting; when the shares measure the currency on only one side of a transaction, they sum to 200%. Shares for 1989 are estimated from gross figures. Changes refer to percentage point changes. [5] Brussels, Copenhagen, Paris, Dublin, Luxembourg, Amsterdam, Madrid and Lisbon; excludes Frankfurt. [6] Adjusted for local double-counting. Table VI.1

customers actually paid and received substantial premiums, amounting to $1.4 billion a day.

Option premiums: $1.4 billion a day

The US dollar, the Japanese yen and the Deutsche Mark

If changes in net trade flows provided the key to understanding exchange rates, then 1995 ought to have been as calm a year in the foreign exchange market as 1994. The broadest measure of net transactions in goods, services, official aid and private transfers, the current account, remained in large deficit for the United

States, at about $150 billion (Table VI.2), but shrank in relation to the US economy. The Japanese current account surplus narrowed from about $130 billion to around $110 billion. The German deficit narrowed, while the overall European Union current account surplus (excluding intra-Union trade) widened to $40–50 billion. Thus, underlying trade flows required little additional net financing.

Capital flows and the yen

With the United States in substantial current account deficit and Japan in substantial surplus, concern naturally focuses on the willingness of the private

The external accounts of the United States, Japan and Germany

	1991	1992	1993	1994	1995				
						Q1	Q2	Q3	Q4
	in billions of US dollars								
United States									
Current account	– 7.4	– 61.5	– 99.9	–151.2	–152.9	–38.5	–43.1	–40.3	–31.1
Capital account[1]	–14.4	19.4	30.9	108.7	54.0	21.3	8.5	2.9	21.3
of which:									
Direct investment	*– 9.4*	*– 25.0*	*– 31.5*	*0.1*	*– 22.2*	*– 6.3*	*– 5.8*	*6.9*	*–17.0*
Portfolio investment[2]	*8.3*	*20.3*	*– 37.9*	*42.6*	*99.9*	*39.2*	*29.1*	*34.2*	*– 2.6*
Banks, other than above	*3.4*	*36.4*	*50.8*	*115.3*	*– 39.1*	*–29.8*	*–27.7*	*– 6.9*	*25.4*
Errors and omissions	*–28.9*	*– 26.4*	*36.0*	*– 14.3*	*6.7*	*12.9*	*18.8*	*–41.7*	*16.6*
Official monetary movements[3,4]	21.8	42.2	69.1	42.5	98.9	17.1	34.6	37.4	9.8
Japan									
Current account	72.9	117.6	131.4	129.1	110.6	28.8	30.9	29.6	22.4
Capital account[1]	–90.0	–118.9	–108.0	–131.4	– 75.1	– 5.0	–25.5	– 9.9	–35.8
of which:									
Direct investment	*–29.4*	*– 14.5*	*– 13.6*	*– 17.1*	*– 22.2*	*– 5.7*	*– 6.0*	*– 3.0*	*– 7.5*
Portfolio investment[2]	*41.0*	*– 26.2*	*– 62.7*	*– 48.9*	*– 52.2*	*10.1*	*–42.4*	*– 8.6*	*–11.2*
Banks, other than above	*–93.5*	*– 73.0*	*– 15.0*	*– 22.7*	*– 79.4*	*–50.5*	*7.7*	*–13.3*	*–23.3*
Errors and omissions	*– 7.8*	*– 10.5*	*– 0.3*	*– 17.8*	*14.1*	*13.5*	*5.2*	*– 9.9*	*5.3*
Official monetary movements[3]	17.1	1.4	– 23.5	2.3	– 35.5	–23.8	– 5.4	–19.7	13.4
Germany									
Current account	–19.1	– 21.5	– 16.1	– 21.9	– 17.3	– 1.9	– 4.3	– 4.2	– 8.3
Capital account[1]	18.8	68.9	– 6.0	29.4	29.7	7.2	9.1	6.0	8.7
of which:									
Direct investment	*–19.6*	*– 17.0*	*– 13.5*	*– 15.9*	*– 26.0*	*– 6.6*	*– 9.7*	*– 2.6*	*– 6.9*
Portfolio investment	*24.4*	*32.6*	*109.9*	*– 25.4*	*29.5*	*3.7*	*15.6*	*6.5*	*3.7*
Banks, other than above	*8.3*	*51.7*	*– 53.0*	*84.1*	*29.1*	*32.5*	*2.7*	*1.7*	*– 7.8*
Errors and omissions	*7.8*	*5.9*	*– 14.4*	*– 6.2*	*– 7.9*	*–15.4*	*6.0*	*0.0*	*1.4*
Official monetary movements[3]	0.3	– 47.4	22.1	– 7.6	– 12.3	– 5.3	– 4.8	– 1.8	– 0.4

Note: Quarterly current account data are seasonally adjusted.

[1] Defined as: – (current account + net official monetary movements); a minus sign indicates a capital outflow. [2] Bonds and equities only. [3] Changes in gold and foreign exchange reserves less changes in liabilities to foreign monetary authorities. A minus sign indicates an increase in official assets. [4] Including US government securities held by foreign monetary authorities.

Source: National data. Table VI.2

sector in Japan to buy non-yen assets, especially dollar-denominated assets. Several forces have sapped this willingness in the 1990s. Not only have the returns to date on foreign investments proved disappointing, but also the halving of equity and land prices this decade has left Japanese financial institutions less willing to bear exchange rate risk. Life insurance companies, Japan's largest class of institutional investors, reduced the share of foreign assets in their portfolios from some 15% in 1989 to about 7% in 1994. In terms of global activity, only Japanese investors have scaled back their cross-border securities transactions since 1990 (Table VI.3).

Japanese investors retrench in the 1990s

At the beginning of 1995, as Japanese financial institutions approached their fiscal year-end, they became particularly cautious about the foreign exchange risk in their portfolios. With minimal Japanese buying of foreign securities in the first quarter, foreign investment in Japanese securities actually exceeded Japanese investment in foreign securities by $10 billion.

Against this backdrop, the yen strengthened in the first quarter from about ¥100 to just over ¥86 to the dollar. Japanese exporters, who had bought options to protect against a yen appreciation only within certain limits, hurried to sell dollars when those limits were breached. Non-Japanese borrowers of yen also sought to limit their perceived exposure, adding to the yen's momentum. With the new fiscal year in April, Japanese financial institutions did not return to buying *foreign currency* – as opposed to foreign issued – assets. This reticence is perhaps best measured by private Japanese purchases in the United States (Graph VI.2), because Japanese investors have recently concentrated a substantial part of their European bond purchases on euroyen issues, which carry no exchange risk for the holder (see Chapter VIII). With Japan's long-term investors staying at home, the yen gained sharply against the dollar, reaching an all-time high of ¥79.75 on 19th April.

Japanese exporters and investors shun foreign exchange risk in early 1995

The yen hits a record high ...

At the same time, option prices also moved to extremes. One-month implied volatility for option contracts struck near the spot rate ratcheted upwards to record levels (Graph VI.3 on page 100), indicating that market participants were unusually uncertain as to where the exchange rate might trade in a month's time. This episode illustrates the general point that, when an exchange rate breaches the limits of recent trading ranges, and especially when it enters uncharted waters, market participants become very unsure about its

... and volatility ...

Cross-border transactions in bonds and equities*

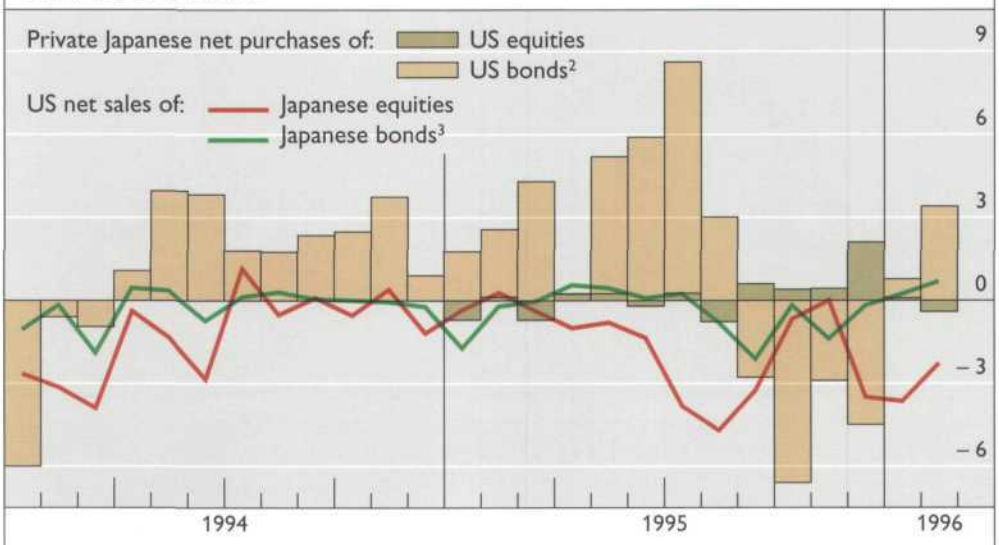
	1980	1985	1990	1991	1992	1993	1994	1995
	as a percentage of GDP							
United States	9.0	35.1	89.0	95.6	106.6	128.8	131.1	135.5
Japan	7.7	63.0	120.0	91.9	71.8	77.8	60.0	65.7
Germany	7.5	33.4	57.3	55.6	85.2	170.8	159.3	168.3
France		21.4	53.6	78.7	121.8	186.8	201.4	178.2
Italy	1.1	4.0	26.6	60.3	92.1	191.9	206.8	250.9
Canada	9.6	26.7	64.4	81.3	113.2	152.9	209.7	192.0

* Gross purchases and sales of securities between residents and non-residents.

Source: National data. Table VI.3

Private portfolio flows from Japan to the United States[1]

In billions of US dollars



[1] A positive sign indicates a net flow from Japan. [2] 1994 data include US equities. [3] Data may include sales of other non-US bonds and US official sales of Japanese government bonds.

Sources: Japanese Ministry of Finance and US Treasury. Graph VI.2

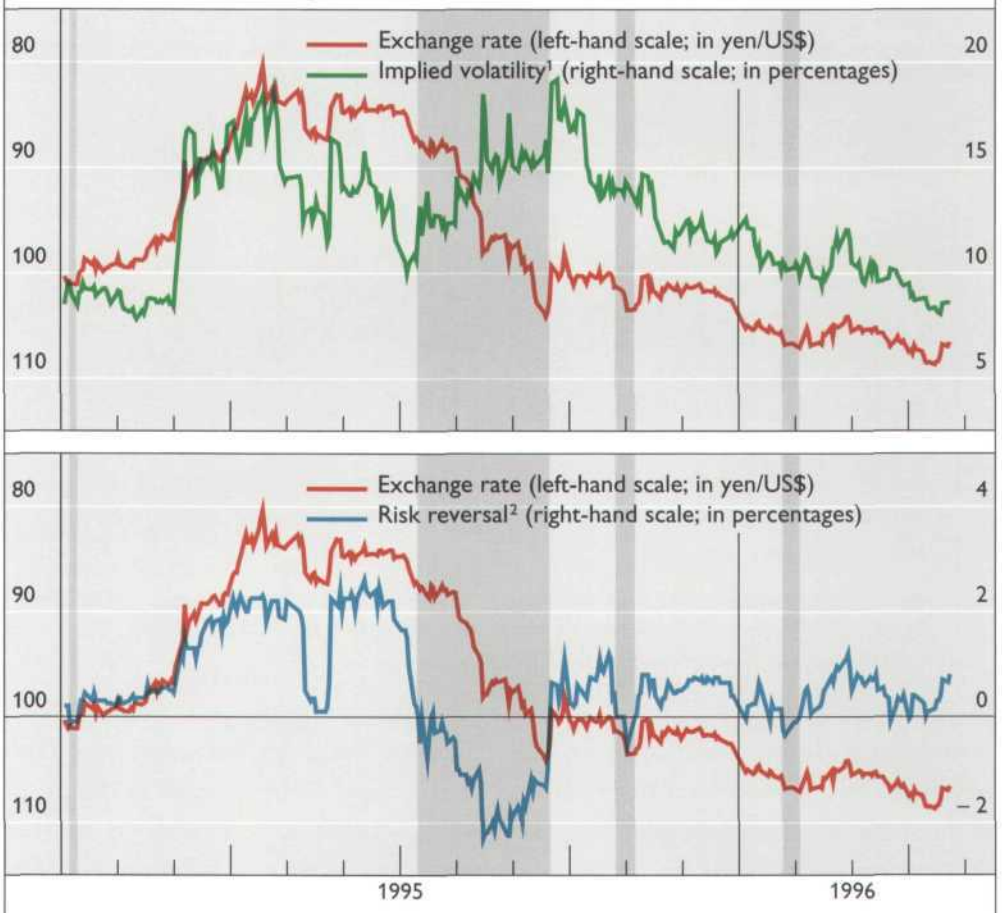
... and risk reversals follow suit

near-term movements. Moreover, the difference in price between an option paying off in the event of a large yen appreciation and one paying off in the event of an equally large depreciation (risk reversal) became very wide as market participants bid strongly for protection against yet a further surge in the yen. For example, Japanese exporters with dollar revenues but yen costs were willing in early April to pay record premiums to exchange some of their potential gains from a dollar rebound for protection against a further dollar slump. This extreme apprehension of yen appreciation, evident in the risk reversals, can be further quantified. Given their forward-looking and contingent character, option prices across a spectrum of exchange rates serve, on the assumption of risk neutrality, to trace out the probabilities that market participants attached to possible outcomes one month ahead. In particular, on 19th April 1995, with the forward rate just over ¥80 to the dollar, market participants attached a higher probability to a yen appreciation of 5 yen or more, namely 12.2%, than they did to an equivalent yen depreciation, namely 10.6% (Graph VI.4 on page 101). Although this 1.6 percentage point differential in probabilities attached to large, opposing exchange rate changes may seem slight, it is quite high for the yen/dollar rate, having never been exceeded in four years of available observations.

Policy caps the yen

After the Bank of Japan lowered its discount rate from 1¾ to 1% on 14th April and guided interbank rates down on the 14th and 17th, and the Group of Seven Finance Ministers and central bank Governors called for an "orderly reversal" of recent movements on the 25th, the yen/dollar rate began to stabilise in the low 80s. May saw the resumption of substantial bond buying in the United States by Japanese investors, and June saw even stronger buying (Graph VI.2). However, the exchange rate remained in the low 80s through June, except for a short-lived rally into the upper 80s in May, and the US-Japanese agreement on automobile trade lifted the dollar only briefly.

The Japanese yen against the US dollar



[1] One-month at the money. [2] A positive (negative) value indicates a bias towards yen (dollar) strength. The shaded areas represent periods in which risk reversals favour the dollar.

Sources: National Westminster Bank Plc and BIS. Graph VI.3

Option prices track spot rates ...

As Graph VI.3 indicates, the price of risk reversals in early 1995 generally seems to have tracked movements in the underlying spot foreign exchange market. When the yen strengthened, options that would pay off in the event of further substantial yen appreciation became more expensive than options that would pay off in the event of a sudden and substantial reversal of yen strength. These option prices suggest that market participants have extrapolative apprehensions (or perhaps *elastic fears*) which project recent experience forward. Last summer, however, developments in the dollar/yen option markets seemed to anticipate rather than follow events in the spot market. Towards the end of June, the price of risk reversals began to fall back towards zero. It was not surprising that, as market participants became accustomed to a trading range in the low 80s, the foreboding of further substantial dollar depreciation dissipated, to be replaced by a more balanced outlook.

... indicating extrapolative apprehensions ...

... with informative exceptions

The downward movement in the price of risk reversals in July reflected massive positioning by speculative funds in favour of a robust dollar rally over the succeeding 6–12 months. By positioning in options, these buyers limited potential losses to the premium paid. Moreover, since these option positions required an extended dollar rally to become valuable, the options were quite cheap.

A propitious background thus awaited the Japanese authorities' early-August announcement of measures to encourage capital outflows and subsequent central bank intervention. For the first time in months, the pricing of risk reversals suggested more bets on large dollar rises than on large declines. Moreover, Japanese institutions had already returned to buying US securities on a sizable scale, with July showing the highest monthly purchase of US securities by private Japanese investors on record. The announcement on 2nd August of measures to encourage capital outflows generally, and purchases of US Treasury bonds in particular (see Chapter VIII), sparked a rapid rise in the dollar to over ¥90. As the exchange rate approached the ¥95 level, dealers who had sold options to the speculative funds had to readjust their option portfolios, putting further pressure on the spot rate, volatility and risk reversals. Thus, while the option positioning did not cause the dollar's rise, it gave it added momentum, just as would equivalent bandwagon buying in the spot market. Against the background of these dynamics, concerted intervention by the US authorities, the Bank of Japan and the Bundesbank on 15th August in holiday-thinned markets amounted to pushing on an open door. The dollar subsequently rose to over ¥96.

Heavy Japanese buying of US bonds ...

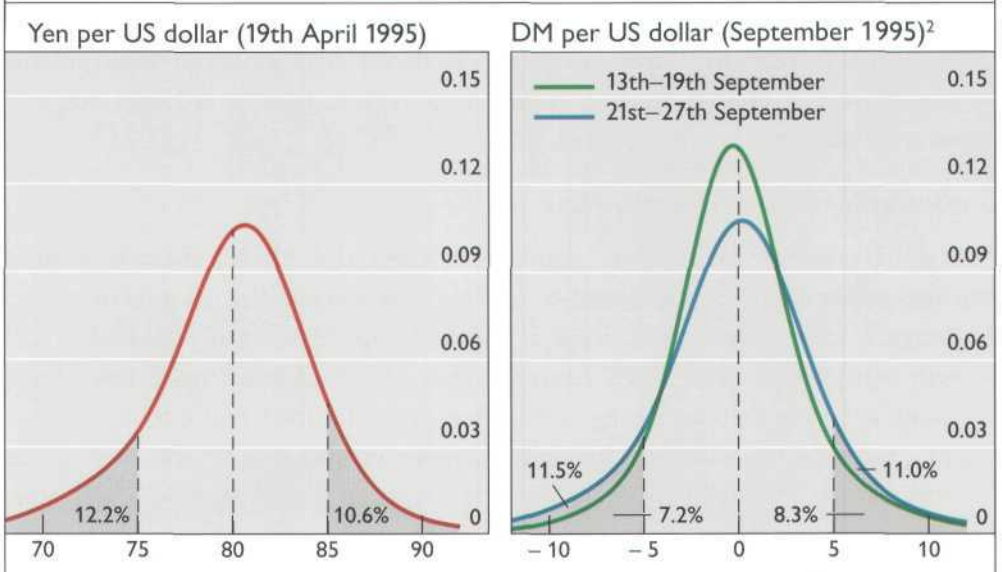
... and option dealers' hedging ...

... leave an open door for central bank intervention

After 8th September, when the Bank of Japan reduced its discount rate to the historical low of ½% and guided call-money yields even lower, the dollar rose above ¥100. However, disappointment greeted the announcement of a fiscal package on 20th September that contained no banking initiatives and the dollar weakened for a time to less than ¥100.

Even though exchange market operations backed by monetary policy changes were working to reverse the yen's appreciation, the Japanese private sector was not responding to the authorities' measures to promote capital

Probability distributions of the Japanese yen and the Deutsche Mark against the US dollar[1]



[1] Vertical lines drawn at the forward rates and 5 yen (left-hand panel) and 5% (right-hand panel) above and below. [2] *Average density over the period, percentage deviation from the forward rate; positive* values indicate dollar appreciation.

Sources: National Westminster Bank Plc, BIS and BIS calculations. Graph VI.4

outflows. Indeed, after the record purchases in July, Japanese investors bought a more modest amount of US bonds in August than in any of the previous three months. Moreover, in September they turned to selling, disposing of a record $6.6 billion in October and selling again in November and December. Policy moves seem to have attracted foreign speculative funds to short yen positions rather than Japanese institutions to long dollar positions. In the event, Japanese investors' liquidations of US bonds were reinforced by substantial US purchases of Japanese equities, another flow *from* a deficit country *to* a surplus country.

Japanese investors sell US bonds despite policy ...

The stabilisation of the yen at rates in excess of ¥100 to the dollar in the fourth quarter combined with low yen interest rates to persuade a variety of market participants to adopt a broadly similar strategy. In some cases emboldened by recent profits on speculative option positions, in effect they borrowed yen to finance positions in US bonds, or even higher-yielding assets. Such trades offered "positive carry", a 5% or larger excess of interest received over interest paid, which could be multiplied for more leveraged positions. The risks in such positions arose principally from a strengthening of the yen, but also from capital losses on the assets.

... but investors outside Japan buy US assets against yen liabilities

Some legs of these positions can be recognised in US balance-of-payments statistics. Thus, no less than 40% of the $100 billion net securities inflow into the United States in 1995 came from the British West Indies and the Netherlands Antilles, the legal residence of some US-based hedge funds, and most of this inflow was financed by an outflow of short-term repurchase finance – contributing to the US securities inflow and banking outflow (see Table VI.2). A forward sale of yen against dollars would suffice to transform this leveraged US bond holding into the equivalent of a US bond holding financed with short-term yen liabilities. Reports of these positions gained plausibility when a downturn in the US Treasury market coincided with a strengthening of the yen in February 1996. The Bank of Japan's announcement that its reserves had risen by a record $17 billion in February suggested that intervention had sought to limit the impact of the liquidation of such positions on the exchange rate. At the close of the Japanese fiscal year in March, no clear evidence had emerged that private investors were prepared to step forward to recycle Japan's reduced but still substantial current account surplus.

Business cycles and the Deutsche Mark

The dollar's broad movements against the Deutsche Mark reflected shifting market perceptions of the relative cyclical position of the two economies. Although a variety of factors were at work, sharp downward revisions in US growth prospects in early 1995 contributed to the decline of the dollar. These revisions led to a marked easing of forward dollar interest rates, which reflect market participants' estimates of Federal Reserve policy over the next 6–18 months (Graph VI.5). While German forward rates to some extent followed suit, forward interest differentials favouring the dollar narrowed unevenly in the first half of 1995.

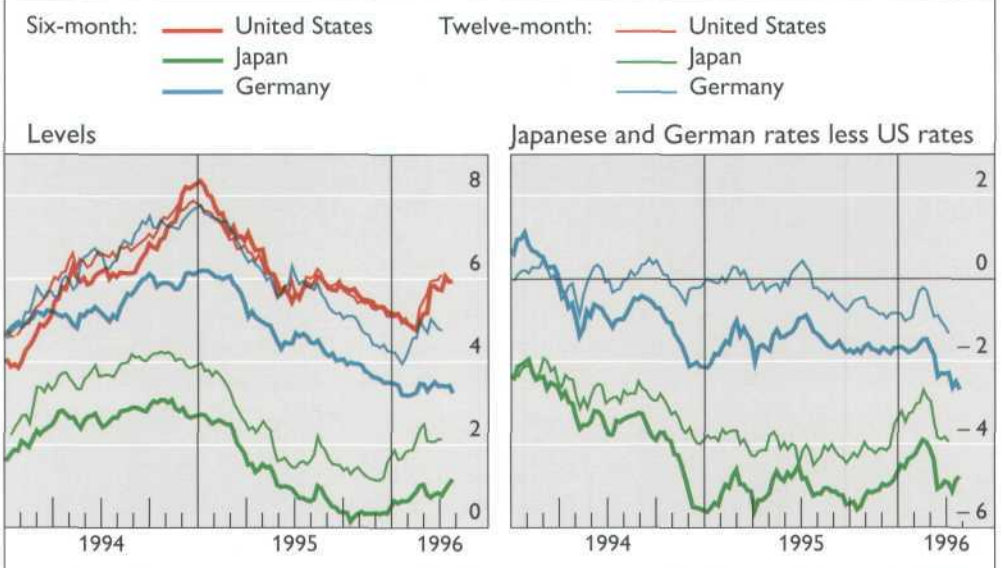
The US economy slows and the dollar weakens ...

In the second half of 1995, it was the German economy's turn to decelerate (see Chapter II). As doubts about the pace of growth there took hold, the Deutsche Mark tended to depreciate. With forward rates levelling off in the

... then the German economy slows and the dollar strengthens

Forward interest rates

Weekly averages, in percentages and percentage points



Note: Six-month forward rates are derived from the difference between 6 and 12-month LIBOR, and one-year forward rates from the difference between 12-month LIBOR and two-year swap rates.

Graph VI.5

United States but continuing to decline in Germany, interest differentials in favour of the dollar widened.

Rates move erratically when outside recent ranges

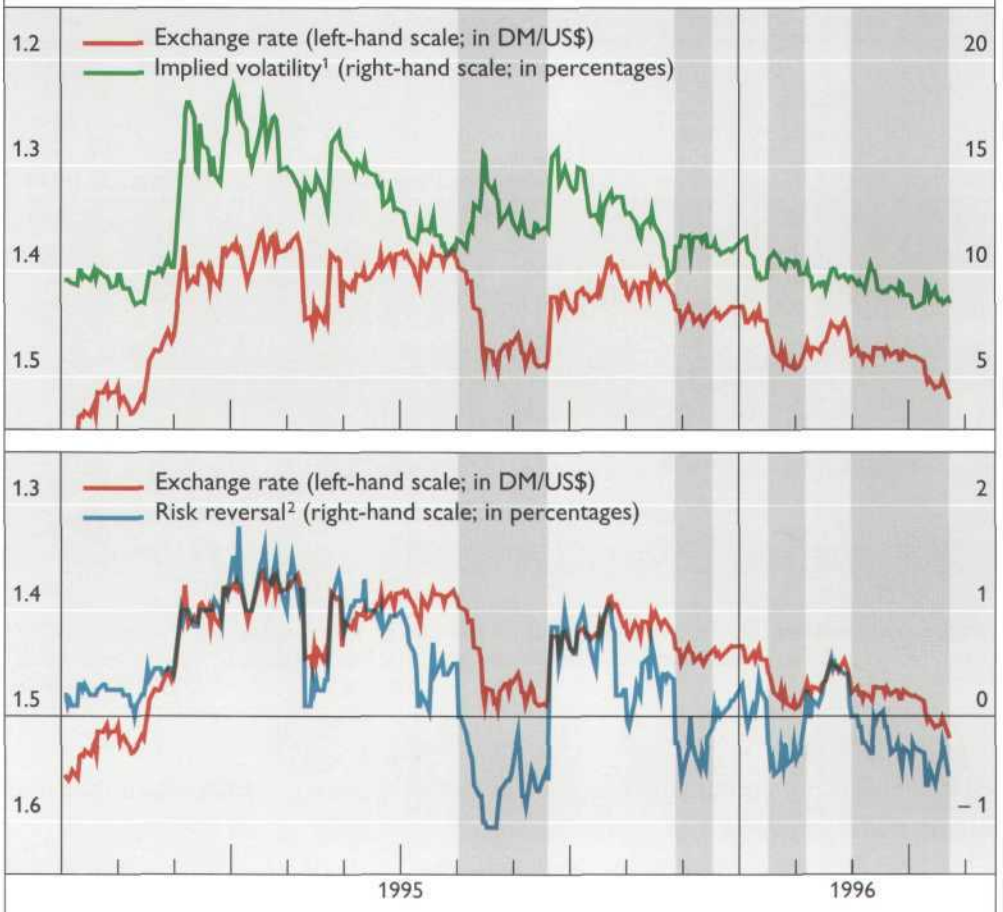
The Deutsche Mark/dollar exchange rate provides further evidence that uncertainty increases when trading breaches recent ranges. As observed above for the yen/dollar rate, dollar weakness against the Deutsche Mark in the first half of the year was associated with heightened uncertainty regarding future rates, as suggested by very high levels of implied volatility, in this case reaching levels just short of those experienced at the time of the ERM crisis in 1992 (Graph VI.6). Then, in early August, after risk reversal prices changed sign and began to signal market apprehensions of a large appreciation of the dollar, greater uncertainty regarding future rates accompanied dollar strength. In general, the sign of the risk reversals indicates whether spot rate movements in one direction or the other are likely to heighten market participants' uncertainties regarding future rates.

Shifts in Europe hit the dollar

The already uneven recovery of the dollar suffered a setback in mid-September. Doubts about which European countries would qualify for monetary union came to centre stage. While the increased attention to policy performance tended to weaken European currencies against the Deutsche Mark, the dollar did not remain unaffected, losing 6 pfennigs (4%) on 21st–22nd September. Expectations of the dollar's value one month ahead became more diffuse and the odds of a sharp change – for example, of 5% or more – shifted from dollar strengthening to dollar weakening (Graph VI.4).

The Deutsche Mark/dollar exchange rate settled down in the fourth quarter of 1995 and first quarter of 1996. A continuing but gradual widening of the interest differential reflected expectations of greater easing by the Bundesbank than by the Federal Reserve and favoured the dollar's further recovery against

The Deutsche Mark against the US dollar



[1] One-month at the money. [2] A positive (negative) value indicates a bias towards DM (dollar) strength. The shaded areas represent periods in which risk reversals favour the dollar.

Sources: National Westminster Bank Plc and BIS. Graph VI.6

the Deutsche Mark. Interest rate differentials moved sharply in favour of the dollar in March 1996 with the release of US data suggesting faster growth, and the dollar again firmed against the Deutsche Mark.

Global reserve developments

Reserves grow rapidly

With central banks intervening to brake and subsequently reverse the dollar's decline against the yen and the Deutsche Mark, international reserves grew in 1995 at the fastest pace since 1987. The importance of intervention in the dollar exchanges is evident in both the country and currency composition of reserve growth. Industrial countries showed about as much reserve growth as developing countries, although the figures would be less comparable at constant exchange rates (Table VI.4). Dollar reserve growth, at $121 billion, represented over two-thirds of the exchange-rate-adjusted reserve growth of $168 billion.

Dollar reserve growth amounts to two-thirds of the US current account deficit

The similarity to 1987 extends to the reliance of the United States on official sources of funds to finance the bulk of its $153 billion current account deficit. Net of the $6 billion reserve build-up by the US authorities, financing by central banks and other official holders totalled about $115 billion. Thus, central banks

and governments financed more than two-thirds of the US current account deficit, much the same proportion as in 1987.

Central banks added substantially more to dollar reserve holdings in 1995 than they placed in the United States. They did likewise in 1994, when they built up their eurodollar holdings. In 1995, however, central banks reduced measured eurodollar holdings, so that unidentified dollar reserves grew by an even larger amount. In such cases, central banks must be investing in offshore dollar securities and with fund managers outside the United States.

Official funds flow strongly out of Japan

Japan provides a mirror image to the United States in its official recycling of its current account surplus. The rise in Japan's external reserves of about $60 billion in 1995 represents over one-half of the current account surplus. Net official flows out of Japan, at $35.5 billion (see Table VI.2), include an offsetting inflow of foreign investment in short-term Japanese government obligations; such investment serves as a proxy for official flows into Japan. Unfortunately, there is good reason to think that this proxy includes significant private investment in 1995, which implies that the role of the official sector in recycling the trade surplus is understated. International banks' reluctance to roll over dollar deposits with Japanese banks in London, New York or Tokyo (see Chapter VIII) set in motion transactions that resulted in substantial *private* acquisitions of Japanese Treasury bills late last year. In particular, Japanese banks responded to the so-called "Japan premium" levied on their dollar deposits by exchanging ample yen liquidity for suddenly costly dollar liquidity (with a forward sale of dollars against yen completing the foreign exchange swap). Such transactions left non-Japanese

Official foreign exchange reserves

	1992	1993	1994	1995	Amounts outstanding at end-1995
	in billions of US dollars				
	Changes, at current exchange rates				
Total	3.4	96.3	148.2	186.0	1,358.2
of which:					
Industrial countries	*–25.0*	*22.7*	*61.8*	*78.7*	*653.7*
Asian NIEs[1]	*15.5*	*20.6*	*29.9*	*21.4*	*246.0*
Other developing countries	*11.3*	*45.2*	*49.5*	*54.4*	*398.3*
	Changes, at constant exchange rates[2]				
Total	26.6	97.8	109.1	168.3	1,358.2
Dollar reserves held:	33.2	73.6	90.5	121.4	881.8
In the United States[3]	39.5	66.3	37.6	104.1	587.4
With banks outside the US[4]	9.2	0.6	30.1	–15.4	106.9
Unallocated	–15.5	6.7	22.8	32.7	187.5
Non-dollar reserves	– 6.7	24.2	18.6	46.9	476.4
of which held with banks[4]	*– 6.9*	*6.2*	*1.8*	*7.6*	*122.2*

[1] Hong Kong, Korea, Singapore and Taiwan. [2] Partly estimated; valued at end-of-year exchange rate. [3] Excludes foreign military sales prepayments and the current value of zero coupon bonds issued to the governments of Argentina, Mexico and Venezuela as collateral for their Brady bonds. [4] Deposits by official monetary institutions with banks reporting to the BIS. Table VI.4

banks with yen for temporary investment and they often chose to invest in safe Japanese Treasury bills. Thus, Table VI.2 overstates official inflows into Japan and therefore understates the role of official recycling of Japan's current account surplus.

Industrialising countries favour the dollar

The dollar's share in global official reserves remained about two-thirds at the end of 1995. The stability of the share in the 1990s has surprised many observers, in view of the long list of countries that are thought to have diversified their reserves away from the dollar. The country composition of reserve growth resolves this apparent contradiction: developing countries with currencies closely aligned with the dollar, and with reserves weighted more towards the dollar than the global average, have been gaining reserves at a higher-than-average rate. The increasing willingness of industrial country investors to buy into both money markets and equity markets of developing countries (see Chapter VII) suggests that these countries' reserves will continue to enjoy rapid, if not even, growth.

The fundamental value of the US dollar: three soundings

The dollar appears reasonably valued or even undervalued according to ...

In 1995 there was an unusually vigorous discussion of the long-term role and value of the dollar. One school of thought drew on a portfolio approach to the dollar's value and mistakenly took official reserves, overweighted in dollars, to be representative of global portfolios. This premise led directly to the conclusion that the dollar was overvalued. Not only should the premise be questioned, but also the portfolio approach should be accepted only as one of a number providing a long-term perspective on the appropriate value of the dollar.

Three of these approaches merit consideration. Purchasing power parity states that in the long run prices in different countries expressed in a common currency converge or at least move together. So-called fundamental equilibrium exchange rates, by contrast, are effective exchange rates associated with current account balance at full employment, or, more generally, with current account imbalances small enough to leave external debt a stable proportion of GDP. Finally, portfolio balance obtains at an exchange rate that balances supply and demand of asset stocks denominated in various currencies.

... purchasing power parity ...

To reach parity in its purchasing power, each dollar would have to command over one-third more Deutsche Mark (Table VI.5) and over one and a half times

Estimates of the US dollar's purchasing power parity and fundamental equilibrium value

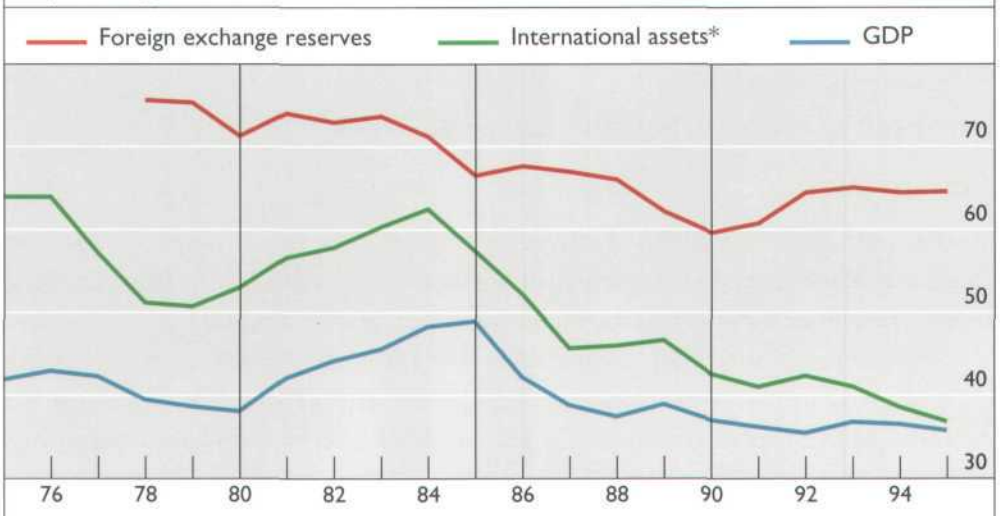
	Market rate*	Purchasing power parity (PPP)		PPP adjusted for productivity	Fundamental equilibrium exchange rate
		OECD	Penn	Goldman Sachs	IIE
Deutsche Mark against the dollar	1.53	2.10	2.12	1.41	1.45–1.50
Yen against the dollar	107	184	188	107	100

* On 15th May 1996.

Sources: OECD, Penn World Tables 5.6, Goldman Sachs and John Williamson's informal update of estimates in *Estimating equilibrium exchange rates*, Institute for International Economics (IIE), Washington, D.C. (September 1994). Table VI.5

US dollar share of foreign exchange reserves, international assets and G-10 GDP

In percentages



Note: Total reserves, assets and G-10 GDP were $1.36, 5.0 and 20.3 trillion respectively in 1995.

* Includes international bonds, cross-border bank liabilities to non-banks, eurocurrency liabilities to domestic non-banks (from 1984) and euronotes (from 1989).

Sources: National data and BIS. Graph VI.7

as many yen. However, some analysts adjust measures of purchasing power parity for differences in productivity across countries. These analysts argue that, since productivity gains in manufacturing tend to raise the relative price of services within a country, productivity differences across countries distort comparisons of the price of a broad consumption basket that includes services. A measure of purchasing power parity adjusted for productivity judges the dollar to be well valued, instead of undervalued, against both the Deutsche Mark and the yen.

... fundamental equilibrium analysis ...

Calculating fundamental equilibrium exchange rates involves more assumptions, but a representative analysis still produces a straightforward answer: in early spring 1996 the dollar seemed to be reasonably valued. That is, the dollar, valued at not much above DM 1.45–1.50 and ¥100, does not obviously yield an unsustainable growth of international debt for the United States. However, this calculation does assume that a deficit of 1% of US GDP, half the current level, is sustainable, even though private financing of the US deficit fell short of 1% of GDP last year. Moreover, it assumes that much of the rest of the 1995 deficit would disappear if the Japanese and European economies were operating at capacity.

... and portfolio balance

Finally, the dollar's share in certain international assets does not seem to be out of line with the US economy's share of output in the Group of Ten countries (Graph VI.7). It should be borne in mind that the currency composition of official reserve holdings differs sharply from that of broad, internationally held assets, which include international bonds, euronotes and international bank deposits. Moreover, foreign exchange reserves, at $1.4 trillion, amount to only about one-quarter of this broad international asset stock. Thus, the most apposite comparison sets the dollar's share in international assets against some neutral

dollar weight for a benchmark international portfolio, here taken to be the US economy's share of G-10 output. This juxtaposition reveals that the dollar share of international assets has fallen as fast as the US economy's share of G-10 output. On this showing, there is no dollar overhang in international portfolios, whose removal would require a further dollar depreciation.

European currencies and the Canadian dollar

A common factor

European currencies regain value against the Deutsche Mark ...

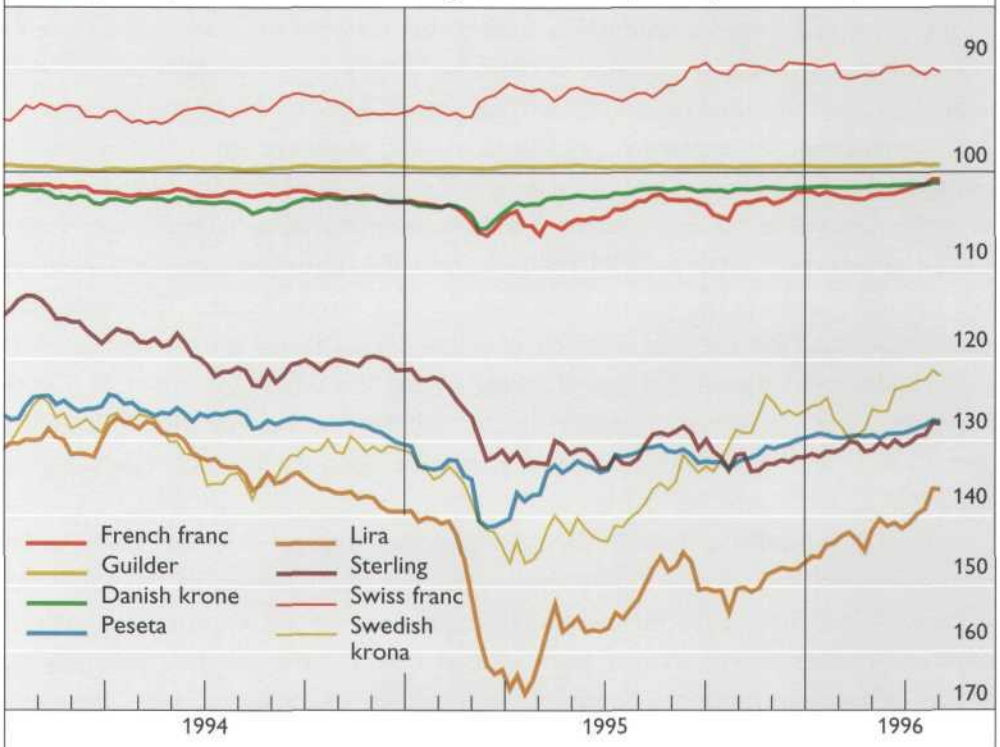
In the past year European currencies generally regained value against the Deutsche Mark from lows reached in spring 1995 (Graph VI.8). This recovery, though uneven, characterised both ERM and non-ERM currencies.

... trading systematically with movements in the Deutsche Mark/ dollar rate ...

To perhaps a surprising extent, when the Deutsche Mark moves against the dollar, European currencies move against the Deutsche Mark. To begin with the currency at the top of Graph VI.9, the Swiss franc shows the highest sensitivity, typically appreciating by about 1.1% against the dollar for every 1% appreciation of the Deutsche Mark against the dollar. From another perspective, the Swiss franc tends to appreciate slightly against the Deutsche Mark when the latter appreciates against the dollar. Some observers interpret this regularity as reflecting the fact that Switzerland attracts a disproportionate share of funds when international portfolio managers seek stability of principal over high returns by shifting investments into both Deutsche Mark and Swiss franc assets.

Exchange rates of European currencies against the Deutsche Mark

Weekly averages, ERM central rate in August 1992 = 100* (semi-logarithmic scale)



Note: Since February 1994, the Belgian franc has moved closely in line with the guilder.

* For the Swiss franc and the Swedish krona, August 1992 = 100. Graph VI.8

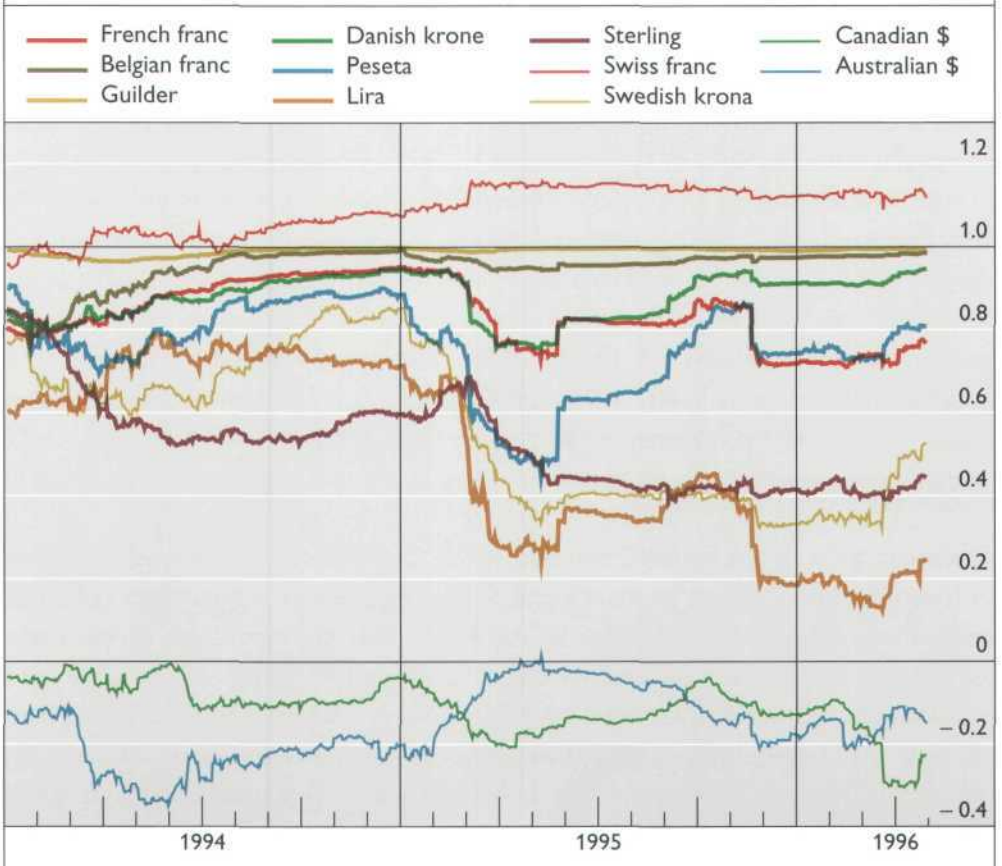
With sensitivities just short of unity, the Dutch guilder and the Belgian franc move in tandem with the Deutsche Mark against the dollar. Just below are the French franc, the Danish krone and, towards the end of 1995, the Spanish peseta: these currencies have typically shared 10–20% of the dollar's movement against the Deutsche Mark. The pound sterling, the Swedish krona and the Italian lira all tended to share half or more of the dollar's movements against the Deutsche Mark in 1995.

European currencies' performance against the dollar generally showed lower sensitivity to changes in the Deutsche Mark/dollar exchange rate in 1995 than in previous years. These changing exchange rate sensitivities are consistent with the findings of the 1995 foreign exchange market survey reviewed above: the previous three years' growth in domestic currency trading in European centres, particularly in London and Milan, favoured the dollar over the Deutsche Mark.

... as do the Canadian and Australian dollars against the US dollar

The Canadian dollar and the Australian dollar tend to fall (rise) against the US dollar when the latter falls (rises) against the Deutsche Mark. Just as the low-yielding Swiss franc tends to outperform the Deutsche Mark when the latter appreciates against the US dollar, so too the higher-yielding Canadian and Australian dollars tend to outperform the US dollar when it appreciates against

Exchange rate sensitivity to movements in the Deutsche Mark against the US dollar



Note: Each point represents an estimated elasticity derived as the parameter, β, in the regression $\log X_t - \log X_{t-1} = \alpha + \beta(\log(DM/\$)_t - \log(DM/\$)_{t-1})$ over the current and previous 125 working days. By definition, the DM/$ sensitivity to itself is unity, and that of the US dollar is zero. Graph VI.9

the Deutsche Mark. It may be that when portfolio managers are willing to leave the Swiss franc and the Deutsche Mark for overseas risk and return, the higher-yielding Canadian and Australian dollars hold particular appeal.

The sensitivity of the currencies of important trading partners to changes in the Deutsche Mark/dollar exchange rate makes a difference to the economies of both Germany and the United States. Thus, owing to the lower sensitivity of European currencies, the Deutsche Mark appreciated more in effective terms in early 1995 than it otherwise would have done given its rise against the dollar. As a result, the exchange rate put particular pressure on German export industries in late 1995 and helped account for their prompt cuts in investment and jobs (see Chapter II).

For the US economy, the tendency – not always in evidence – of the Canadian dollar to depreciate against the US dollar when the latter depreciates against the Deutsche Mark *stabilises* the effective value of the US dollar. Thus, lower prices for Canadian goods to some extent offset higher prices for European goods and thereby cushion the impact of a weak dollar on US prices and activity. From the Canadian perspective, this regularity can prove less comfortable, as in early 1995, when the Bank of Canada had to raise short-term interest rates to limit the Canadian dollar's depreciation against an otherwise weak US dollar.

Changes in European exchange rates can induce changes in the dollar

The force behind these trading regularities does not run in only one direction. Some observers would point to March 1995 as a period of US dollar-driven strains which destabilised the relationships among European currencies. In contrast, as suggested above, European developments in September seemed to trip the dollar, interrupting its recovery. Further evidence for this interpretation can be derived from the discount on the foreign exchange value of the ECU compared with the sum of the values of the constituent currencies in the ECU basket, which widened sharply last September, signalling European strains.

Policy changes also contributed to the recovery of European currencies against the Deutsche Mark. The Italian lira, Swedish krona and Spanish peseta benefited from their respective central banks' policies of raising short-term rates even after the tensions of March 1995, and then not fully matching the Bundesbank's rate cuts in late 1995 (see Chapter IV). The Italian lira and Swedish krona also gained from measures to reduce fiscal deficits.

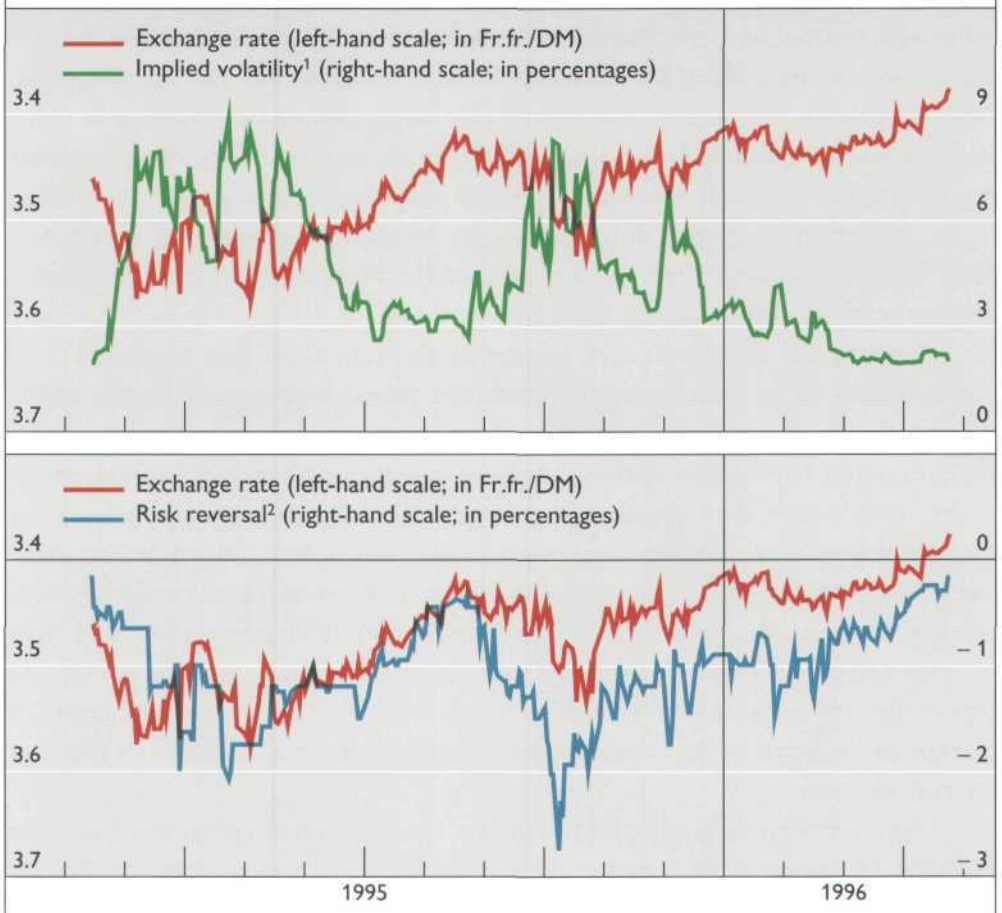
Unique developments in Europe

The French franc is weakened by political developments and strikes in 1995 ...

The movement of the *French franc* against the Deutsche Mark showed the effect of these common strains in March and September, but at other times reflected political developments in France. In April and May the approach of elections tended to put pressure on the franc and to lead to very diffuse exchange rate expectations (Graph VI.10), despite high money market rates. Following the tensions of late September, legislative and popular opposition to social security reform in October undermined the franc and led market participants to trade volatility at levels comparable to those in the run-up to the spring elections. Strikes in December put relatively little pressure on the exchange rate but left market participants' expectations about the future value of the franc quite widely spread. In the following months, the franc regained value against the Deutsche

... but recovers in 1996 ...

The French franc against the Deutsche Mark



[1] One-month at the money. [2] The consistently negative values indicate a consistent bias towards DM strength.

Sources: National Westminster Bank Plc and BIS. Graph VI.10

Mark, trading within 2.25% of its central rate again and reaching the average rate of the first half of 1993.

... calming markets

Stepping back from these episodes, one can recognise the French franc/Deutsche Mark exchange rate as a special case of the relationship between spot rates, volatility and risk reversals, described above for the yen/dollar and Deutsche Mark/dollar. As in these cases, the risk reversal seems to track the spot exchange rate. But unlike the dollar exchange rates, market participants display great uncertainty regarding the future value of the franc only when the franc depreciates against the Deutsche Mark, and not when it appreciates. Moreover, they are always willing to pay more for positions that profit from a large depreciation of the franc than for ones that profit from an equally large appreciation, and to pay much more at times of franc weakness (whereas the price of risk reversals for the other currency pairs was sometimes positive and sometimes negative).

The Italian lira recovers unevenly, with large gains following the recent elections

The dramatic recovery of the *Italian lira* from its deep lows of spring 1995 against the Deutsche Mark faltered in May and again in September. Political uncertainties and fears of inflation from the earlier depreciation took their toll in May. The resumption of recovery in June encouraged some discussion in Italy

of the currency's return to the ERM. Questions about monetary union in late September, however, focused particularly on the lira, which lost over 7% of its value against the Deutsche Mark in five weeks. In trading risk reversals, market participants shifted from an unusually balanced outlook in mid-September to bidding strongly for options that would pay off in the event of a further large depreciation of the lira. From November, the lira tended to strengthen against the Deutsche Mark and, consistent with the pattern noted above for the French franc, uncertainty regarding future rates (as measured by volatility) declined in step. The lira's strength around the time of the April election led to renewed discussion of its return to the ERM.

Sterling shows little change ...

Over the last couple of years, market participants have often remarked upon the unusually close relationship between the *pound sterling* and the US dollar. Indeed, during this period a popular market strategy, known as "stable cable", has amounted to taking a position that the sterling/dollar exchange rate would prove more stable than option prices suggested. Despite its recent affinity for the dollar (see Graph VI.9), the pound, unlike the dollar and other European currencies, did not recover against the Deutsche Mark in the summer of 1995. Sterling's all-time lows both against the Deutsche Mark and on an effective basis occurred after the Treasury-Bank of England monetary policy meeting in May and before the unveiling of the budget in November. These coincidences point to market participants' concerns about the mix of policies in the run-up to the next general election.

... and the Swiss franc remains strong

Like that of sterling, the performance of the *Swiss franc* against the Deutsche Mark in the period under review did not conform to its usual pattern. Despite the dollar's recovery, the Swiss franc remained strong against the Deutsche Mark. Uncertainties regarding prospective European monetary union led investors to bid up the Swiss franc despite low and falling yields.

The market outlook for European monetary union

Market indicators point to monetary union

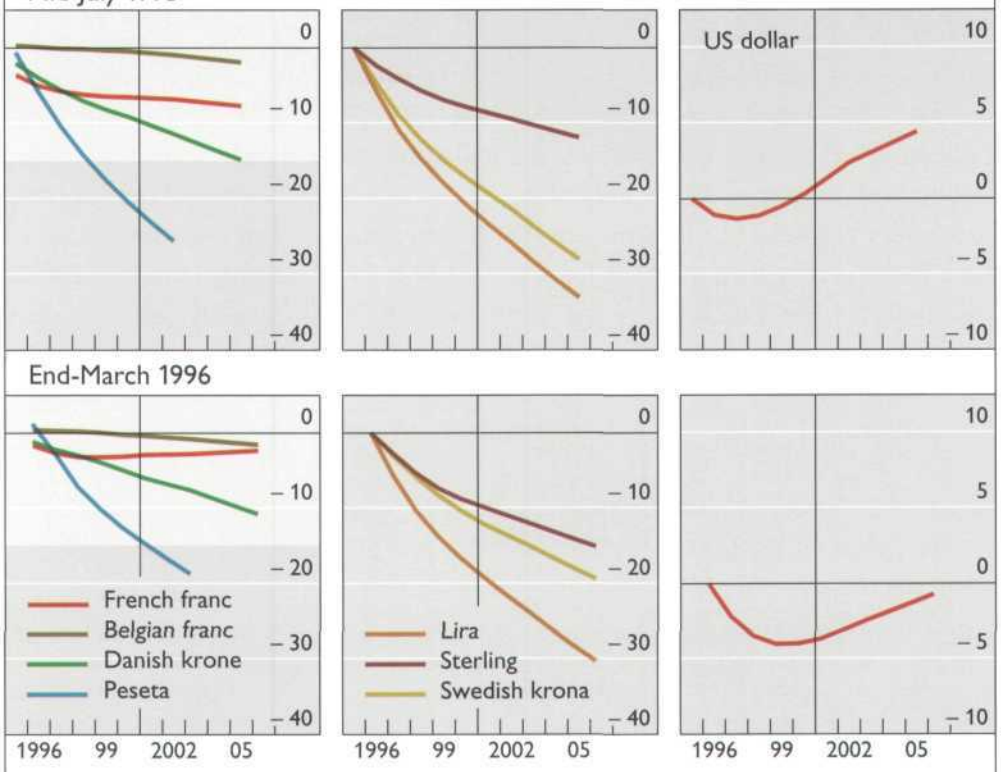
Looking ahead, market participants necessarily ask questions about the prospects for European monetary union and the likely range of currencies involved. In the derivative market, yields on interest rate swaps at varying maturities in different currencies offer a clear measure of market participants' answers. Of course, events can and frequently do belie such expectations.

Implied forward exchange rates, calculated out to maturities well beyond those actively traded in the market, show some European currencies to be fairly stable against the Deutsche Mark (Graph VI.11). For the ERM countries, the initial percentage change in the exchange rate corresponds to the deviation from the respective central rate at that time. In July 1995 and March 1996, the forward exchange rates for France, Belgium and Denmark remained well within the current 15% bands across the full ten-year maturity spectrum (as did those for Austria and the Netherlands, not shown). Perhaps more noteworthy is how the implied forward rates suggest little change against the Deutsche Mark for the French and Belgian francs. None of the European currencies outside the ERM demonstrates such stability.

Forward exchange rates for the dollar against the Deutsche Mark show the dollar depreciating for two or three years, bottoming out and then appreciating;

Forward exchange rate changes against the Deutsche Mark

In percentages



Note: Forward exchange rates are derived from differentials on one-year eurodeposit interest rates and, for longer horizons, on interest rate swap (midpoint) yields in the respective currencies.

Sources: Reuters and BIS calculations. Graph VI.11

this outlook corresponds to US forward rates first exceeding then cutting through German rates some years out along the yield curve. Many interpretations of this pattern have focused on upward pressure on German long bond yields associated with monetary union. Other interpretations emphasise German investors' traditional resistance to low nominal yields and, at least implicitly, insufficient foreign buying of German bonds to outweigh this resistance.

The Canadian dollar

The Quebec referendum chiefly affects uncertainty

After the tensions of March 1995, the Canadian dollar broadly rose against the US dollar as the latter strengthened against the Deutsche Mark. This overall movement was consistent with the tendency of both the Canadian and the Australian dollar to magnify the US dollar's movements against the Deutsche Mark (see Graph VI.9). The Canadian dollar suffered in September, not only in common with the US dollar from the fallout from European strains, but also from the scheduling of the referendum on Quebec independence. The run-up to the referendum in October did not so much weaken the currency – the dip to Can.$ 1.37 to the US dollar was mild compared with the fall in early 1995 – as lead to extraordinarily diffuse expectations of future exchange rates. The limited impact of this political event on the level of the forward exchange rate, but large

impact on the strength of market participants' convictions, resembles the effect on the French franc of the December strikes in France.

The price of gold

Gold prices move more erratically when above $400 per ounce

After several years of trading within a fairly narrow price range, gold rallied to over $400 per ounce in early 1996 (Graph VI.12). Gold producers' opportunistic hedging through forward and short sales in part accounts for the stability of prices in 1994 and 1995: every time the price started to rise, producers would take action to lock in their revenues. The increased scale of such hedging may help account for the extraordinary rise in gold lease rates in the approach to the turn of the year 1995/96. That is, when gold lenders followed their usual practice of reducing their credit exposures at end-year, those who needed to borrow gold to sell it short had to offer unusual compensation.

The price of gold and its volatility

Monthly averages

[1] London morning fixing. [2] Standard deviation of day-to-day percentage changes, at an annual rate.

Graph VI.12

After the turn of the year, when speculative buying pushed the price above this well-established range, some gold producers scaled back their hedging, putting their shareholders in a position to benefit sooner than previously from any sustained rise in the price of gold. As observed above with regard to currencies, the movement of the gold price outside its recent trading range was also associated with a rise in volatility (although in this case measured by realised price movements rather than by implied volatility). More recently, gold has traded fairly calmly at prices below $400 an ounce.

VII. Capital flows and financial systems in emerging markets

Highlights

Official capital flows to the developing world in 1995 were greater than for many years. Faced with an acute financing crisis, Mexico received external financial assistance on an unprecedented scale. Rigorous domestic policies eventually restored the country's access to international capital markets but risk premia remained stubbornly high, falling back towards pre-crisis levels only in early 1996. Official capital flows to Argentina were also significant.

Private flows to both countries fell despite a significant rise in sovereign and public sector international bond issuance. But the repercussions of the peso crisis on the other financial markets of the developing world proved only short-lived. After a sharp decline in the first quarter of 1995, aggregate flows of private capital to Asia and Brazil recovered. There was a sizable increase in the developing world's international reserves.

While the Mexican crisis had only a transient impact on international flows of financial capital, it revealed weaknesses in the banking systems of much of Latin America. It therefore served as a warning about the risks of financial fragility more generally and about the particular importance of building robust financial systems. Even a decade ago, few would have predicted the speed and extent of the liberalisation and internationalisation of financial systems in the emerging markets. Securities markets that before were non-existent or at best rudimentary have expanded in both breadth and depth. At the same time the volume of bank credit has risen sharply, sometimes straining existing mechanisms of prudential oversight.

Banks in a number of countries now face difficulties, latent as well as manifest. Policy-makers have recognised that how these problems are resolved could well have significant macroeconomic implications in the years ahead. Accordingly, these difficulties are being tackled more effectively than were many of the similar problems in the 1970s and 1980s. In most countries, macroeconomic policies are now geared to stability and there has been little backtracking on the earlier reforms that made financial systems more open and more market-oriented. Provided this orientation of policy can be maintained, there are grounds for cautious optimism about the health of financial systems in the emerging markets.

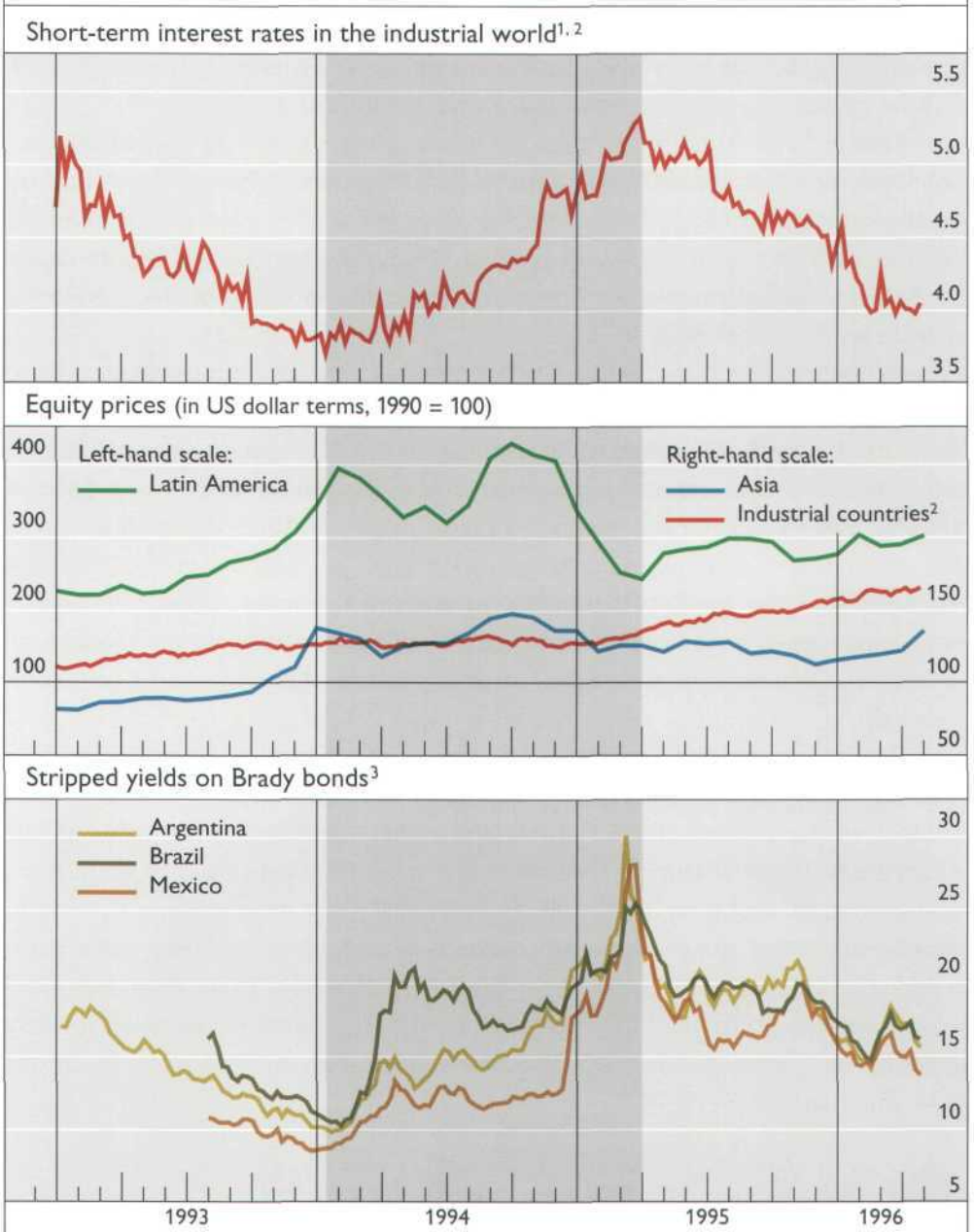
Capital flows after the Mexican crisis

The crisis surrounding the Mexican peso triggered capital outflows from the developing world in the early months of 1995. Heavy and generalised sales of emerging market securities put downward pressure on exchange rates and

depressed equity and bond prices. One indication of the abruptness of the shift in market sentiment was the massive rise in the yields on Brady bonds, illustrated in Graph VII.1. Mexico encountered difficulties in stabilising its newly floating exchange rate, with recurrent weakness prompting successive increases in interest rates in the early months of the year (Chapter III describes these developments in more detail). Very sharp increases in short-term interest rates in both Argentina and Brazil failed to prevent large-scale losses of reserves during the first quarter of the year.

Heavy outflows in early 1995 from Latin America ...

Interest rates in the industrial countries and financial asset prices in the emerging markets



[1] Overnight rate. [2] Weighted average of the United States, Japan, Germany, France and the United Kingdom. [3] Yields on Brady par bonds stripped of US Treasury collateral on principal and interest.

Sources: International Finance Corporation, J.P. Morgan and national data. Graph VII.1

... and most of Asia ...

In Asia, the initial downward pressure on exchange rates was intense. The only important exception was the Singapore dollar, which appears to have benefited from some diversion of flows. Several central banks raised overnight interest rates sharply, intervened on a major scale in the foreign exchange markets and persuaded local banks to deny finance to would-be speculators. These measures were generally successful and pressure quickly subsided.

... followed by renewed inflows as policies restore confidence ...

As the year progressed, return flows of financial capital to emerging markets gathered strength. Two factors accounted for the improvement. First, a varying mixture of official lending, rigorous macroeconomic policies (including high interest rates) and a continued commitment to liberal financial markets reassured international and domestic investors, stemming and then reversing the flight of capital from Latin America. In particular, the finalisation of a substantial foreign loan package and the announcement of a new stability programme in early March assuaged market worries about Mexico's ability to meet its short-term debt obligations. By mid-year, a couple of two-year international bond issues had also been successfully launched by Mexican public sector entities. Although renewed turbulence hit the Mexican peso in the autumn, the currency subsequently stabilised, but at a significantly lower level.

Capital outflows from Argentina were halted by a tightening of fiscal policy, sizable official credit, increased issuance of international bonds by the public sector and a sharp rise in interest rates. In Brazil, the combination of very high interest rates (climbing to around 65% in March, falling back to 40% by the end of the year) and the gradualness of the rate of exchange rate depreciation attracted large capital inflows despite a further tightening of restrictions on inflows. Official reserves rose by nearly $20 billion between April and December 1995, with a further strong rise in early 1996.

... and as returns in financial markets in industrial countries fall

A second, more cyclical factor behind the increased supply of capital to the developing world was the marked fall in short-term interest rates in the major industrial countries (Graph VII.1). Equity markets in Latin America also recovered somewhat, although the rise was not as large as during the previous period of declining interest rates (1993 and early 1994). However, flows into emerging market equities picked up from late 1995 as the exceptional rise in major industrial country equity and bond markets during 1995 set a limit on further prospective gains from financial assets in several developed markets.

Strong Asian demand for foreign capital ...

Foreign inflows in Asia were boosted by continuing strong growth. As monetary policy was tightened in some countries, higher interest rates attracted inflows into short-term paper and bank deposits. In addition, some construction projects in Asia were financed by international bond issues and foreign direct investment rose. Overall, net private capital inflows in the major Asian economies other than China (where external borrowing was reduced) amounted to $35 billion. However, with current account deficits in these countries widening appreciably, their international reserves rose by less than in earlier years, both in absolute terms and as a proportion of capital inflows. China's reserves rose by almost $30 billion in 1995 and the first quarter of 1996.

... and increased borrowing from banks

A significant change in the composition of capital flows last year was the marked upturn in net bank borrowing. Notwithstanding heavy repayments by entities in Mexico and several Gulf oil-producing countries, net BIS reporting

Capital flows to Asia and Latin America

In billions of US dollars

	1980–90	1991	1992	1993	1994	1995
	Net private capital inflows					
Total	12.4	50.7	80.9	95.2	70.0	52.6
China	1.9[1]	–1.9	11.7	7.8	16.4	– 1.4
Other Asia[2]	4.4	24.5	18.3	32.4	22.0	34.7
Brazil	3.8	2.5	9.1	9.9	9.1	32.0
Mexico	1.7	21.0	23.9	30.3	9.7	–15.4
Other Latin America[3]	0.6	4.6	18.0	14.7	12.9	2.7
	Net official capital inflows					
Total	12.0	10.2	16.9	10.1	10.4	35.8
China	1.2	2.9	5.4	5.6	7.5	6.2
Other Asia[2]	5.7	7.2	11.1	3.6	3.1	2.3
Brazil	1.0	–1.4	–0.5	–1.2	– 0.7	– 0.7
Mexico	2.0	2.0	1.7	–0.9	0.3	25.7
Other Latin America[3]	2.1	–0.5	–0.9	2.9	0.2	2.3
	Net increase in reserves					
Total	13.4	52.7	70.0	57.2	43.0	60.2
China	2.7[1]	14.1	23.2	1.8	30.5	22.0
Other Asia[2]	10.5	23.3	23.9	36.7	21.7	15.0
Brazil	–0.1	–0.4	14.7	8.7	7.2	13.5
Mexico	0.6	8.2	1.2	6.1	–18.9	9.6
Other Latin America[3]	–0.3	7.6	7.1	4.0	2.5	0.2

Note: Capital flows are calculated as the difference between the current account and the change in reserves; private flows are calculated as a residual from an estimate of official flows.

[1] 1982–90. [2] India, Indonesia, Korea, Malaysia, Singapore, Taiwan and Thailand. [3] Argentina, Chile, Colombia and Venezuela.

Sources: IMF Balance of Payments Statistics and Institute of International Finance. Table VII.1

bank claims on developing countries (excluding offshore centres) rose by about $21 billion, compared with little change in 1994 (see Table VIII.3 in Chapter VIII). The largest increases were vis-à-vis Korea and Thailand. Once the initial effects of the Mexican crisis had subsided, borrowing by developing countries on international bond markets also increased. Both of these developments are discussed further in Chapter VIII.

Macroeconomic stability and financial system robustness

Many of the capital markets in the developing world that attracted heightened investor interest in the 1990s are still narrow (with a limited range of paper) and rather shallow (low turnover). In many cases, incompletely sterilised inflows have increased bank liquidity, contributing to a sharp expansion of bank credit.

In most Asian and Latin American countries progress towards a liberal banking and financial system is still relatively recent and incomplete. Once regulations have been dismantled, it takes time to develop a modern financial infrastructure with robust institutions. Even in the developed industrial

economies, reform has been accompanied by pronounced volatility in markets and, at times, strains affecting major domestic institutions, notably banks. For economies still in the full flux of development, the risk that financial reform may cause turbulence is all the greater, even if, by conventional standards, macroeconomic policies are conducive to stability. For example, the rapid industrialisation of some Asian countries in the 1990s triggered a construction boom, stimulating borrowing for real estate investment reminiscent of experiences in several industrial countries in the 1980s. Rapid changes in the structure of relative prices (including asset prices) pose new challenges to the financial system's ability to correctly assess and price such risk. In parts of the developing world, this task has been made more difficult by destabilising fiscal and monetary policies.

Sound financial systems help macroeconomic stability ...

Macroeconomic stability and systemic soundness are mutually reinforcing. On the one hand, robust financial systems make it easier to pursue policies that help macroeconomic stability. One element of robustness is deeper capital markets, which can contribute to a smoother implementation of monetary policy. Another element is a sound banking system, which makes it easier to tighten monetary policy when this is necessary for longer-term stability. The importance of this link has been highlighted by recent experience in some countries. For instance, weaknesses in the Brazilian and Mexican banking systems have inevitably exacerbated the risks associated with higher interest rates, increasing the short-run costs of the much-needed stabilisation policies pursued.

... and vice versa

On the other hand, macroeconomic stability reduces the risk of systemic problems. Judging from different countries' experiences, four aspects of macroeconomic stability have important implications for the robustness of financial systems – the government budget position, private saving rates, inflation and the exchange rate.

Elements of macroeconomic stability include fiscal discipline ...

Maintaining a strong fiscal position can help in dealing with some of the macroeconomic problems usually encountered in the transition to a sound and open financial system. Strengthening government saving can offset the decline in private saving typically seen when there is a surge of credit demand upon the removal of direct controls. This can limit the risk of inflation in goods and, especially, asset markets frequently associated with liberalisation. Low deficits may also help to contain the interest rate volatility intrinsic in thin and underdeveloped capital markets, another potential contributor to financial fragility. Finally, smaller budget deficits can reduce domestic interest rates, thus moderating the large short-term capital inflows frequently associated with financial reform. In short, a strong fiscal position almost always nurtures stability in financial markets.

... high rates of private saving ...

Yet several financial crises in Latin America (most recently in Mexico) clearly demonstrate that a balanced fiscal position may not be sufficient to ensure stability. High private saving rates are needed too. Long-standing schemes in several countries, notably Chile and several Asian countries, to boost private saving rates (see Chapter III) have had the important effect of encouraging the development of local capital markets. A number of other countries (including Brazil and Mexico) have recently taken or proposed steps to reinvigorate private saving.

... low inflation ...

Low inflation can also help in avoiding financial fragility. High inflation undermines the predictability and stability of future income; it also blurs the signals of changing relative prices. Bank lending becomes riskier and the development of longer-term securities markets is inhibited. Moreover, a financial system that has evolved against a background of chronic inflation will not be well placed to cope with a more stable environment. By producing massive inflation gains from non-remunerated liabilities, high inflation can encourage new financial institutions to enter an already saturated market. During earlier episodes of hyperinflation in both Argentina and Brazil, new banks mushroomed, sometimes establishing branch networks. Moreover, financial institutions concentrated on short-term transactions, preferring treasury operations over loans. The quality of financial sector assets thus suffered because credit assessment skills atrophied.

... and a sustainable exchange rate

Finally, a sustainable exchange rate can reduce the risk of financial crises. Exchange-rate-based stabilisation programmes, which have often resulted in sharp reductions in inflation, are frequently maintained for too long and the exchange rate becomes overvalued. The longer an unrealistic exchange rate is maintained, the greater will be the chance that finance flows to the wrong sectors and the higher will be the subsequent costs of dislocation. This will be especially true if a reversal of short-term capital flows forces a large and sudden adjustment. Indeed, several financial crises in Latin America have been triggered by very abrupt exchange rate changes.

Floating versus fixing

Whether freer and more open financial markets also require a greater degree of exchange rate flexibility is an open question. A fixed exchange rate has often led residents to build up a dangerous exposure to exchange rate risk by borrowing in foreign currencies to benefit from low international interest rates. A floating exchange rate might reduce this temptation. It can also be argued that greater flexibility would help to absorb exogenous shocks such as changes in the terms of trade or swings in capital flows, without putting all the burden of adjustment on domestic interest rates. On the other hand, a stable exchange rate with very visible support from the authorities has often proved to be an important signal to the markets of the official commitment to stability, especially where the reorientation of policies is relatively recent. For this reason, most countries in the developing world with adequate reserves manage their exchange rates rather closely. Some have chosen to do this through a pre-announced exchange rate band that can anchor expectations while allowing some leeway for real adjustment.

Securities markets

Deeper capital markets ...

As in industrial countries, financial intermediation through capital markets has increased in importance relative to intermediation through banks. Table VII.2 shows the sharp rise in the value of securities outstanding as a proportion of GDP since 1990 for the principal emerging markets. In a number of Asian countries, this percentage is now close to that prevailing in some major industrial economies. In Latin America, however, the banks' share of financial intermediation remains very high (see Table VII.5 in the following section).

Securities markets

As a percentage of GDP unless otherwise stated

	Securities outstanding[1]		Equities				Bonds		
	1990	1994	Capitalisation		Trading concentration[2]	Turnover[3]	Capitalisation		Turnover[3]
			1990	1995			1990	1994	
India	35.0	93.4	12.6	56.9	6.2	24.1	18.5	22.4	57.5
East Asia									
Indonesia	13.5	32.6	7.6	33.9	35.4	29.4	1.6	6.0	10.0
Korea	91.4	105.4	44.0	40.2	12.8	171.6	19.7	24.1[4]	43.0
Malaysia	196.5	352.6	113.8	265.0	13.6	62.3	59.9	51.2	32.6
Taiwan	83.2	134.7	62.3	74.0	23.4	353.5	5.6	13.6	1,840.0
Thailand	37.8	113.8	27.9	85.4	28.0	60.9	9.8[5]	7.0[5]	4.0
Latin America									
Argentina	9.4	30.4[6]	2.4	13.4	47.7	28.1	7.0	18.3[6]	600.0[6]
Brazil	11.9	66.6	3.7	26.2	77.6	83.4			
Chile	54.5	155.8	44.9	109.4	57.7	9.5	9.6	18.4	275.4
Colombia	22.8	34.4	3.5	23.9	52.5	17.8	1.6	4.9	
Mexico	44.6	73.9	14.1	36.3	56.4	46.5	8.7	2.9	32.9
Venezuela	22.4	18.2	17.2	4.9	80.7	20.2	5.2	11.1	
United States	*203.7*	*244.5*	*56.3*	*94.7*	*7.4*	*69.7*	*108.3*	*123.4*	*1,460.0[5]*
Japan	*189.5*	*178.2*	*99.5*	*72.1*	*13.2*	*32.4*	*78.0*	*88.4*	*250.0[5]*
Germany	*88.9*	*132.7*	*21.6*	*23.9*	*61.9*	*97.8*	*70.1*	*85.6*	*2,120.0[5]*

[1] Where available, including short-term money market instruments, government bonds, corporate bonds and equities at market value. [2] Percentage share of the ten most active stocks in the total value traded in 1994. For the United States and Japan, share of total volume traded. [3] Total value traded as a percentage of average market capitalisation in 1994. [4] 1995. [5] Government bonds only. [6] 1993.

Table VII.2

... can help banks

Securitisation can present a competitive challenge to banks. Yet securities markets not only compete with banks, but can also help to make banking systems stronger and more resilient. Capital markets can spread the risks previously concentrated on banks: for example, an increased reliance by property companies on equity has facilitated a reduction in the loan-to-value ratios of their bank loans for real estate. This, combined with the securitisation of mortgages, has helped to insulate banks from declines in real estate prices in Hong Kong, for example. In addition, well-developed debt markets extending into long maturities can help banks limit maturity mismatches in their balance sheets. Finally, securities markets can help banks to price risk.

Money markets

Relatively liquid *money markets* have begun to emerge in a number of countries as short-term interest rates have become more responsive to market conditions with the dismantling of controls. Interest rates in such markets tend to be much more volatile than in the industrial countries (Table VII.3), although this is due as much to an unstable macroeconomic environment as to market thinness. In addition, such markets are on occasion dominated by the stance adopted by the largest domestic banks, sometimes acting in collusion. Nevertheless, foreign participation in such markets has increased substantially in recent years.

Volatility of exchange rates, interest rates and equity markets

	Exchange rates[1]		Interest rates[2]				Equity markets[3]	
			Overnight		Three-month			
	1986–90	1991–95	1986–90	1991–95	1986–90	1991–95	1986–90	1991–95
	Standard deviation of month-on-month changes							
China	3.4	4.3			0.5	0.3		21.6
India	1.3	3.2	2.6	5.2			8.9	10.4
Hong Kong	0.1	0.2	2.4	1.4	0.8	0.5	8.8	7.6
Korea	0.8	0.6	0.9	1.3	0.0	0.2	8.9	7.7
Singapore	1.2	1.0	2.5	1.1	0.5	0.5	7.3	4.1
Taiwan	1.6	1.2	1.7	0.9			17.8	11.2
Indonesia	3.9	0.2	2.2	2.0	1.6	0.6	10.8	8.6
Malaysia	1.0	1.4	1.2	0.3	0.4	0.2	8.6	7.0
Thailand	0.6	0.5	1.2	2.5	0.5	0.7	9.3	8.8
Argentina	18.8	5.3	∞	27.2	∞	23.3	31.7	17.6
Brazil	10.5	11.2	∞	∞			22.9	16.2
Chile	1.3	1.8			0.6	0.2	8.3	8.1
Colombia	0.3	2.2			0.9	1.8	6.4	11.5
Mexico	3.7	5.8			12.2	5.8	15.9	10.8
Venezuela	10.0	7.1			2.9	5.1	13.7	13.3
France	*0.7*	*0.7*	*0.4*	*0.8*	*0.3*	*0.6*	*4.6*	*4.0*
Italy	*0.7*	*2.8*	*0.6*	*0.9*	*0.7*	*0.8*	*7.6*	*6.0*
United Kingdom	*2.4*	*2.1*	*0.6*	*0.4*	*0.6*	*0.4*	*5.5*	*3.4*

Note: ∞ denotes exceeds 1,000.

[1] Against the US dollar (emerging market countries) or the Deutsche Mark (Europe). [2] For China, the one-year deposit rate; for Taiwan, before November 1994, the weighted average of six money market rates with maturities ranging from overnight to six months; for Chile, the real interest rate as officially defined. [3] In US dollar terms. Table VII.3

Bond markets

Bond markets remain relatively underdeveloped in much of the developing world. In many cases, an inadequate infrastructure and high issuance costs have led corporations to issue bonds privately or in international rather than domestic markets. Where bond markets do exist, they are still rather illiquid, often because bonds are held to maturity by the domestic financial institutions required to invest in them. Bond markets are most developed in Asia, notably in Hong Kong, Korea, Malaysia and Singapore. Other things being equal, markets open to foreign investors have tended to be more liquid. Action to encourage the development of bond markets has included the setting-up of cost-effective and safe clearing systems and the establishment of independent credit-rating agencies to provide information on the creditworthiness of borrowers. Even when the conditions are right, markets may not develop spontaneously. Fostering market-makers, willing to quote prices continuously, has been an important preoccupation of many central banks in industrial as well as developing countries. The authorities in several countries have attempted to develop deeper markets for a benchmark security, sometimes by buying illiquid issues in the market and selling a standard issue.

Government bond markets in industrial countries serve the important function of providing banks with safe and liquid securities. Banks in the developing world, without such securities, may have their assets too concentrated on loans, leaving them with a smaller margin of safety when faced with a loss of deposits.

Equity markets

Equity markets have developed more rapidly and, in many countries, capitalisation/GDP ratios are close to industrial country averages (Table VII.2). However, in a number of countries, turnover is still relatively low and is dominated by transactions in the shares of a few large companies. Moreover, price volatility is still much higher than in the industrial countries, particularly in Latin America. Nonetheless, it is significant that in all but two of the countries shown in the table, price volatility was lower in the 1991–95 period than in the 1986–90 period. This observation suggests that the much greater interest shown by foreign investors in emerging market equities in the 1990s has not necessarily made these markets more volatile. Indeed, there is reason to believe that the widening range of investors may have helped to make markets more stable.

Brady bonds

The development of the market for *Brady bonds* has been of particular significance for foreign investors. The large volume of Brady bonds floated and their denomination in dollars created the basis for a deep and liquid secondary market which has in recent years proved to be a sensitive indicator of shifts in financial market sentiment with respect to individual countries. By helping in the pricing of country risk, this has provided investors with a hedging mechanism: for instance, a spot purchase of securities can be combined with an option to sell Brady bonds.

Derivatives

With the shift towards market-determined exchange rates and interest rates, the management and trading of risk has assumed critical importance. Accordingly, a noteworthy trend last year was the rapid development of new exchange-traded derivative instruments. The creation of derivative contracts on the major US exchanges has the particular significance of providing investors with offshore hedging instruments that are less subject than local instruments to political risks such as the imposition of exchange controls. The use of Mexican peso futures, quoted from April 1995 on the Chicago Mercantile Exchange, has grown; more recently, derivatives on a 30-share Mexican index as well as futures and options on Mexican Brady bonds have been introduced. In November 1995 futures and options on the Brazilian real were launched. As more active short-term money markets and interbank markets have emerged, over-the-counter interest rate futures or forward contracts have developed and options markets have also begun to take root. All in all, these developments are likely to further improve the liquidity of spot markets over time.

The banking system and credit growth

Less stable macroeconomic environments ...

A macroeconomic environment that is generally more volatile than in the major industrial countries has added to the difficulties of the banking industry in the emerging markets. Table VII.4 shows that the ranking of countries by the volatility of banking business broadly matches that based on the variances of GDP growth and inflation. Yet the year-to-year variability of bank deposits and credit greatly exceeds that of GDP. Even allowing for the much greater amplitude of the

The volatility of macroeconomic indicators and banking aggregates[1]

	GDP	Inflation	Bank deposits[2]	Bank credit to private sector[2]
India	2.0	4.1	3.4	4.6
Hong Kong	3.5	3.1	6.1[3]	12.4[4]
Korea	3.5	7.2	5.3	5.6
Singapore	3.3	2.6	5.7	4.6
Taiwan	2.4	5.5	6.4	8.7
Indonesia	2.0	3.1	7.8	20.1
Malaysia	3.0	2.4	8.8	8.4
Thailand	2.7	4.6	6.6	6.5
Argentina	5.5	888.3	23.5	34.4
Brazil	4.3	918.3	57.0	53.6
Chile	5.8	7.5	20.9	21.8
Colombia	1.5	3.9	9.0	9.1
Mexico	4.2	39.4	33.2	22.1
Venezuela	4.9	21.9	12.7	16.0
United States	*2.1*	*3.1*	*4.4*	*3.4*
Japan	*1.8*	*2.0*	*2.5*	*2.5*
Germany	*1.8*	*1.9*	*5.4*	*3.1*

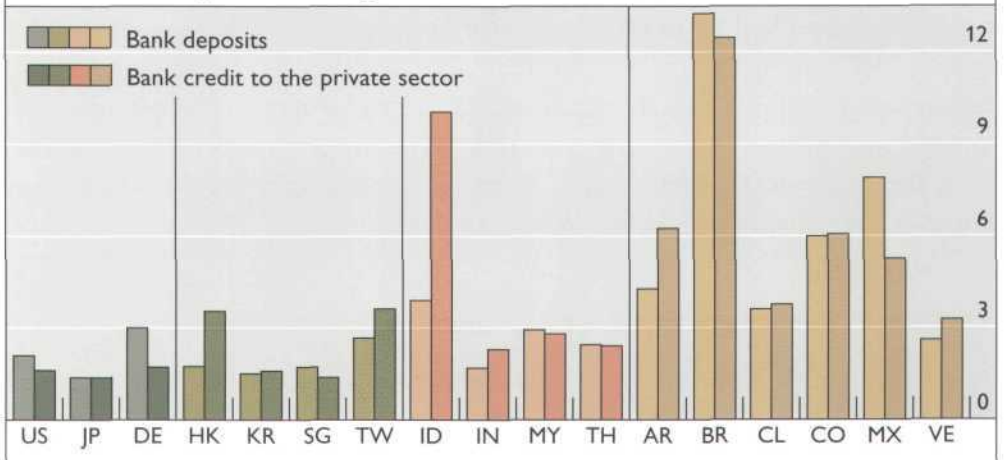
[1] Measured as the standard deviation of annual percentage changes over the period 1980–95. [2] As a percentage of nominal GDP. [3] 1983–95. [4] Total domestic credit. Licensed banks only. Table VII.4

economic cycle, however, banking business in Latin America has been by far the most volatile (Graph VII.2).

... not conducive to resilient banking systems

An unstable macroeconomic environment inevitably makes it harder for banks to assess credit risks: a company's credit history under hyperinflation may not be a good guide to performance in a more stable environment. Furthermore,

The volatility of banking business relative to that of GDP



Note: Volatility as defined in Table VII.4.

US = United States; JP = Japan; DE = Germany; HK = Hong Kong; KR = Korea; SG = Singapore; TW = Taiwan; ID = Indonesia; IN = India; MY = Malaysia; TH = Thailand; AR = Argentina; BR = Brazil; CL= Chile; CO = Colombia; MX = Mexico; VE = Venezuela. Graph VII.2

macroeconomic instability and high inflation have frequently triggered capital flight, leading to an abrupt fall in domestic bank deposits and loans. Argentina and Venezuela have both exemplified this, with bank credit/GDP ratios well below those of other countries at a similar stage of development. An effective programme of macroeconomic stabilisation that brings down inflation and provides assurance of at least near-term stability can help to rebuild bank deposits and make bank lending viable. Rates of credit expansion can then be very rapid, and it may be difficult to gauge how far such credit expansion is justified by a return to more normal conditions, and how far it reflects imprudent lending.

But an adverse macroeconomic climate has not been the only cause of poor performance. Other contributing factors have included an uneven institutional fabric, bad banking practices, weak prudential oversight mechanisms and, finally, the inevitable problems encountered in the transition to a more liberal system.

Institutional fabric

A major source of difficulty has been that reforms giving financial markets and institutions greater freedom were often not supported by sufficient efforts to improve the uneven institutional fabric inherited from years of government control and protection. Two elements of this unsatisfactory structure have been of particular consequence: inefficient banks and an inadequate legal framework.

Inefficient banks ...

At the start of many liberalisation programmes, banks – protected by controls and regulation – were often very inefficient. In many countries, moreover, large state-owned banks had traditionally played an important, and sometimes dominant, role in the banking system. With loan policies subject to government direction or other forms of political pressure, banks did not always evaluate credit risks properly. They could also afford to be overstaffed or to maintain excessive branch networks. A banking system will become more efficient only if liberalisation is accompanied by measures to enable the more competitive banks to absorb and reform the weaker banks or to allow new entrants to drive out the incompetent banks.

... often do not face enough competition

Yet the takeover mechanism is frequently obstructed by various restrictions that have remained in force even after liberalisation. Many countries have also retained restrictions on the entry of new banks, especially foreign banks. Moreover, an oligopolistic banking structure that has often survived liberalisation has stifled competition. In addition, liberalisation has not always led to the privatisation of state banks, whose share in total banking sector assets remains high in some countries (Table VII.5). The need to ensure that banks fall into the hands of only "fit and proper" persons may sometimes have served to delay the privatisation process. This has been especially the case when foreign banks were excluded or when ownership by powerful industrial or commercial groups was ruled out because of the risk of compromising independent credit risk assessment. Even after privatisation, the internal culture of former state banks can resist change in the absence of a competitive climate in the industry.

Net interest margins vary widely ...

How far and how rapidly reforms have made banks more efficient in providing their services is hard to judge. One imperfect indicator of the "price" of their intermediation is the net interest margin. Although international

comparisons in this area are hazardous, banks in the emerging markets seem to fall into three broad groups:

- banks in the higher-income Asian centres (Hong Kong, Korea, Singapore and Taiwan) have an average net interest margin of between 1½ and 2 percentage points, not much above the margins seen in Germany and Japan;
- banks in the other Asian countries (India, Indonesia, Malaysia and Thailand) have an average net interest margin of between 3 and 4 percentage points;
- banks in Latin American countries (with the exception of Chile and Mexico) have an average net interest rate margin of around 8–10 percentage points.

Moreover, this broad pattern has changed little during the 1990s, although there appears to have been some modest decline in Latin American interest margins (Graph VII.3).

A conclusive judgement is of course impossible because net interest margins may reflect differences in inflation and in risk as well as differences in efficiency. High inflation will magnify net interest margins by producing gains from non-remunerated liabilities and generating high nominal interest earnings on the bank's own assets. The riskiness of loans differs greatly across countries and doubtless increased with liberalisation. Nevertheless, the cross-country pattern of interest spreads closely shadows the pattern of operating costs as a percentage of assets (Table VII.5). Interest margins are higher in those countries where operating costs

... largely reflecting differing operating costs

Indicators of the structure of the banking industry

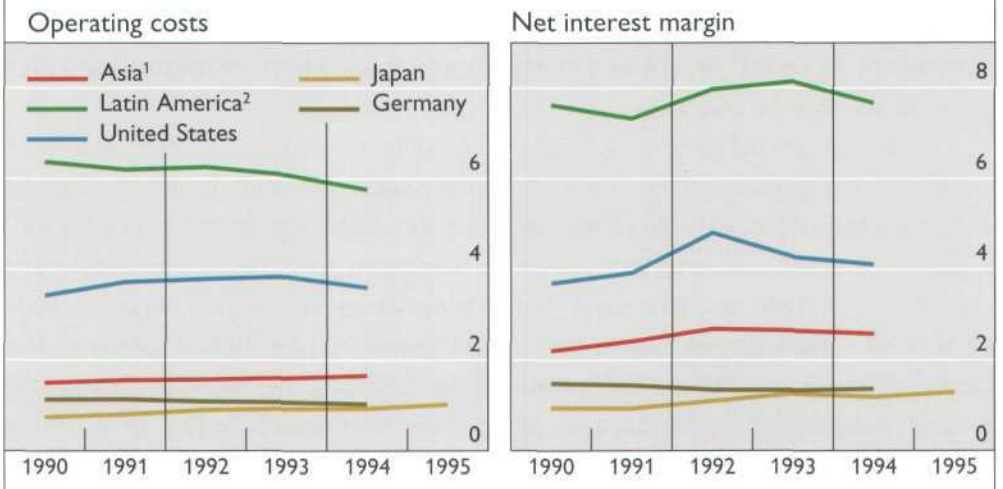
	Bank share in financial inter-mediation[1]	Share of state-owned banks[2]	Operating costs	Net interest margin	Deposits at the central bank as a % of loans to the non-government sector	
	1994	1994	as a % of total assets[3]		1994	1995
India	80	87	2.3	2.9	21.3	15.6
Hong Kong	94	0	0.8[4]	1.6[4]	0.1	0.1
Korea	38	13	1.7	2.1	7.5	7.9
Singapore	71	0	1.4	1.6	6.7	6.5
Taiwan	80	57	1.3	2.0	9.9	8.7
Indonesia	91	48	2.4	3.3	0.5	1.1
Malaysia	64	8	1.6	3.0	0.0	0.2
Thailand	75	7	1.9	3.7	1.2	1.4
Argentina	98	42	8.5	9.2	8.0	3.5
Brazil	97	48	8.3	10.0[4]	15.5	11.5
Chile	62	14	3.0	6.1	5.5	5.0
Colombia	86	23	7.3	8.3	27.4	21.8
Mexico	87	28	3.9	5.1	0	0
Venezuela	92	30	5.7	8.1	48.5	34.9
United States	*23*	*0*	*3.7*	*4.2*	*3.2*	*2.4*
Japan	*79*	*0*	*0.8*	*1.1*	*0.6*	*0.6*
Germany	*77*	*50*	*1.1*	*1.4*	*1.7*	*1.3*

[1] Assets of banks as a percentage of the assets of banks and non-bank financial institutions. [2] Percentage share of assets except for Argentina (share of deposits). For India, 1993. [3] Average of 1990–94. [4] 1992–94.

Sources: Central banks, IBCA Ltd. and IMF International Financial Statistics. Table VII.5

Indicators of banks' performance

As a percentage of total assets



[1] Simple average of Hong Kong, India, Indonesia, Korea, Malaysia, Singapore, Taiwan and Thailand.
[2] Simple average of Argentina, Brazil, Chile, Colombia, Mexico and Venezuela.

Source: IBCA Ltd. Graph VII.3

are higher. This suggests that much of the cross-country difference in interest margins reflects differing levels of banking system efficiency rather than payment for different risks. The higher margins charged by banks operating in riskier or more volatile environments will not help make banking systems safer if they are squandered on higher operating costs.

Inadequate legal framework

A further institutional problem is that reforms were frequently launched when the legal framework was still ill-attuned to the needs of a market-oriented financial system. Banks depend on an effective legal framework. The promptness of legal procedures necessary for banks to be able to get control of the collateral they hold has an obvious bearing on its value, particularly in a crisis: long delays and unpredictable results inevitably hurt banks. Likewise there must be effective legal mechanisms preventing the fraudulent transfer of assets held as collateral. In addition, a streamlining of collateral pledging arrangements would improve the access of smaller enterprises to credit at lower cost. Finally, mechanisms for the prompt and predictable adjudication of claims in the event of bankruptcy are also essential.

Poor banking practices

Poor banking practices include insufficient diversification ...

A second source of difficulty has been poor banking practices. The *inadequate diversification* of bank assets has been a central failing. Specialist banks have been over-dependent on the particular sector or region served. Another weakness has been concentration on loans for real estate or, indeed, any other long-term investment project. The general problem with the use of bank finance for a long-term project is that its present value is typically very sensitive to changes in the rate of interest. This is one justification for the limits on real estate loans that apply in a number of countries: for example, a recent Hong Kong guideline encourages banks with a property exposure of more than 40% of loans to reduce

or stabilise the proportion. Finally, small economies, especially if their exports are narrowly concentrated on only a few commodities, may offer banks limited scope for diversification. In such circumstances, the banking system can be insulated from national shocks only by international diversification. This may apply particularly to banks' securities portfolios, especially where domestic securities markets are thin or too new.

... lending to connected enterprises ...

In a number of emerging markets, lending to *connected enterprises* (e.g. industrial companies which have a major stake in the bank) has often compromised objective risk assessment and increased the temptation of fraud. Rules in different countries on maximum exposure to a single borrower vary significantly in their restrictiveness. Some supervisory authorities impose a limit of 10% of capital or net worth but others permit up to 30%. Moreover, the intent of these regulations is sometimes undermined by increased exposure through subsidiaries, by offshore or off-balance-sheet operations or by counting each of several companies within a group as a single borrower.

... mismatches between assets and liabilities ...

Another dangerous practice is excessive *maturity and currency mismatches* between assets and liabilities. Where bank finance is practically the only source of investment finance, even for long-term projects, as it is in many developing countries, banks whose funds are drawn from short-term deposits face potentially serious maturity mismatches. When interest rates are liberalised, banks lose the protection of the controlled structure that typically kept short-term rates below long-term rates. Attempts by banks to avoid this interest rate risk by charging their long-term borrowers variable interest rates (linked to short-term rates) may rebound on them as a credit risk if their customers face servicing difficulties when short-term interest rates rise sharply.

Similar considerations apply to foreign currency lending to domestic borrowers. Such lending typically surges in the early stages of reform programmes as borrowers seek to avoid the higher domestic currency interest rates that usually accompany liberalisation. A recent sample found that almost 60% of the financial liabilities of large and medium-sized Mexican companies were denominated in foreign currencies even though their foreign sales were less than 10% of the total. The large volume of foreign-currency-denominated bank borrowing by such companies before devaluation added to the scale of the subsequent banking crisis, despite the fact that the banks themselves had relatively little direct foreign exchange exposure.

... and overvaluation of collateral

A final problem has been the *overvaluation of collateral*. In an upswing, when prices are rising, the temptation to overvalue collateral can be very strong. Yet realistic and conservative valuation is essential because the value of collateral (especially real estate) is usually most depressed when loans turn bad. Selling in an illiquid market may be difficult. Related to this, it is important that loan-to-value ratios for mortgages should reflect the risk that property prices can fall. Hong Kong, for instance, reduced what it regards as prudent loan-to-value ratios from 90% to 70% in late 1991. Taiwan's banks have also reduced loan-to-value ratios for property by a similar amount. More recently, a tightening of credit terms has led banks in Thailand to accept undeveloped land as collateral for only 50–60% of its current value, compared with up to 80% in the past.

Prudential oversight

Mechanisms of prudential oversight lagged behind liberalisation

A third important cause of difficulties has been the failure to strengthen the system of prudential oversight sufficiently to cope with the increased risk that is almost inevitably associated with liberalisation. In some cases, supervisory guidelines remained lax or were easy to evade: when supervision was not on a consolidated basis, for instance, banks could transfer problems offshore or to other members of their conglomerate group. The responsible authorities often lacked the resources to adequately monitor banks or the powers to enforce the rules. For example, the major strengthening of Mexico's supervisory framework began only in 1994, well after the banks had been freed from controls and a sharp expansion in credit had taken place. Likewise, Venezuela's new banking law, which reinforced the supervisory and crisis management framework, came into effect only at the beginning of 1994.

Market-based mechanisms need encouragement

Officially enforced rules and regulations can only be part of any oversight mechanism; disclosure and market-based control mechanisms also have an essential role to play because any regulation inevitably prompts attempts to avoid or to evade. This is all the more true when the structure of financial markets is changing rapidly, and may at times outgrow specific regulatory provisions.

Entry standards

Particularly significant prudential rules are: limits on the entry of new institutions; capital/asset ratios; and auditing and accounting standards. *Entry standards* for new banks create a dilemma. There is no doubt that the entry of new banks can enhance competition. Foreign banks, in addition, can bring a much-needed infusion of know-how and technology. However, new banks do bring some risks. Potential entrants may well prove ill-equipped for banking; this applies especially to domestic candidates. Moreover, the increased capacity that results from new entry may reduce the overall profitability of the banking system, making it more vulnerable to adverse shocks. This effect may be all the greater when the new entrants are highly competitive foreign banks.

In general, Asian countries have been rather more cautious in permitting new entrants than Latin American countries. Banking crises have sometimes led to a significant tightening of restrictions. For instance, Hong Kong's present rigorous entry standards were introduced in part as a reaction to the 1982 banking crisis. The lifting of a moratorium on new bank licences in 1978 had intensified competition in the banking sector and, with the weak supervisory and regulatory systems then in place, had led to excessive risk-taking (as well as fraud). Chile also tightened conditions of entry to its banking system after its 1982 financial crisis.

Many countries (e.g. Brazil, Mexico and Korea) have allowed foreign entry on a gradual basis, retaining limits on foreign bank penetration during the transition period. Although foreign banks' share of total assets has risen over the last decade, it remains below 10% in most emerging market countries without large offshore banking sectors. The two exceptions are Chile and Malaysia, both with rather robust banking systems.

The earlier relatively lax entry standards for domestic institutions in some Latin American countries had led to an excessive expansion in the number of banks, often with widespread subsequent failures. In Brazil, the elimination (in

1988) of the need for prospective banks to win a bank charter permitted the creation of too many new banks, many of which foundered with the end of hyperinflation. A similar chain of events occurred in Argentina.

Capital/asset rules

The most prominent *capital/asset rule* is the 8% capital adequacy ratio laid down by the Basle Committee on Banking Supervision. Practice in many emerging markets has moved only slowly towards reflecting the spirit of this regulation. In the first place, the ratio was always meant to be only a minimum, even for the countries of the Group of Ten. Supervisors of banks in the riskier environments of many emerging markets may need to impose higher ratios to achieve a proper safeguard. Some indeed do so: actual capital adequacy ratios today exceed 15% in Hong Kong and Singapore and they have been relatively high in Colombia. Argentina recently increased capital requirements.

Supervisors will also need to supplement rules on capital with other guidelines. For instance, risk management processes are of key importance. A significant aspect of Argentina's recent reforms was to make the minimum capital requirements for commercial banks subject to risk ratings on normal CAMEL criteria (viz. Capital adequacy, Asset management, Management quality and integrity, Earnings quality and stability, and Liquidity).

Furthermore, measures of capital depend on accurate accounting. For example, the *delayed or incomplete recognition of non-performing assets* has often undermined their effectiveness. Some supervisory authorities require banks to build up loan loss reserves systematically as they extend loans, with more reserves being set aside to cover the riskier loans. Yet in many Latin American countries during the early 1980s, loan loss reserves were no higher than in the Asian countries despite the higher level of risk. Recent reforms in a number of Latin American countries have imposed more rigorous provisioning rules.

A single fixed capital ratio may be less effective than ratios that can be varied according to the background and nature of the institution. In addition, a schedule of ratios that imposes a progressive loss of privileges or even penalties on banks may be more credible than a single ratio in constraining bank behaviour, and more effective in prompting corrective action. For example, US legislation drawn up after the crisis in the savings and loan industry imposed such a schedule. Malaysia's two-tier regulatory framework – which subjects poorly capitalised banks to tighter regulation – is another example.

Accounting and auditing standards

Rules and regulations need to be backed by effective control mechanisms based on markets, whether the equity or the interbank market. Transparency and accuracy in the published accounts are essential if the markets are to be able to detect signs of trouble early. Yet *accounting and auditing standards* are often lax and ill-defined in the developing world, and those transactions in which no cash actually leaves the bank may not be realistically recorded. Where a bank owns other financial companies (also offshore), transparency requires that the financial accounts reflect the consolidated activities of the whole group.

Much has been done to enhance transparency in recent years. Many countries have taken major steps to reinforce the role of external auditors and to secure the regular publication of balance sheets on a consolidated basis. These measures have sometimes been buttressed by the development of independent rating agencies (Malaysia) or by a move towards US or similarly demanding

accounting standards (Mexico). Independent agencies provide monthly risk ratings for bank deposits in Chile. Brazil has recently imposed more comprehensive disclosure requirements. From September 1996, financial institutions in Argentina soliciting deposits will have to publish the rating received from an independent rating agency.

Transitional difficulties

Banks take time to adjust to a new environment

In any transition economic agents take time to adjust to a new environment. Liberalisation and stabilisation policies have often been associated with an excessive expansion of bank credit that proves to be rather impervious to high nominal interest rates. Asset price cycles, notably in the real estate sector, have been one potent mechanism for instability. An increase in confidence bred by broadly based structural reforms may also engender over-optimism about the future. Freed from restrictions on lending, banks respond to the backlog of credit demand from sectors previously subject to controls – typically loans to the personal sector, for real estate and for investment in securities. They will have little previous experience of setting prudent lending limits because the earlier controls prevented them from reaching such limits. They will find this new business very profitable at first, and will be encouraged to pursue it further. If all the banks try to do the same thing, asset prices will be bid up and up. Borrowers will continue to borrow to buy assets that are rapidly appreciating in value, even when they have to pay high interest rates to do so. Such short-term success will at first reward excessive risk-taking by banks and their customers alike. The deterioration in loan quality will be revealed only when the asset price bubble finally bursts.

Graph V.6 on page 84 shows how closely the total private credit/GDP ratio has followed swings in asset prices in several industrial countries that have experienced banking crises. Such swings may be even greater in many emerging markets where construction booms transform the value of land and where equity price booms are often more violent. For example, Taiwan's banks suffered severe problems with the bursting of the asset price bubble in 1990 when domestic liquidity conditions tightened. The Venezuelan banking crisis was also preceded by a violent boom-bust equity market cycle. Moreover, exporters of commodities may be vulnerable to abrupt terms-of-trade changes: such effects contributed to previous banking difficulties in Indonesia, Malaysia and much of Latin America. In addition, a process of very rapid industrialisation will itself offer hugely profitable arbitrage opportunities, and thus stimulate the demand for loans even at very high interest rates. Periods of high rates of credit expansion have preceded many banking crises in developing countries, both in the 1980s and more recently.

Controlling the growth of bank credit

A major challenge is to control credit expansion

Controlling the expansion of bank credit in such circumstances may not be easy. Increases in interest rates may not be sufficient to constrain loan demand when asset prices are rising rapidly and may also attract unwanted capital inflows. Accordingly, several central banks have responded to an incipient boom in credit by imposing lending ceilings or restrictions on the terms of credit extension. For example, personal loans to finance consumption may be subject to minimum

downpayments or maximum repayment periods. Countries as different as Brazil and Singapore have used such restrictions to contain credit-financed consumer booms in recent years. Others reserve the right to do so.

Use of reserve requirements ...

Alternative measures to minimise the risk of excessive credit expansion in the early stages of liberalisation have included the use of reserve requirements and moral suasion. The main disadvantage of reserve requirements is that they act as a tax on financial intermediation and thus encourage an expansion of off-balance-sheet or offshore business. Indeed, an excessive use of reserve requirements in the past weakened the banking systems in several Latin American countries. In the wake of the banking crisis in the 1980s, for example, Argentina increased reserve requirements on healthy banks to finance lending to troubled institutions. Similarly, Mexico used reserve requirements to finance large budget deficits in the 1980s.

... in Latin America ...

In more recent years, however, reserve requirements have tended to be lower and more selective, both in scope and in timing. Central banks in a number of countries (e.g. Brazil, Chile and Colombia) have imposed higher requirements on shorter-term bank deposits, thus encouraging banks to lengthen the maturity of their liabilities. Several central banks have temporarily increased reserve

Growth of bank credit to the private sector relative to the growth of GDP

	1980–89	1990–93	1994	1995[1]	Memorandum item: Bank credit to the private sector as a % of GDP	
	Average annual percentage changes				1980	1994
China[2]	5.0	2.7	3.1	– 6.2	54.0	95.4
India	2.4	–2.4	– 7.4	3.4	22.2	24.1
Other Asia						
Hong Kong[3]	12.0	7.9	1.8	5.8	80.9	284.5
Korea	3.3	0.4	4.2	– 1.1	38.8	49.0
Singapore	2.2	0.9	1.1	8.8	71.0	86.8
Taiwan	6.1	9.5	7.8	0.7	49.2	141.1
Indonesia	11.4	4.9	9.3	5.7	14.2	49.8
Malaysia	8.0	3.2	1.5	13.4	39.2	78.2
Thailand	5.8	9.2	14.7	10.2	30.1	91.7
Latin America						
Argentina	–3.8	16.5[4]	10.4	5.2	16.6	18.0
Brazil	0.5	2.2	8.5		17.5	26.1
Chile	5.1	1.9	– 0.5	1.4	34.7	46.7
Colombia	1.7	5.2	9.0	4.8	14.3	19.3
Mexico[5]	–0.6	25.0	26.3	–24.0	15.6	46.3
Venezuela	–3.3	–6.1	–41.5	6.1	27.5	9.2
United States	*1.3*	*–4.1*	*0.4*	*4.1*	*64.5*	*62.8*
Germany	*1.5*	*2.4*	*2.3*	*0.8*	*78.6*	*98.9*
Japan	*3.6*	*–0.6*	*– 0.6*	*1.4*	*84.7*	*116.8*

[1] Preliminary. [2] Credit other than to central government. [3] Total domestic credit. Licensed banks only. [4] 1991–93. [5] Excludes development banks. Table VII.6

requirements (e.g. Brazil in the early stages of the Real Plan) to limit rapid credit growth. Others have imposed high marginal requirements. In Argentina reserve requirements were eased last year when banks were confronted with a withdrawal of deposits, helping the banking system to withstand the shock. In contrast, Mexico gave up an instrument for controlling bank lending when reserve requirements were lowered to zero early in the privatisation process.

... and Asia

With the notable exception of India, most Asian countries now have relatively low reserve requirements (see the final columns of Table VII.5). Nevertheless, most central banks in the region retain discretionary power to vary reserve requirements for various policy purposes. Both Indonesia and Malaysia recently raised reserve requirements to restrain credit expansion. As credit growth slowed last year, Taiwan cut its reserve requirements. Thailand increased reserve requirements on non-resident baht deposits to deter capital inflows.

Moral suasion

Finally, several central banks in Asia (notably in India, Malaysia, Thailand and Indonesia) have resorted to moral suasion to moderate credit expansion. In some countries, for example, banks submit plans for future credit growth. Moral suasion may also be applied to the purpose of credit extension: too rapid expansion of lending for investment in property or equities is often frowned upon.

The rate of credit expansion in a number of Asian countries last year was unusually rapid even by the standards of this booming region (Table VII.6). Bringing rates of credit expansion to more sustainable levels will be important to maintain stable and healthy banking systems.

Banking crises

Non-performing loans of banks high ...

Banking crises in the emerging markets have usually been more severe than in industrial countries. While non-performing loans reached around 10% of bank loans at the height of the Nordic banking crises, non-performing loans often exceeded 20% of total loans in the mid-1980s crises in both Asia and Latin America. The figures for individual countries, shown in Table VII.7, should be regarded as indicative only of broad orders of magnitude as the international comparability of such information is weakened by differences in the recognition of non-performing loans. Indeed, such loans are often under-reported, particularly in the early stages of a crisis.

... and often concentrated in the state sector

In some countries (notably China, India and Indonesia), non-performing loans are mainly concentrated in the state sector, often the result of previous lending not subject to market discipline. In other countries, the non-performing ratio remains significantly higher in state banks than in private ones: for example, one-third of total loans in Argentina's public banks were non-performing at the end of 1994, compared with 10% for private banks. In some cases, the acquisition of state bonds at non-market rates left banks with additional heavy losses. Lending to local government or agencies has caused serious problems for the state government banks of Brazil.

The timing, if not the underlying causes, of banking crises in Latin America has often been influenced by macroeconomic crises. The Venezuelan banking

Non-performing loans as a percentage of total loans

	Crises in the 1980s		1990	1994	1995[2]
	years[1]	average			
India				23.6	19.5
Other Asia					
Hong Kong				3.1	2.9
Korea	1986	6.7[3]	2.1	1.0	0.9
Taiwan[4]	1986	5.5	1.2	2.0	3.1
Indonesia			4.5	12.0	10.4
Malaysia	1988	32.9	20.6	10.2	6.1
Thailand	1983–88	15.0	9.7	7.5	7.7
Latin America					
Argentina	1985	30.3	16.0	8.6	12.3
Brazil			4.7	3.9	7.9
Chile	1983	15.5	2.1	1.0	1.0
Colombia	1984	25.3	2.2	2.2	2.7
Mexico[5]	1982	4.1	2.3	10.5	19.1
Venezuela	1983	15.4	3.0	24.7	10.6
United States	*1987*	*4.1*	*3.3*	*1.9*	*1.3*
Japan				*3.3*	*3.4*
Italy			*5.2*	*8.8*	*10.3*
			1992[6]		
Finland			*8.0*	*4.6*	*3.9*
Norway			*9.1*	*5.4*	*4.5*
Sweden			*11.0*	*6.0*	*4.0*

[1] Peak years shown. [2] Preliminary. [3] Official data are available only from 1986 onwards. [4] Past-due loans. [5] Commercial banks only. [6] The peak year of the Nordic banking crises. Table VII.7

Macroeconomic difficulties can trigger crises

crisis followed years of erratic macroeconomic policies, exacerbated by oil price shocks and political disturbances. Once confidence broke, and capital flight led to a major loss of reserves, banks faced severe difficulties. Several banks failed, requiring massive official intervention, at a cost of more than 16% of GDP. The run on the Mexican peso, and the year of high nominal interest rates that followed, hit a banking system that had already been overstretched by the excessive expansion in lending that followed liberalisation. Abrupt disinflation revealed major structural flaws in the banking systems of both Argentina and Brazil.

A successful outcome depends on ...

How these crises are handled is a major policy challenge that raises many thorny issues, macroeconomic as well as systemic. Three main elements seem necessary for a successful outcome: a quick resolution of individual banks' situations; maintaining confidence in the value of the domestic currency and in the official commitment to a market-oriented financial system; and improvements to prudential oversight mechanisms (market-based as much as regulatory) to prevent a recurrence.

When banking difficulties first emerge, the size of the potential problem is often hard to gauge and the temptation for the public authorities to conceal its full extent can be very strong. A common motivation is the need to maintain

... distinguishing temporary from permanent problems ...

public confidence in the banking system, particularly if there is no deposit insurance. Moreover, it may not be easy at the outset to discern whether difficulties are purely temporary or are more permanent. An extreme or unexpected movement in macroeconomic variables (e.g. a collapse in the exchange rate or the property market or a sharp rise in interest rates) will affect even well-run banks. Accordingly, the cumulative effects of a loss of confidence (e.g. through the public's withdrawal of deposits, or through other banks' cutting credit or even payment lines in interbank markets) are hard to predict, and may turn out to be enormous and, to some degree, irreversible.

But the danger with this argument for forbearance is that banks and others may use the excuse of adverse cyclical conditions to avoid recognising a *durable* loss in the value of the assets they or their customers hold. This has often been the case when a real estate bubble bursts. The debtor and the banker holding property as collateral may see a common interest in not recognising its lower value. Neither may wish to sell into a falling market. Yet withholding assets from the market in this way is not a long-term solution and often prolongs the time that unrealised losses hang over the market.

... and acting quickly

Delay has also reflected the difficulty of getting the fiscal authorities to give high priority in their expenditure plans to dealing with problem banks; in addition, the unpopularity of banks may stand in the way of securing swift public support for fiscal aid. Finally, legal ambiguities may also impede prompt resolution. Yet the longer action is delayed, the greater the costs can become. Resources will also be increasingly misallocated if pressure to lend to those borrowers which face the greatest difficulties begins to crowd out loans to more solvent customers. One well-established pattern in the 1980s banking crises in Asia and Latin America was that banks continued, long after the crisis had broken, to extend new credits to roll over the debt service obligations their customers could no longer meet.

Bank managers who are facing insolvency may be tempted to "gamble for resurrection", paying above-market rates to attract funds (drawing deposits away from healthy banks) that can be committed to new high-risk, high-return loans. Weaker banks may follow a similar strategy in the years before a crisis. For example, the smaller banks in Mexico (many of which were probably riskier) were, by 1992, paying significantly more than the larger banks to raise funds, and deposits with these banks grew appreciably faster than those held with the larger banks in 1993 and 1994. A similar pattern can be detected in the Venezuelan banking system in the years before the 1994 crisis. By paying high rates, a bank in difficulties can hope to escape insolvency. The gamble may be attractive because it may not increase the bank's own losses even if it fails. Instead, the extra costs of the risks assumed may fall on the state. Delay can therefore mean that the ultimate losses will be far greater than they need have been.

Clear assignment of responsibility

Quick action depends on a clear definition of which institution has prime responsibility for taking corrective measures. A fragmented supervisory structure can sometimes hinder this: emergency measures in Venezuela, for example, became properly coordinated only after the creation of the Financial Emergency Board in July 1994. Effective action also depends on powers that can be exercised promptly. An important aspect of Argentina's recent reforms was increased

powers for the central bank to revoke the licences of failing institutions and to transfer assets acquired from financial institutions with liquidity problems. During the last two years, some 76 banks have been closed or merged. In several countries (Malaysia and, more recently, Argentina and Brazil) the ability of the authorities to offer financial support or other inducements to encourage the merger of problem banks with healthier institutions has been enhanced. Last year, there was a sharp rise in bank mergers in Latin America; loans from the World Bank and the Inter-American Development Bank are helping to finance banking sector restructuring in several countries.

Deposit insurance

Quick action may also be facilitated by an explicit deposit insurance scheme that compensates at least small depositors for losses. In the past, many countries in Asia and Latin America have had only implicit guarantees (the government being expected to honour deposits) rather than explicit schemes. One advantage of an explicit scheme is that it can be designed so that the potential costs can be met by levies on bank deposits, perhaps graduated according to the riskiness of the bank, and not by government. Explicit schemes may also make it easier to close a bank by obviating the need for expensive litigation with small depositors. An explicit guarantee may also limit the coverage of the protection (e.g. to deposits up to a certain size). In April 1995, Argentina introduced an explicit scheme funded by the banks and limited to certain deposits up to a specific ceiling. In other cases, the authorities have taken the view that these objectives can be better served by giving small depositors prior claims in the event of liquidation (e.g. Hong Kong).

Need to maintain confidence in policies both macroeconomic ...

A second prerequisite is restoring or maintaining confidence both in the value of the domestic currency and in the official commitment to market-oriented financial policies. In the 1980s and earlier, many governments faced with insolvent banking systems adopted the expedient of relaxing monetary policy so much as to generate high inflation, negative real interest rates and devaluation. By eroding the real value of banks' bad loans, this tactic can appear to pay short-run dividends. But such policies typically provoke capital flight, shrinking the domestic deposit base of sound as well as unsound banks. Moreover, the memory of expropriation through inflation endures long after lax macroeconomic policies have been reversed. Indeed, memories of the past help to account for the heavy loss of deposits from Argentina's banking system in the wake of the Mexican crisis. In marked contrast to earlier episodes, when the loss of deposits was prolonged, Argentinian bank deposits have recovered sharply since the middle of last year, thanks largely to the restructuring process which is currently under way in a context of continuing low inflation and the strong commitment to currency stability.

... and microeconomic

The commitment to financial reform has also been maintained, as the most recent banking crises have been addressed in ways which do not reverse the liberal orientation of financial market policies. Policy-makers have attempted to avoid the mistakes of the 1980s, when many governments in Latin America mismanaged banking crises by reversing earlier financial market liberalisation. At that time, credit was allocated to "priority" sectors (including government) and interest rate controls were reimposed on banks. The reimposition of controls inevitably weakened confidence in the banking system, undermined the incentives

for bank managers to run efficient institutions and led to a contraction of bank deposits as funds moved offshore. With the exception of Venezuela, however, no major Latin American country reverted to controls on interest rates in the 1990s. And the important adjustment reforms announced by Venezuela in April 1996 included the freeing of bank interest rates, which had been capped in the aftermath of the 1994 banking crisis and which were negative in real terms by a wide margin.

A final necessary element for success is improved prudential oversight. A crisis suggests that prudential regulations need to be tightened and market-based monitoring mechanisms reinforced. There is little point in recapitalising banks if the underlying factors that led to the problems are not addressed.

Adverse consequences

A banking crisis ...

Even if handled well, a banking crisis is likely to damage economic performance. The recapitalisation of troubled banks can add to fiscal deficits, sometimes substantially. Another legacy is a sharp tightening of credit conditions that may go beyond what is warranted. Credit rationing is particularly likely to hit small or new enterprises.

... may involve large-scale fiscal commitments ...

The size of the eventual public cost will depend on the future macroeconomic environment: the longer instability persists, for example, the larger the ultimate cost will be. Sometimes official support has been given in exchange for financial paper surrendered or pledged by the bank – either its holdings of government bonds (Brazil) or its own stock (Mexico) – while the portfolio of loans remains under the commercial bank's administration. The cost of such support depends on the market value of the financial assets surrendered (normally banks get more than they could on the open market) and on whether official loans can eventually be repaid. Official support has also been given in exchange for the title to bad loans, sometimes with a repurchase obligation attached. For instance, Chile obliged the banks hit by the 1980s crisis to buy back their bad loans from the central bank according to a ten-year timetable; the banks' freedom to conduct business remained circumscribed while these debts were still outstanding. Thailand provided official support in exchange for an option for the central bank to buy the bank's shares at a later date. Hence the final cost of recapitalisation will depend on: the nature of the specific arrangements put in place; the eventual market value of the collateral acquired on liquidation; or the ultimate productivity of non-performing loans if debtor enterprises remain in operation.

Moreover, the fiscal cost of recapitalisation will often have to be met more quickly in countries with relatively underdeveloped financial markets. In industrial countries, the cost of recapitalisation can be spread over time, through the issuance of long-term government bonds: losses are realised only as interest and principal repayments are made. Few developing countries have domestic bond markets strong enough to finance this sort of operation.

... and may leave credit conditions extremely tight

A banking crisis can leave a rather durable legacy of greatly tightened credit conditions, often taking the form of a marked widening in bank interest rate spreads. The costs of such an adjustment process ultimately fall on bank customers, and may distort economic decisions. Depositors may receive lower

interest rates, and this may drive some funds offshore. Higher rates on bank loans will discourage investment and may bankrupt borrowers who would in normal conditions remain solvent. Excessively high interest rates run the risk of adverse selection, as the least creditworthy increase their share of borrowing. They may also encourage larger, more creditworthy enterprises either to borrow abroad or to take out foreign currency loans, thus increasing corporate vulnerability to exchange rate changes.

In practice, many will be unable to service their bank debts at new, much higher, levels of interest rates. This will often prompt official action to help selected customers. Mexico introduced a range of major measures in 1995 to help bank borrowers to cope with the massive rise in interest rates that followed the peso crisis. As existing loan terms (based on floating nominal interest rates) would have implied a much more rapid *real* repayment of loans, the authorities helped banks to restructure a significant portion of loans into fixed rate indexed loans. Other measures included, for small debtors, sizable interest rate relief and, for large enterprises, the replacement of their liabilities at Mexican banks with long-term bonds issued by the Government. New loans have fallen sharply.

The future will include ...

The damage done by banking crises naturally prompts reflection about the medium-term role of the industry. Chapter V looks at the increasingly competitive environment that is pushing banks in the industrial world to restructure and consolidate. Banks in the emerging markets also have to adjust to a more competitive world. In attempting to defuse recent banking crises, policy-makers in Asia and Latin America have sought to avoid both inflationary policies and measures that undermine market mechanisms. This has created a healthier climate for financial institutions to respond to the competitive challenges of modern financial markets. For many banks, rising to this challenge will require nothing less than a transformation in their business practices. A process of consolidation is well under way in many countries.

... more competition ...

... consolidation ...

The internationalisation of the industry can help this, not only because the spur of foreign competition can stimulate domestic productivity (especially in oligopolistic domestic markets), but also because the chance to acquire foreign assets can provide local banks with greater possibilities to diversify risk. A concentration of bank assets on small or volatile economies is inherently risky, and increased opportunities to invest abroad can help to reduce such risks. Chile's new banking law allowing well-capitalised domestic banks to invest in branches and subsidiaries abroad seems likely to be followed by other countries in the developing world. A number of countries harbour ambitions to establish themselves as at least regional financial centres. These trends will constitute a major challenge for local supervisors and for effective international cooperation on prudential oversight.

... and internationalisation

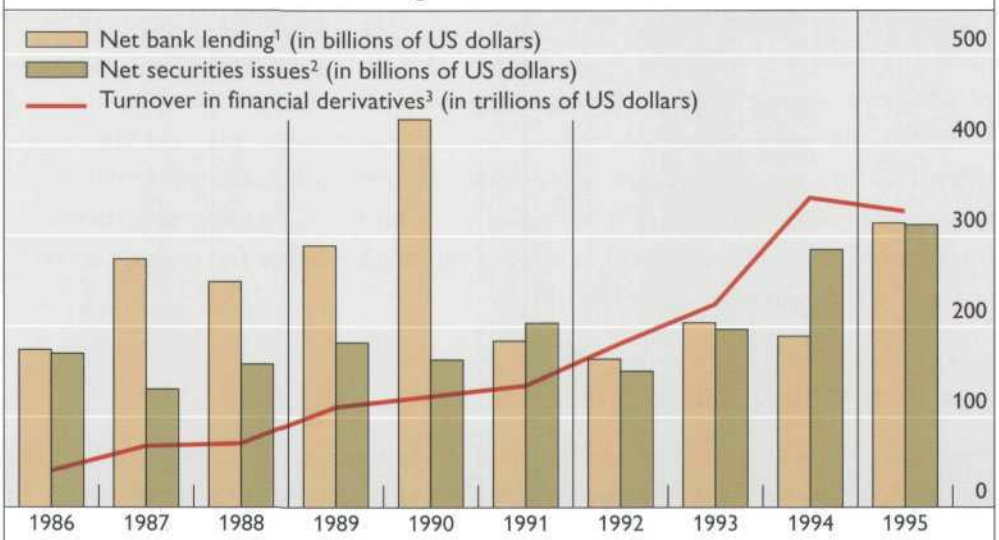
VIII. International financial markets

Highlights

An unprecedented volume of international debt securities was issued in 1995 and there was a brisk recovery in the extension of international bank credit. The deepening of the Mexican crisis in the early part of the year, currency turbulence, the persistence of interest rate volatility in some key debt markets and the emergence in the summer of a risk premium on Japanese banks' international borrowing failed to offset the broadly positive impact of declining benchmark interest rates on overall market activity. New securities financing was supported by the international diversification of funding sources by financial intermediaries. At the same time, international investors returned to higher-yielding instruments, to the benefit of a wider range of borrowers and financing structures. However, awareness of market and credit risks remained acute. There was also a strong rise in secondary market trading of securities, reflecting active cross-border purchases of domestic government paper, based in some instances on leveraged transactions (see Chapter V). This, combined with the buoyancy of activity in Asia, boosted cross-border bank lending.

Activity in derivatives markets provided mixed signals, with reduced demand for major exchange-traded instruments but a further surge in over-the-counter

Total international financing



[1] Changes in amounts outstanding, excluding exchange rate valuation effects and interbank redepositing. [2] Net issues (excluding exchange rate valuation effects) of international bonds and euronotes. [3] Notional amounts of financial derivatives traded on organised exchanges.

Sources: Bank of England, Euroclear, Futures Industry Association, International Securities Market Association (ISMA), national data and BIS. Graph VIII.1

Estimated net financing in international markets[1]

Components of net international financing	1990	1991	1992	1993	1994	1995	Stocks at end-1995
	in billions of US dollars						
Total cross-border bank claims[2]	614.7	– 48.0	185.5	318.3	276.9	657.4	7,925.8
Local claims in foreign currency	130.2	– 61.4	–39.8	–0.9	–4.0	–5.7	1,297.9
minus: Interbank redepositing	*314.8*	*–294.4*	*–19.4*	*112.4*	*82.9*	*336.7*	*4,578.6*
A = Net international bank lending[3]	430.0	185.0	165.0	205.0	190.0	315.0	4,645.0
B = Net euronote placements	33.0	34.9	40.4	72.1	140.2	192.4	593.8
Total completed international bond issues[4]	239.8	319.7	334.7	432.4	373.6	359.9	
minus: Redemptions and repurchases[4]	*108.8*	*150.0*	*223.7*	*307.0*	*228.1*	*239.2*	
C = Net international bond financing[4]	131.1	169.8	111.1	125.4	145.5	120.8	2,209.6
D = A + B + C = Total international financing	594.1	389.7	316.5	402.6	475.7	628.2	7,448.3
minus: Double-counting[5]	*79.1*	*34.7*	*71.5*	*122.6*	*65.7*	*118.2*	*1,008.3*
E = Total net international financing	515.0	355.0	245.0	280.0	410.0	510.0	6,440.0

[1] For banking data and euronote placements, changes in amounts outstanding, excluding exchange rate valuation effects; for bond financing, flow data. [2] Claims reported by banks in the Group of Ten countries plus Luxembourg, Austria, Denmark, Finland, Ireland, Norway, Spain, the Bahamas, Bahrain, the Cayman Islands, Hong Kong, the Netherlands Antilles and Singapore, and the branches of US banks in Panama. [3] Excluding, on an estimated basis, redepositing between reporting banks. [4] Excluding bonds issued under euro-medium-term note (EMTN) programmes, which are included in net euronote placements. [5] International bonds purchased or issued by the reporting banks, to the extent that they are included in the banking statistics as claims on non-residents.

Sources: Bank of England, Euroclear, ISMA and BIS. Table VIII.1

(OTC) transactions. Indeed, according to the central bank survey of derivatives market activity, conducted in the spring of 1995, OTC derivatives activity dwarfs exchange-traded business, reflecting in large measure the flexibility and wholesale orientation of OTC products. It is now widely recognised that derivatives are making an important contribution to overall economic efficiency, which may partly explain why calls for restrictive action abated last year. Asset and liability management is increasingly conducted in a globally integrated manner, drawing heavily on derivatives-related techniques to modify continuously the risk profile of positions. However, by strengthening the links between instruments and functions, this growing sophistication of risk management poses new challenges. With financial stability increasingly dependent upon adequate internal control systems and disclosure, there is a greater onus on firms' management to ensure the soundness of market practices and on the official sector to maintain a stable financial environment.

The international banking market

Strong rebound in banking business ...

International banking activity rebounded strongly last year, in both gross and net terms. Four major factors influenced the volume, composition and pricing of loans. First, the "Japan premium", which emerged in the summer and reflected the reduction in credit lines to Japanese banks, led to a retrenchment by Japanese institutions in foreign centres and a sizable outflow of funds through the Japanese banking system. Secondly, there was a renewed expansion of bank credit related to securities trading, with some return to leveraged transactions, albeit on a

... due to record lending to Asia ...

smaller scale than in early 1994. Thirdly, despite the temporary withdrawal recorded in the wake of the Mexican crisis, the rapid pace of lending to Asia and some increase in business with Latin America meant that the total volume of banking funds channelled to the developing world reached an all-time record. Finally, there was continuing evidence of ample liquidity, as illustrated by the slim margins and the weakening of contractual safeguards in announced syndicated loans. These developments added to concerns relating to the sustainability of the rallies seen in securities markets, the instability of large short-term bank flows and the spreading of the market tiering faced by Japanese banks to a broader spectrum of participants.

Developments by currency, market centre and nationality of reporting banks

... hedging and speculative demand for funds ...

There was a marked recovery of interbank transactions within Europe and between Europe and Japan last year. Whereas in early 1994 the unwinding of leveraged positions taken in European currency and securities markets had led to massive repayments of bank credit, hedging and speculative demand in 1995 boosted transactions in European currencies subject to bouts of weakness against the Deutsche Mark (such as the French franc and the Italian lira). At the same

Main features of international banking activity[1]

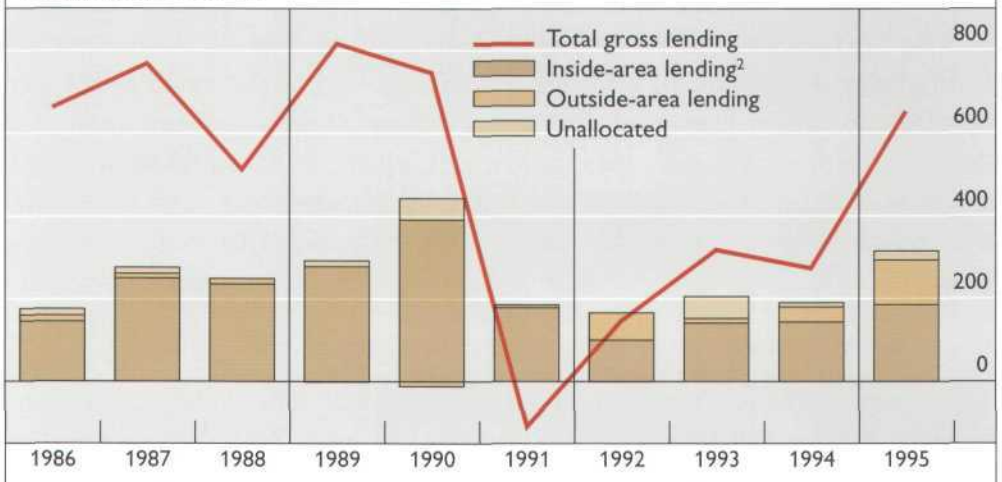
Uses and sources of international bank credit	1990	1991	1992	1993	1994	1995	Stocks at end-1995
	in billions of US dollars						
A = Claims on outside-area countries	−12.1	6.8	66.0	11.6	36.6	108.0	994.3
B = Claims on inside-area countries	705.0	−116.6	80.4	253.2	226.2	521.8	7,987.4
(1) Claims on non-banks	*289.0*	*100.8*	*89.7*	*127.2*	*−48.6*	*201.1*	*2,326.3*
(2) International financing of banks' domestic lending	*101.2*	*77.0*	*10.0*	*13.6*	*191.8*	*−16.0*	*1,082.4*
(3) Interbank redepositing	*314.8*	*−294.4*	*−19.4*	*112.4*	*82.9*	*336.7*	*4,578.6*
C = Unallocated	52.0	0.4	− 0.8	52.7	10.2	21.9	242.0
D = A + B + C = Gross international bank lending	744.8	−109.4	145.6	317.4	272.9	651.7	9,223.6
E = D − B*(3)* = Net international bank lending	430.0	185.0	165.0	205.0	190.0	315.0	4,645.0
A = Liabilities to outside-area countries	92.2	− 11.7	13.2	−14.8	74.6	92.3	895.8
B = Liabilities to inside-area countries	633.1	−208.8	91.2	114.1	539.1	320.6	7,546.5
(1) Liabilities to non-banks	*175.3*	*15.2*	*104.4*	*87.7*	*132.6*	*138.5*	*1,716.4*
(2) Domestic funding of banks' international lending	*101.7*	*117.7*	*40.7*	*88.3*	*−64.2*	*−11.9*	*1,337.6*
(3) Interbank redepositing	*356.2*	*−341.7*	*−53.9*	*−62.0*	*470.7*	*194.0*	*4,492.6*
C = Unallocated	60.9	63.9	6.7	43.8	47.0	96.1	695.3
D = A + B + C = Gross international bank borrowing	786.2	−156.7	111.1	143.0	660.7	509.0	9,137.6
Memorandum item: Syndicated credits[2]	*159.2*	*136.7*	*221.4*	*220.9*	*252.0*	*320.2*	

[1] Changes in amounts outstanding, excluding exchange rate valuation effects. [2] Announced new facilities, excluding non-spontaneous medium-term credit and renegotiated loans where only spreads are changed.

Sources: Bank of England and BIS. Table VIII.2

Total international bank lending[1]

In billions of US dollars



[1] Changes in amounts outstanding of banks' cross-border claims and local claims in foreign currency, excluding exchange rate valuation effects. [2] Net of interbank redepositing.

Source: BIS. Graph VIII.2

... and Japanese banks' funding of own affiliates

time, the risk premium on the international liabilities of Japanese banks led to sizable transfers of yen and dollar-denominated funds from the domestic to the foreign offices of Japanese banks. This was accompanied by a retrenchment of Japanese banks' affiliates located in major centres, masking more active international lending by European banking groups. There was also some evidence in the second part of the year of strong demand for yen funds by eurobanks' customers, which may have been used to acquire dollar-denominated paper on an unhedged basis. Overall, the yen accounted for 30% of total lending identified by currency, followed by the dollar (23%), the French franc (10%) and the Italian lira (8%). In contrast, cross-border lending activity in Deutsche Mark contracted owing to reduced circular flows of funds between the euro- and domestic markets. Uncertainty surrounding the future single European currency contributed to a further contraction of the ECU banking market (–$20.6 billion).

Evidence of renewed speculative demand in currency and securities markets

In 1994 the reversal of earlier leveraged positions, which had been based on expectations of a generalised downward movement in interest rates and stability in European exchange rates, had been reflected in some repayment of cross-border credit extended to non-bank entities located inside the reporting area. The renewed build-up of bank claims on the latter group last year (+10%) suggests a return to such trading strategies, the more so as the increase was partly offset by further repayment of foreign currency debt by the corporate sector, especially in Italy and Japan. The distinction between purely interbank transactions and those conducted by non-bank financial institutions in wholesale markets has faded in recent years. In this connection, it is important to bear in mind that differing accounting rules with respect to repurchase agreements, together with the variety of legal forms that these can take (the associated transactions being treated either as collateralised loans, with no transfer of ownership of the securities involved, or as securities purchases, and therefore as claims on the issuers), can create significant distortions in actual claims.

While the subdued pace of ECU and Deutsche Mark lending held down growth in Luxembourg, currency and securities-related trading and the side-effects of the "Japan premium" tended to boost cross-border lending business in Japan, the United Kingdom and France. In France, the negative impact of the retreat of Japanese banks' affiliates was more than compensated for by exports of French francs by domestic banks in response to foreign hedging and speculative demand for the currency. The key role played by London in the euromarket helped the United Kingdom maintain its predominance in international banking, with the retrenchment by Japanese banks offset by the increased presence of other groups, German banks in particular. Activity in Hong Kong and Singapore was indirectly hampered by the problems facing the Japanese banking system as well as by growing competition from new offshore facilities within the region.

London retained its predominance

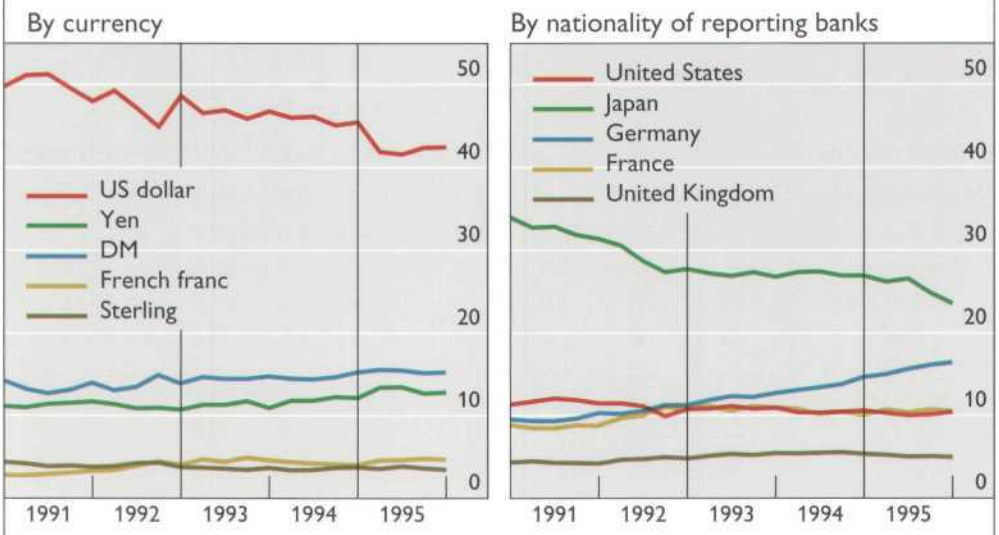
Business with countries outside the reporting area

A record volume of lending to Asia was the main factor accounting for reporting banks' buoyant lending to outside-area countries last year. At the same time, strong credit demand in smaller industrial countries, eastern Europe and, after a temporary contraction in the first quarter, Latin America was met selectively. The unprecedented volume of lending to Asia ($84.3 billion) suggests that the impact of the Mexican crisis on the region was at most marginal. Apart from its sheer size, four features characterised bank credit to Asia in 1995. First, two-thirds of the total was in the form of short-term interbank lines, partly to exploit interest rate differentials between the domestic and international markets, but also to finance the development of local or regional financial centres. This, together with sizable trade-related loans, meant that by mid-1995 64% of the outstanding claims on the region were of less than one year. Secondly, Thailand and Korea took up $36.3 and 22.3 billion of new funds respectively. By year-end,

Massive short-term lending to Asian countries ...

Currency and nationality structure of international bank lending*

Percentage shares, at end of quarter



* Cross-border claims and local claims in foreign currency of banks located in industrial reporting countries.

Source: BIS. Graph VIII.3

Thailand had become the largest bank debtor in the developing world, ahead of Korea, Mexico and Brazil (Table VIII.3). Specific influences, such as a shift in financing in favour of the local offshore facilities set up in 1993 and competition between foreign banks to obtain local banking licences, boosted credit lines to the country. Nonetheless, the size of the inflows into Thailand and the high proportion of short-term loans (71% of reporting banks' outstanding claims on the country at mid-1995) led the authorities to introduce restrictive measures. Thirdly, the major part of the funds lent to Asia originated from Japan. Finally, the narrow base of equity and fixed income markets in the region, together with remaining restrictions on residents' access to international securities markets, meant that capital inflows were primarily channelled through banks. Thus, net international securities issues by entities in Asian developing countries, at $13 billion, continued to amount to only a modest fraction of their international bank borrowing, with the favourable conditions available in the banking market contributing to the strong bias towards the latter.

... particularly to Thailand ...

... but limited securities issuance in the region ...

In contrast, Latin American borrowers continued to rely more heavily on international securities ($17.9 billion) than on international bank loans ($6.9 billion). Renewed access to the eurobond market after the first quarter was concentrated on sovereign issuers and was not accompanied by any large-scale return of banking funds. Indeed, reflecting in part the tendency towards a sharper differentiation between countries in credit risk assessments, outstanding claims on Mexico continued to decline after the first quarter, leading to a $6.5 billion fall for the year as a whole, while the bulk of new bank financing was directed to Brazil and, to a lesser extent, Argentina ($2.3 billion), Chile ($1.9 billion) and Colombia ($1.8 billion). On the deposit side, by far the most significant factor behind the $34.7 billion rise in the holdings of Latin American

... in contrast to Latin America ...

... where bank financing appeared to be more selective ...

Banks' business with countries outside the reporting area*

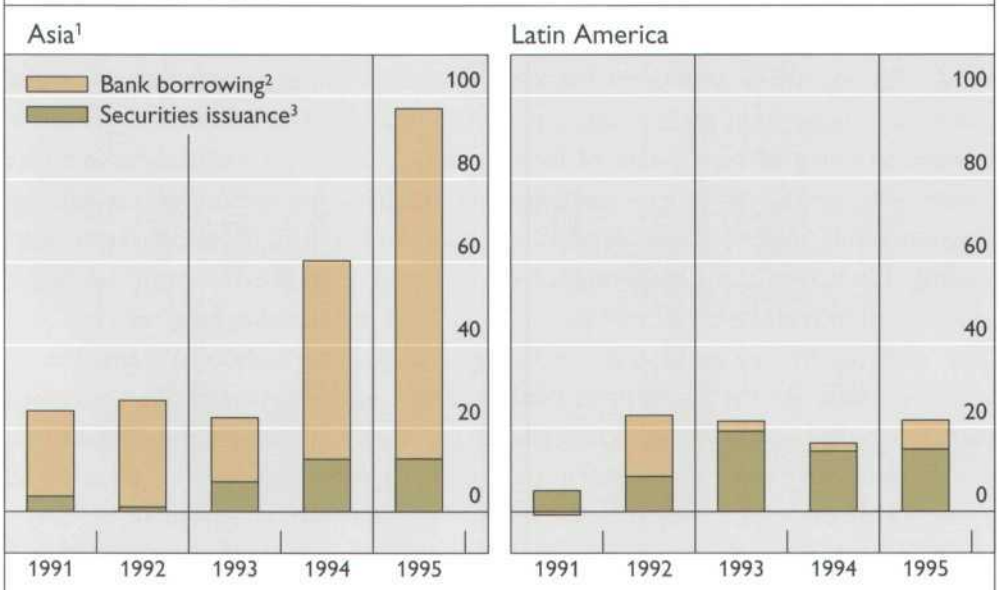
Positions of banks vis-à-vis	Assets			Liabilities			Stocks at end-1995	
	1993	1994	1995	1993	1994	1995	Assets	Liabilities
	in billions of US dollars							
Total outside area	11.6	36.6	108.0	−14.8	74.6	92.3	994.3	895.8
Developed countries	5.0	− 1.3	23.6	10.5	22.4	22.8	189.0	176.9
Eastern Europe	−3.8	−13.0	2.9	2.6	2.0	9.1	87.4	47.2
Developing countries	10.4	50.9	81.5	−28.0	50.1	60.4	717.9	671.7
Latin America	2.4	2.0	6.9	− 3.8	21.0	34.7	237.4	193.6
Brazil	*4.6*	*− 6.8*	*6.8*	*− 0.9*	*9.9*	*22.0*	*68.5*	*58.1*
Mexico	*2.3*	*6.6*	*−6.5*	*− 0.6*	*0.1*	*4.2*	*70.9*	*30.3*
Middle East	−5.4	3.1	−6.7	−20.3	2.9	8.5	74.6	204.1
Africa	−2.0	− 2.0	−3.1	0.4	3.3	−1.0	37.8	41.5
Asia	15.5	47.8	84.3	− 4.1	22.9	18.2	368.1	232.4
Korea	*2.4*	*15.1*	*22.3*	*− 0.4*	*4.9*	*3.3*	*83.3*	*23.9*
Thailand	*7.1*	*19.4*	*36.3*	*− 0.2*	*2.0*	*4.2*	*89.5*	*11.3*

* Changes in amounts outstanding, excluding exchange rate valuation effects.

Source: BIS. Table VIII.3

International bank and securities financing in Asia and Latin America

In billions of US dollars



[1] Excluding Hong Kong, Japan and Singapore. [2] Exchange-rate-adjusted changes in BIS reporting banks' claims vis-à-vis Asian and Latin American countries. [3] Net issues of euronotes and international bonds.

Sources: Bank of England, Euroclear, ISMA, national data and BIS. Graph VIII.4

... and was accompanied by some capital outflows

residents was the depositing of Brazilian official reserves with commercial banks following the removal of legal uncertainties surrounding the country's external debt. However, the $6.6 billion rise in banks' liabilities to Latin American non-bank entities suggests some outflow of capital from the region.

International syndicated loans

A high volume of loanable funds ...

The syndicated credit sector was once again very buoyant last year, with a record volume of $320.2 billion of new facilities arranged, up from $252 billion in 1994. While a greater proportion of facilities was used for refinancing at lower cost, activity was boosted by sovereign borrowing, a large number of bridging loans and backup facilities, a series of project-related deals and, above all, sizable financing packages for merger and acquisition (M&A) purposes. Flexibility, speed of execution, confidentiality and the ability to accommodate large and complex arrangements made syndicated credits particularly well-suited for project-related and M&A financing. However, even allowing for the higher level of refinancing, the large nominal amount of new facilities (mainly to US and UK corporate borrowers) provides little indication of actual net flows, since the facilities include a wide variety of arrangements in support of international securities issues. More significant was the evolution of conditions prevailing in the market. The ample liquidity position of banks in North America and Europe and competition from new market participants proved beneficial to borrowers. Highly rated sovereign and corporate entities obtained credits at record low margins over reference rates, and there was a willingness among lenders to extend maturities and further relax contractual lending safeguards such as those pertaining to adverse material

... proved beneficial to borrowers

change and negative pledge. The potential market-wide risks implied by narrow lending spreads and weakened covenants led to official warnings about a reversion to the excessively loose credit standards of the late 1980s.

Loan trading and other features ...

Developments in the course of the year provided further evidence of the blurring of the distinction between the characteristics of bank loans, on the one hand, and securities and derivatives on the other. The greater use of active portfolio management techniques, progress in document standardisation and the continuing entry of new types of intermediary into lead management (such as investment banks) or general participation (such as life assurance companies, pension funds and specially established loan funds) further encouraged loan trading. Moreover, the broadening of the investor base led the principal rating agencies to introduce credit ratings for such loans. By allowing investors to value their portfolios more accurately, the ratings should bring additional transparency to the market. At the same time, bank and non-bank intermediaries continued to develop derivative-type structures enabling them to unbundle the various risk components of loans, with several arrangements providing for the transfer to investors of the credit risk of non-prime loans (without an exchange of claims taking place). The development of such instruments will increasingly enable market participants to bypass structural impediments to more efficient trading and bring the loan market more into line with arbitrage and trading practices already closely linking securities and derivatives markets.

... are blurring the distinction with other markets

The international securities markets

Buoyant new issuing activity ...

Total net financing through euronotes and international bonds reached an all-time record of $313.2 billion in 1995. This represented a 13% increase in the total stock outstanding, comparable to the expansion seen in 1994 and significantly higher than the 8% increase in the domestic debt securities markets of OECD countries last year. The subdued pace of borrowing by government entities was more than offset by the strong demand for funds from financial institutions and a tentative recovery in borrowing by non-financial companies. Euronotes became the preferred issuing vehicle, also for traditional eurobonds, while the yen was by far the most popular issuing currency. The low level of interest rates prevailing in major countries (in particular Japan) encouraged investors to return to lower-rated securities or yield-enhancing structures encompassing derivative-type features. However, with the bear market of 1994 and the Mexican crisis fresh in international investors' minds, awareness of market and credit risks remained acute. Bond issues were generally of a smaller size and shorter maturity than before the market reversal of early 1994, and risk premia on securities issued by borrowers from the developing world and certain developed countries with large fiscal or external deficits were higher than before the Mexican crisis. There was also a record volume of issues involving some form of asset backing. This multiplicity of instruments, combined with the extensive use of swaps, heightened investors' attention to the technical features of issues, their legal risks and the relationship between credit and market risks.

... and secondary market trading

In the secondary market, yearly turnover in securities reported by the international clearing houses rose by 21% compared with 1994 (to $32.4 trillion),

with the turbulence in continental European securities markets pushing trading to record levels in the fourth quarter. The increase over the year was again more pronounced in domestic securities (which accounted for two-thirds of total turnover) than in eurocurrency paper. Underlying factors included uncertainty in world capital markets, the further development of collateral management, more open domestic debt markets, new links with national securities settlement systems and, most notably, the growing use of repurchase transactions. The rapid growth of cross-border securities transactions is accentuating linkages between instruments and markets, which helps to explain recent initiatives taken to reduce counterparty, market and systemic risks. In this context, it is worth mentioning that on 1st June 1995 the International Securities Market Association (ISMA) shortened the settlement period for eurosecurities to three business days, which paralleled similar moves by a number of national authorities.

Type and residence of issuers

Strong borrowing by financial institutions ...

An important feature of primary issuance in 1995 was the further increase in the share of borrowing by financial institutions. The need for banks to finance

Main features of international securities issues[1]

Country of residence, currency and type of issuer	1990	1991	1992	1993	1994	1995	Stocks at end-1995
	in billions of US dollars						
Total net issues	164.1	204.7	151.5	197.6	285.7	313.2	2,803.3
International bonds[2]	131.1	169.8	111.1	125.4	145.5	120.8	2,209.6
Euronotes	33.0	34.9	40.4	72.2	140.2	192.4	593.8
Developed countries	130.3	159.1	115.5	129.7	210.0	233.0	2,149.7
Europe[3]	*90.4*	*88.3*	*93.7*	*142.5*	*167.1*	*172.2*	*1,306.4*
Japan	*28.7*	*39.6*	*–3.4*	*–44.7*	*–26.9*	*–26.7*	*238.4*
United States	*2.0*	*13.8*	*16.9*	*11.2*	*41.7*	*64.2*	*313.7*
Canada	*4.9*	*15.9*	*10.7*	*19.1*	*18.2*	*10.8*	*181.3*
Offshore centres	9.9	3.9	–0.1	5.6	37.1	36.9	187.9
Other countries	3.9	16.0	12.8	25.8	28.7	27.3	156.9
International institutions	20.0	25.7	23.2	36.5	9.9	15.8	308.7
US dollar	56.0	54.9	58.9	31.5	73.7	74.9	984.9
Japanese yen	28.9	21.1	9.2	33.8	106.8	108.3	496.8
Deutsche Mark	9.4	12.6	24.6	31.2	27.5	55.9	319.7
Other currencies	69.8	116.0	58.7	101.1	77.6	74.0	1,001.9
Financial institutions[4]	58.5	42.6	44.3	52.6	154.0	186.5	1,038.6
Public sector[5]	52.5	79.4	82.3	131.8	109.5	87.0	986.7
Corporate issuers	53.1	82.6	24.9	13.2	22.2	39.6	778.1
Memorandum items:							
Announced international bonds[2]	*241.7*	*317.7*	*334.1*	*446.5*	*361.6*	*358.7*	
Announced euronote facilities	*71.3*	*95.9*	*113.2*	*109.8*	*194.0*	*271.6*	

[1] International bonds and euronotes. For international bonds, flow data; for euronotes, changes in amounts outstanding excluding exchange rate valuation effects. [2] Excluding bonds issued under euronote facilities. [3] Excluding eastern Europe. [4] Commercial banks and other financial institutions. [5] Governments, state agencies and international institutions.

Sources: Bank of England, Euroclear, ISMA and BIS. Table VIII.4

renewed international credit expansion (in particular to fund the global wave of mergers and acquisitions) and a widespread process of balance-sheet restructuring favouring international liabilities were among the major driving forces. German-owned financial entities were especially active, with banks capitalising on the inherent strength of their credit ratings and specialised credit institutions on varying degrees of state support. Large US government-sponsored lending agencies that have traditionally conducted most of their fund-raising in their domestic markets also embarked on a process of financing diversification, primarily through global callable issues. In contrast, efforts at fiscal consolidation led to a reduction in sovereign borrowing. At the same time, the strong cash flows of non-financial companies in the industrial world and continued repayments of equity-linked debt issued in the late 1980s by Japanese names tended to hold back total net corporate financing, in spite of a recovery in issuance by US and UK non-financial companies.

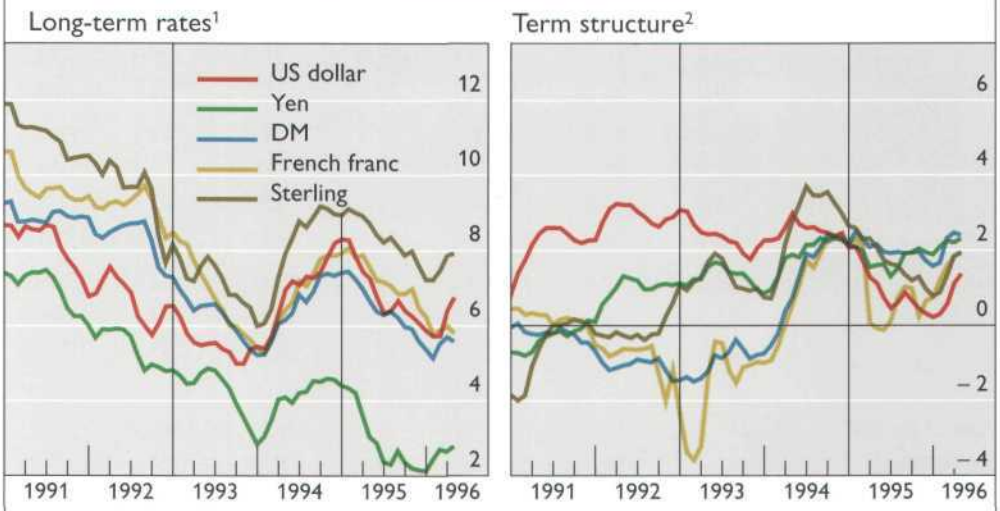
... especially from Germany

The low level of interest rates prevailing in major industrial countries proved beneficial to borrowers in developing and transition countries, with their total gross and net issuance almost matching the volumes of the previous year. Thus, the Mexican financial crisis failed to have a lasting impact on the total volume of funds raised. However, while Latin American borrowing increased slightly (to $17.9 billion), it was concentrated on Argentinian and Brazilian names, whereas financing for Mexican entities nearly dried up. Conditions for borrowers located in the region remained substantially less attractive than before the bond market reversal of early 1994 and, with the exception of Brazilian and Argentinian banks, there was a virtually complete withdrawal of Latin American private sector issuers. Fund-raising activity by Asian developing countries moderated somewhat, but this may have reflected local restrictions on foreign borrowing rather than the Mexican crisis. The general reduction in financing activity by Asian

Differentiated impact of the Mexican crisis

International interest rates

Monthly averages, in percentages and percentage points



[1] Yields in annual terms on five-year interest rate swaps. [2] Five-year rates minus three-month euro-market interest rates.

Source: BIS.

Graph VIII.5

Borrowing in the securities markets by sector and residence of issuers

Sector and country of residence	Domestic[1]				International[2]				Stocks at end-1995	
	1992	1993	1994	1995	1992	1993	1994	1995	Domestic[1]	International[2]
	in billions of US dollars									
Total net issues[3]	1,428.8	1,604.4	1,474.4	1,680.3	151.5	197.6	285.7	313.2	24,110.0	2,803.3
Private sector	423.2	440.1	310.2	639.5	69.1	65.7	176.2	226.1	8,776.7	1,816.6
United States	156.2	226.5	237.4	419.4	14.2	7.5	38.6	56.1	4,028.2	300.8
Japan	55.3	46.6	11.4	80.5	−5.2	−47.8	−28.0	−27.8	1,530.2	217.3
Germany	70.9	72.1	39.8	92.3	6.7	14.1	30.5	36.8	1,023.3	103.9
France	62.7	1.0	−25.3	−21.8	18.7	20.4	15.1	6.8	601.4	183.7
UK	0.6	14.9	27.5	18.4	10.2	16.5	33.0	41.9	186.5	251.7
Italy	41.6	39.7	12.3	27.7	−1.3	− 1.3	− 1.9	0.5	362.8	13.1
Netherlands	3.1	1.1	2.0	2.4	10.1	24.3	30.7	37.5	72.1	225.1
Sweden	11.5	8.7	− 6.7	− 0.9	5.0	9.6	3.2	− 0.4	156.3	25.4
Australia	2.0	−3.5	4.9	1.2	−1.4	1.6	0.5	6.1	46.6	51.6
Canada	−1.6	3.5	2.3	4.3	−1.6	− 0.1	− 1.1	2.5	52.1	44.1
Other	20.9	29.7	4.6	16.0	13.8	21.0	55.5	66.2	717.2	400.0
Public sector	1,005.6	1,164.3	1,164.2	1,040.9	82.3	131.8	109.5	87.0	15,333.4	986.7
International institutions					23.2	36.5	9.9	15.8		308.7
Canada	32.7	23.4	18.7	22.6	12.3	19.2	19.3	8.3	451.2	137.2
Sweden	3.6	12.0	22.1	7.7	4.2	13.9	20.3	11.9	144.9	86.9
Other	969.3	1,129.0	1,123.4	1,010.6	42.6	62.2	60.0	51.0	14,737.3	453.9

[1] Issues by residents and (for notes) non-residents in local currency in the local market; OECD countries only. [2] Issues by residents in foreign markets and in foreign currency in the local market; for euronotes, excluding local currency issues in foreign markets. [3] Changes in amounts outstanding at constant exchange rates, except for data on international bonds, which are on a flow basis.

Sources: Bank of England, Euroclear, ISMA, national authorities and BIS. Table VIII.5

names was offset somewhat by heavy recourse to the market by Korean entities ($8.6 billion out of a total of $13 billion for Asia), following the partial liberalisation of issuance by local banks. Several new sovereign borrowers entered the market (Lithuania and Slovakia) or re-entered it for the first time since the LDC debt crisis of the early 1980s (Brazil).

The currency composition of issues

Issuance concentrated in yen ...

Additional liberalisation measures in Japan (see page 152), combined with strong demand for yen-denominated securities from Japanese investors keen to avoid currency risk, meant that for the third consecutive year the yen was the most widely used currency. The ease with which yen issues could be launched in the institutional and retail markets facilitated the introduction of several large offerings, including a ¥550 billion multi-tranche deal for Italy, which was the largest ever launched on the euromarket. Concerns about the financial implications for the United States of the rescue package arranged for Mexico initially triggered a flight from US dollar assets into traditionally strong European currencies, but issuance in the US currency later recovered and the share of the US dollar in net financing for the year remained stable.

... dollars ...

The Deutsche Mark was again the third most important currency of issue, benefiting from its anchor currency status in Europe, favourable swap opportunities, active fund-raising by German financial institutions and some currency diversification by borrowers from emerging and transition countries. While growing concerns relating to European monetary union towards the end of the year tended to discourage longer-term issues in the German currency, this helped the Swiss franc sector, where net issuance nearly doubled. In contrast, political and economic uncertainty led to sharp declines in new issues denominated in sterling, French francs, Italian lire and Canadian dollars. Overall, net issuance continued to be heavily concentrated in the three main currencies, the yen (35%), the US dollar (24%) and the Deutsche Mark (18%). However, these market shares should be interpreted with caution, owing to the growing use of currency swaps in primary issuance, the weight of home-country investors in individual eurocurrency sectors (particularly significant last year for the yen and the lira) and the impact of liberalisation measures taken in recent years (especially in Japan and Germany).

... and Deutsche Mark

Types of instrument

Announcements of new *euronote facilities* in 1995 amounted to $271.6 billion, bringing the cumulative total of programmes launched since the establishment of the market to almost $1.2 trillion. At the same time, new drawings under existing facilities increased by 37% (to $192.4 billion), and by year-end euronotes represented 21% of all international securities outstanding (compared with 7% at the end of 1990). Activity in the *euro-commercial paper (ECP) market* remained lethargic, which is consistent with the stagnation or contraction in most major domestic commercial paper markets since 1991 (except in the United States, where a rapid recovery has taken place since 1993). This can be explained in part by substitution away from short-term debt and the availability of short-term drawings under euro-medium-term note programmes. A series of defaults at the end of the 1980s and in the early 1990s may also have dampened investors' interest in ECP.

Euronote facilities were the main financing vehicle ...

In contrast, expansion in the *euro-medium-term note (EMTN) market* continued to be more rapid than that of its US counterpart. EMTN borrowing is increasingly conducted through underwriting syndicates (as opposed to the method of "best efforts" dealer placement), meaning that a growing volume of notes is composed of paper which differs very little from traditional eurobonds. Meanwhile, with a significant proportion of small individual drawings and/or private placements, market transparency was further reduced. According to market sources, the cautious behaviour of investors was reflected in a smaller size and shorter average maturity of notes and an aversion to transactions leveraged through derivatives. That being said, investors have become increasingly familiar with securities incorporating derivative-type features, and issues that were considered "exotic" a few years ago have now become standard.

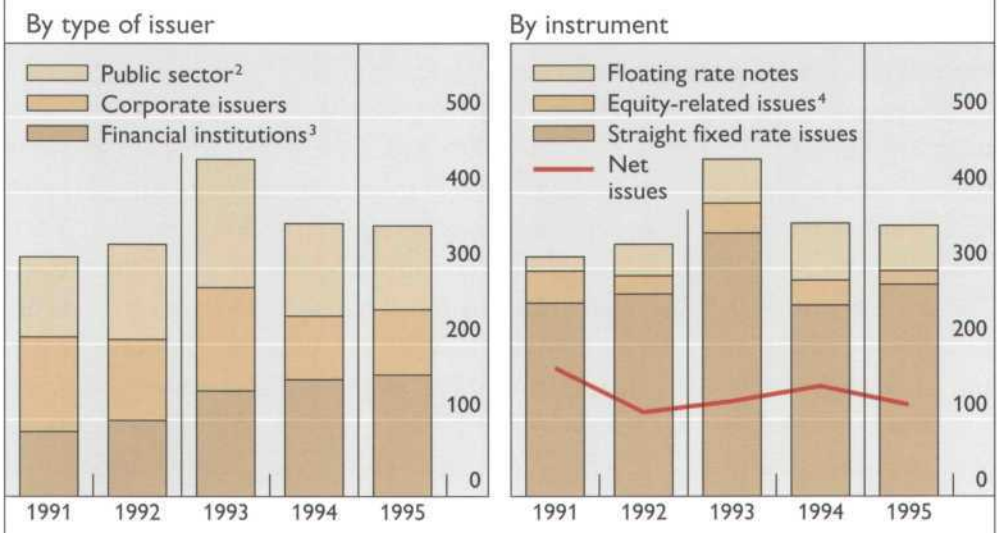
... at the cost of reduced market transparency

In spite of growing competition from syndicated loans and euronotes, total gross announced issuance of *international bonds* ($358.7 billion, excluding a record $69.5 billion of bonds launched under EMTN facilities) was comparable to that of 1994. However, the increase in repayments resulted in a 17% decline in net

Bond market characterised by ...

Main features of the international bond market[1]

Announced issues, in billions of US dollars



[1] Excluding bonds issued under euro-medium-term note programmes. [2] Governments, state agencies and international institutions. [3] Commercial banks and other financial institutions. [4] Convertible bonds and bonds with equity warrants.

Sources: Bank of England, Euroclear, ISMA and BIS. Graph VIII.6

financing (to $120.8 billion). New issuance was underpinned by a sustained volume of asset-backed securities, foreign bonds (especially in the United States and Japan) and global issues, although some market observers questioned the global nature of such offerings owing to their limited distribution outside the United States. The cautious stance of international investors was illustrated by the smaller size and shorter average maturity of fixed rate issues relative to those seen in the bull market of the early 1990s. At the same time, the low returns to underwriting led to initiatives aimed at restoring profitability, such as the occasional abandonment of fixed price re-offering and the use of smaller syndicates, or even in some cases the underwriting of an entire issue by a single firm. There was also a tendency among intermediaries to curtail activity or reallocate resources towards higher-margin niches such as developing country securities and asset swaps. A number of underwriters now treat eurobond business as a "loss leader", enabling them to generate revenues from other related areas such as secondary market trading and foreign exchange and derivative products. The inability to offer such ancillary services is increasingly seen as an impediment to more general participation in the bond market.

... caution of investors ...

... and limited profitability of intermediaries

In the *straight fixed rate bond sector*, the substantial increase in dollar issues last year resulted mainly from the expansion of foreign issues in the US market. US investment demand for dollar-denominated foreign paper was supported by the smaller role played by currency considerations in this market, the limited supply of domestic corporate paper and the better reception given to lower-rated names. Japanese investors' persistent aversion to foreign currency exposure combined with recent liberalisation measures led to an increase in the volume of euroyen and Samurai bond issues, although less favourable bond and swap

Fixed rate issues boosted by investment demand in the United States and in Japan

market conditions (partly related to the "Japan premium") caused some contraction of issuance towards the end of the year. Buoyant foreign investment demand for Deutsche Mark assets and attractive swap opportunities gave a further strong impetus to the issuance of fixed rate Deutsche Mark bonds, especially in the intermediate maturity category.

Frequent bouts of uncertainty concerning the direction of interest rates sustained demand for *floating rate note (FRN) issues*. However, lower borrowing requirements and more attractive conditions in the syndicated loan market meant that there were fewer issues by prime sovereign borrowers than in 1994. Financial institutions thus remained the main driving force behind FRN activity. The low margins available on high-quality issues encouraged investors to diversify into higher-yielding instruments such as subordinated bank debt, callable bonds and asset-backed securities. Finally, the primary market for *equity-related bonds* weakened further, to its lowest volume since 1986. The generally poor performance of equity markets in which issues have been concentrated (particularly in Asia) constrained activity. Although repayments declined further from the peak reached in 1993, the low volume of new issues led to a further contraction in the stock of outstanding paper.

Financial institutions remained the main FRN issuers ...

... while the equity-related market continued to contract

Regulatory issues

Japan introduced the most comprehensive set of liberalisation measures last year, with a package in August designed to promote investment in foreign securities and loans, comprising: the lifting of most remaining restrictions on the sale of euroyen bonds in Japan; greater flexibility in the accounting treatment of institutional investors' foreign bond holdings; and the encouragement of investment in foreign bonds by domestic government entities. Euronote issuance was also liberalised; in April 1995 Japanese issuers of foreign bonds (and foreign issuers of yen bonds) were given authorisation to set up MTN programmes, and in October the seasoning restrictions on sales of euroyen commercial paper were removed. Other measures affecting the eurobond market included the abolition by Italy of remaining constraints on the lead management of eurolira issues by foreign banks. Several developing and transition countries also introduced reforms aimed at developing their domestic securities markets and at liberalising residents' issuance of foreign currency securities. However, the Mexican crisis alerted them to the potential for instability of large and volatile capital flows, leading some (such as Brazil, Chile, Korea and Thailand) to adopt temporary restrictive measures, including taxes on foreign borrowing and domestic investment by non-residents and supplementary reserve requirements. In addition to limiting inflows, some countries facilitated the outflow of capital. For example, Chile abolished the "lock-in" period on the repatriation of capital invested through debt/equity conversions. In certain instances, policy responses included restrictions on the use of "new" financial instruments such as American Depositary Receipts (Chile) and derivatives (Brazil).

New liberalisation measures were taken in Japan ...

... and Italy ...

... while temporary restrictive measures were introduced elsewhere

One important development was the entry into force on 1st January 1996 of the European Union's Investment Services Directive (ISD). The ISD allows locally established securities firms to operate in any EU member state provided that they are regulated in at least one of them. Another key feature of the ISD

is that stock and derivatives exchanges will be able to market their products and services anywhere in the European Union, allowing EU firms to have direct access to any EU exchange and to trade securities without the use of local brokers and intermediaries. However, the full competitive impact of the package could take some time to be felt, not least because most EU countries have yet to incorporate the ISD provisions into their national legislation. Moreover, the general guidelines permit a great deal of flexibility in their local interpretation. The ISD was accompanied by the EU Capital Adequacy Directive, which requires banks and investment houses to allocate sufficient capital to cover market risks.

The European ISD began to be implemented

Global derivatives markets

Decline in exchange-traded business, but upsurge in OTC transactions

A slight decline in turnover in terms of notional amounts on organised exchanges from the record level seen in 1994 (Table VIII.7) and a marked increase in over-the-counter transactions characterised developments in global derivatives markets last year. Confronted with a reduction in business and strong competitive pressures, exchanges undertook initiatives aimed at broadening their customer base by establishing bilateral links and introducing new instruments and services. The central bank survey of derivatives market activity conducted in the spring of 1995 revealed that the OTC market was considerably larger than previously estimated. While most currency-related transactions continue to take place outside organised markets, open positions in OTC interest rate products also exceed those on exchanges by a wide margin. Despite the fact that in some countries a relatively small number of firms accounted for a large share of transactions in certain types of product, the global nature of trading and indications that the identity of the largest dealers varied from one product group to another assuaged concerns about market concentration. Moreover, growing

Markets for selected financial derivative instruments

Instruments	Notional amounts outstanding					
	1990	1991	1992	1993	1994	1995
	in billions of US dollars					
Exchange-traded instruments	2,290.4	3,519.3	4,634.4	7,771.1	8,862.5	9,185.3
Interest rate futures	1,454.5	2,156.7	2,913.0	4,958.7	5,777.6	5,863.4
Interest rate options[1]	599.5	1,072.6	1,385.4	2,362.4	2,623.6	2,741.7
Currency futures	17.0	18.3	26.5	34.7	40.1	37.9
Currency options[1]	56.5	62.9	71.1	75.6	55.6	43.2
Stock market index futures	69.1	76.0	79.8	110.0	127.3	172.2
Stock market index options[1]	93.7	132.8	158.6	229.7	238.3	326.9
Over-the-counter instruments[2]	3,450.3	4,449.4	5,345.7	8,474.6	11,303.2	17,990.0
Interest rate swaps	2,311.5	3,065.1	3,850.8	6,177.3	8,815.6	..
Currency swaps[3]	577.5	807.2	860.4	899.6	914.8	..
Other swap-related derivatives[4]	561.3	577.2	634.5	1,397.6	1,572.8	..

[1] Calls and puts. [2] Data collected by the International Swaps and Derivatives Association (ISDA) only; the two sides of contracts between ISDA members are reported once only. [3] Adjusted for reporting of both currencies; including cross-currency interest rate swaps. [4] Caps, collars, floors and swaptions.

Sources: Futures Industry Association, various futures and options exchanges, ISDA and BIS calculations. Table VIII.6

public recognition of the economic benefits of derivatives markets, a better understanding of such instruments and more prudent use of them meant that calls for regulatory action in the area of derivatives markets abated. Official initiatives continued to be aimed primarily at improving disclosure standards and promoting closer cooperation and greater management responsibility in the control of risks.

Exchange-traded instruments

The slowdown in exchange-traded business ...

The decline in the turnover of exchange-traded financial derivatives was consistent with a moderation of financial market volatility in Europe during the year and the reportedly more cautious attitude of non-financial users. However, the greater reduction in currency contracts, where volatility remained high by historical standards, also suggests some migration of activity to the OTC market and/or declining liquidity. Within the sector for interest rate instruments, the drop in trading was more widespread in long-term than in short-term contracts. Indeed, a few short-term contracts, such as the PIBOR futures, even experienced a notable increase in activity. This can be explained by a number of influences, including short-term interest rate changes in response to tensions in foreign exchange markets, the development of recently introduced instruments and business derived from buoyant cash and OTC transactions. In the long-term market segment, the French government bond futures contract, which had been used heavily in earlier years in connection with foreign position-taking, experienced one of the sharpest falls (33%). In contrast, the Japanese government bond futures contract showed signs of recovery. In addition to lower bond market volatility in Europe, transactions in long-term instruments may have been affected by the growing preference of large market participants for cash-based trading strategies (such as repos). Among equity instruments, there was a further increase in the value of futures and options transactions on stock indices. Activity in these instruments has expanded sharply in recent years, reflecting their growing use in domestic and international portfolio allocation strategies. Moreover, the inclusion in reported data of options on single equities would have resulted in even stronger growth in this market segment.

... was more widespread in long-term than in short-term interest rate products ...

... while equity-related activity continued to expand

Buoyant commodity contracts on the Chicago Board of Trade (CBOT) helped the exchange to maintain its leading position in North America, ahead of the Chicago Mercantile Exchange (CME) and the Chicago Board Options Exchange (CBOE). At the same time, the London International Financial Futures and Options Exchange (LIFFE) retained its predominance in Europe thanks in large measure to its wide range of international interest rate products. Despite the marked expansion of turnover in terms of number of contracts in Brazil (Graph VIII.7), the smaller size of individual contracts there meant that actual activity on the local exchanges remained considerably lower than in the major financial centres. Several exchanges were established last year in the developing world and in countries in transition. However, the lack of sufficiently large and efficient securities markets, as well as of appropriate legislation and regulation, continues to hamper the development of trading in these markets.

Except in Brazil, business in emerging markets was limited

Growing competition led exchanges ...

The stagnation in overall market growth accentuated competitive pressures between exchanges. Limited scope for introducing new interest rate contracts

Financial derivative instruments traded on organised exchanges

Instruments	Turnover in notional amounts						Notional amounts outstanding at end-1995
	1990	1991	1992	1993	1994	1995	
	in trillions of US dollars						
Interest rate futures	92.8	99.6	141.0	175.0	273.3	258.9	5.9
On short-term instruments	67.6	75.2	113.3	137.2	223.2	212.3	5.5
of which: Three-month eurodollar rates[1]	*39.4*	*41.7*	*66.9*	*70.2*	*113.6*	*104.1*	*2.5*
Three-month euroyen rates[2]	*11.3*	*12.9*	*14.0*	*24.1*	*44.4*	*41.7*	*1.4*
Three-month euro-DM rates[3]	*2.1*	*3.2*	*7.5*	*12.4*	*19.1*	*18.0*	*0.7*
Three-month PIBOR	*1.9*	*2.9*	*5.8*	*10.1*	*12.3*	*15.8*	*0.2*
On long-term instruments	25.2	24.3	27.7	37.8	50.1	46.6	0.4
of which: US Treasury bonds[4]	*7.8*	*6.9*	*7.1*	*8.0*	*10.1*	*8.7*	*0.0*
Japanese government bonds[5]	*12.2*	*10.3*	*9.7*	*13.9*	*13.9*	*14.6*	*0.2*
German government bonds[6]	*1.6*	*2.0*	*2.9*	*4.0*	*8.3*	*7.8*	*0.1*
French government bonds[7]	*1.6*	*2.0*	*2.8*	*3.1*	*4.7*	*3.4*	*0.0*
Interest rate options[8]	15.2	17.3	25.5	32.5	47.0	43.0	2.7
Currency futures	2.7	2.7	2.3	2.7	3.3	3.2	0.0
Currency options[8]	1.2	1.5	1.4	1.3	1.4	1.0	0.0
Stock market index futures	5.6	7.8	6.0	7.2	9.4	11.4	0.2
Stock market index options[8]	5.8	6.4	5.7	6.4	8.1	10.1	0.3
Total	123.4	135.2	181.9	225.1	342.5	327.6	9.2
In North America	*65.7*	*70.8*	*102.1*	*113.1*	*176.1*	*162.2*	*4.8*
In Europe	*21.4*	*26.7*	*42.8*	*59.7*	*85.7*	*86.6*	*2.2*
In Asia[9]	*36.2*	*37.7*	*36.9*	*52.0*	*78.3*	*74.5*	*2.0*
Other	*0.0*	*0.0*	*0.1*	*0.3*	*2.4*	*4.2*	*0.1*

[1] Traded on the Chicago Mercantile Exchange – International Monetary Market (CME-IMM), Singapore International Monetary Exchange (SIMEX), London International Financial Futures and Options Exchange (LIFFE), Tokyo International Financial Futures Exchange (TIFFE) and Mid-America Commodity Exchange (MIDAM). [2] Traded on the TIFFE and SIMEX. [3] Traded on the Marché à Terme International de France (MATIF), LIFFE, CME-IMM and SIMEX. [4] Traded on the Chicago Board of Trade (CBOT), MIDAM, LIFFE, New York Futures Exchange (NYFE) and Tokyo Stock Exchange (TSE). [5] Traded on the TSE, LIFFE, CBOT and SIMEX. [6] Traded on the LIFFE and Deutsche Terminbörse (DTB). [7] Traded on the MATIF. [8] Calls and puts. [9] Including Australia and New Zealand.

Sources: Futures Industry Association, various futures and options exchanges and BIS calculations. Table VIII.7

led exchanges to adopt multi-faceted competitive strategies involving the introduction of *new instruments* and *specialised services*, the *rationalisation* of existing activities and the establishment of *new cross-market links*. With regard to instruments, new listings concentrated on sectoral equity indices, cross-currency parities and commodity contracts. There was also a further development of customised instruments (combining some of the flexibility of OTC products with the benefits of the guarantee and price transparency offered by exchanges), with new listings on equity and currency instruments. In addition, diversification encompassed moves into "novel" areas such as emerging market financial assets, credit risk, insurance, real estate and pollution.

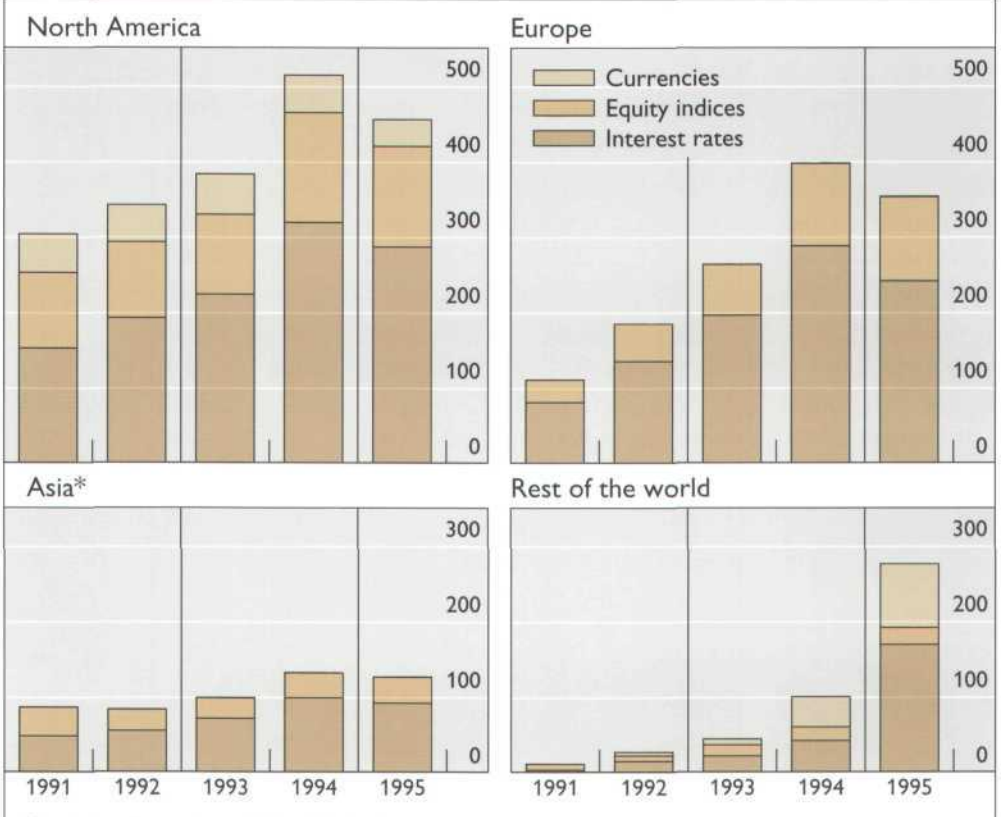
... to diversify ...

A second facet was the greater emphasis placed on the provision of ancillary services for OTC and exchange-traded instruments. For example, while the major US exchanges were putting the finishing touches to their collateral and margining

... provide new services ...

Turnover in financial futures and options traded on organised exchanges

In millions of contracts



* Including Australia and New Zealand.

Sources: Futures Industry Association, national data and BIS. Graph VIII.7

facilities for OTC products, Meff Renta Fija in Spain announced the launch of a clearing facility for "plain vanilla" peseta-denominated interest rate swaps. Some exchanges also introduced measures to provide market participants with increased opportunities for cross-market arbitrage and greater flexibility in the management of their financial risks. These included various spread trading facilities (which permit transactions based on price differences between cash and futures instruments, or between different futures), the introduction of additional delivery months, the acceleration of contract delivery procedures, adjustments to price and position limits and the setting-up of facilities for electronic matching of large orders processed through trading floors. Such measures should help to improve the liquidity of cash and derivative instruments and strengthen the links between the various market segments.

... and greater flexibility ...

With respect to the rationalisation of existing activities, the lower income of both brokers and exchanges encouraged initiatives aimed at reducing operating costs. These included mergers, such as that between LIFFE and the London Commodities Exchange, and the abandonment of products which, because they were not strongly anchored in domestic underlying markets or lacked liquidity, did not offer competitive advantages. This explains, for example, the delisting by

... rationalise ...

LIFFE of the three-month eurodollar contract and the German medium-term bond contract.

... and establish new cross-market links

There was also greater interest in various forms of cross-market links. Bilateral arrangements continued to be the preferred avenue, allowing exchanges to counter the potential loss of business resulting from the introduction of substitute products elsewhere. Although cost pressures sustained interest in electronic trading systems, some of the new links involved exchanges with pit trading, a development which revived the debate concerning the relative merits of the two types of system. For example, the consideration given on some exchanges to a move to electronic systems raised fears that competitors might introduce pit trading for similar contracts. The "locals", who play an important arbitraging role in open outcry systems, have also been concerned that the development of electronic links could endanger their position. Such concerns explain in part the abandonment of the electronic trading link between the Marché à Terme International de France (MATIF) and the Deutsche Terminbörse (DTB). Bilateral arrangements also raise new questions regarding the oversight of remote market access. Finally, it is important to note that, except in periods of exceptional market turbulence, few instruments have so far attracted strong demand outside local business hours. The links announced last year could provide new tests of the existence of such demand.

The debate over open outcry versus electronic trading continued

Over-the-counter instruments

OTC activity showed no sign of tapering off ...

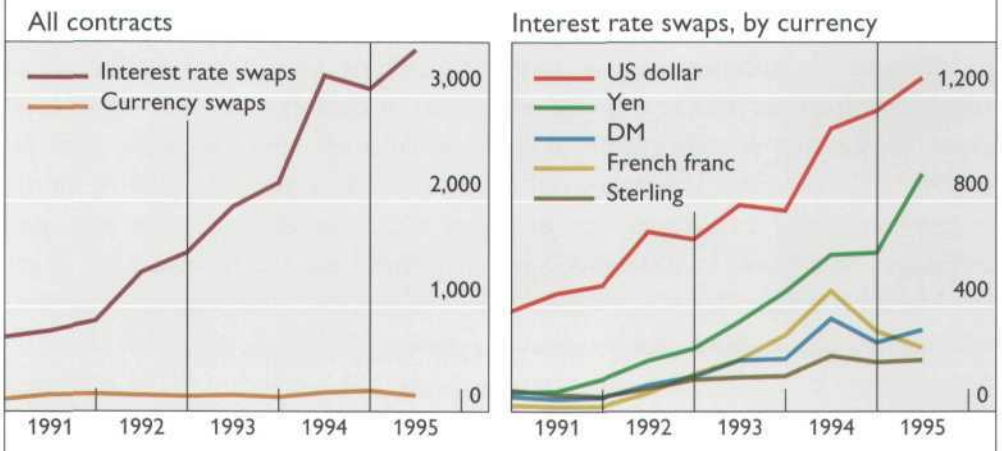
Preliminary information released by the International Swaps and Derivatives Association (ISDA) indicates that the notional principal of swap and swap-related positions outstanding surged by 59% last year, following growth of 33% in 1994. According to more detailed data available only for the first half of the year, much of the upswing took place in the interest rate sector, whereas activity in currency swaps continued to be subdued. The expansion in interest rate swaps was concentrated primarily in the market in yen, where interest rate volatility remained high for much of the year and the injection of liquidity by the Bank of Japan led to a steeper yield curve environment. At the same time, intermediaries continued to introduce warrants on a large variety of underlying assets, notably single equities, equity indices and currencies.

... but there was a shift in trading strategies

Losses faced by end-users in 1994–95 led many corporate customers to review their use of derivative instruments and improve their risk management practices. This in turn encouraged intermediaries to place greater emphasis on their advisory capabilities, a strategy aimed at strengthening their long-term relationships with customers. The market continued to be characterised by a strong innovative drive but there was a shift in the locus of innovation. First, there was some movement away from leveraged directional transactions towards less risky spread-based and capital-protected structures. Secondly, intermediaries offered investors and borrowers hedging alternatives that were less expensive, but at the cost of providing a lower degree of protection. This was particularly evident in the area of currency derivatives, where large swings in the major exchange rates and high volatility pushed up the price of hedging instruments and resulted in a wide variety of "exotic" structures (such as barrier options) being offered. At the same time, there was some erosion of profitability among

New interest rate and currency swaps

Notional amounts, in billions of US dollars



Sources: ISDA and BIS. Graph VIII.8

intermediaries, as the wider availability of the skills and technology required to design and evaluate complex products increased competition and put downward pressure on origination and dealing margins.

The central bank survey of derivatives market activity

A survey of derivatives markets revealed that ...

In the spring of 1995, the central banks and monetary authorities of 26 countries carried out a survey of derivatives market activity, in conjunction with the triennial foreign exchange market survey coordinated by the BIS (the main findings of which are summarised in Chapter VI). The exercise aimed to shed light on the size and structure of the global OTC derivatives market, on which limited information had previously been available. The survey was not, however, designed to assess individual participants' exposure to risks, which would have required a considerably larger amount of detailed information on their overall financial activities. The data collected included turnover during April 1995, as well as notional amounts and market values outstanding on 31st March 1995, and covered the four main categories of market risk: foreign exchange, interest rate, equity and commodity. The survey is estimated to have covered about 90% of intermediaries active in derivatives markets. Information was also collected on participants' exchange-traded derivatives business but, unlike the OTC data, these figures were not adjusted for double-counting, and they are therefore not fully comparable.

... the OTC market was larger than previously thought ...

After adjustment for double-counting resulting from local and cross-border transactions between reporting institutions, the survey found that the notional value of daily turnover in OTC contracts amounted to $839 billion in April 1995, while the value of outstanding contracts stood at $40.6 trillion at the end of March 1995. The latter figure is substantially larger than the partial estimates provided so far by other bodies. ISDA, for example, had put the size of the swap and swap-related interest rate options market at $11.3 trillion at the end of 1994. It is also a multiple of derivatives positions reported by organised exchanges worldwide (Table VIII.7). However, it should be borne in mind that OTC trading

generally results in a cumulative build-up of positions because the closing-out or modification of existing positions results in the writing of new contracts (and therefore the creation of further counterparty relationships), whereas most exchange-traded positions are reversed before contract expiry.

... predominating over exchanges both in interest rate products ...

The survey showed that, while interest rate products were by far the largest component of both OTC and exchange-traded markets, exchanges were far more heavily dependent upon interest rate products (for 96% of the total notional amounts outstanding) than OTC markets (66%). Another notable finding was the small size of equity and commodity-related markets, which may partly reflect the less comprehensive coverage of intermediaries active in such markets. Reporting dealers accounted for 57% of total outstanding interest rate and foreign currency positions. While this reveals that the market remains largely the preserve of financial sector entities, it may also indicate that dealers cannot offset all of their exposures related to customer transactions internally. The global nature of the market was underscored by the high proportion of contracts involving foreign

The over-the-counter derivatives market at end-March 1995[1]

Market risk category and instrument type	Notional amounts outstanding		Gross market values		Gross market values as a percentage of notional amounts outstanding
	in billions of US dollars	percentage share[2]	in billions of US dollars	percentage share[2]	
Foreign exchange	13,095	100	1,048	100	8
Forwards and foreign exchange swaps[3]	8,699	72	622	71	7
Currency swaps[4]	1,957	11	346	22	18
Options[5]	2,379	17	71	7	3
Other products	61	0	10	0	16
Interest rates	26,645	100	647	100	2
Forward rate agreements	4,597	17	18	3	0
Swaps	18,283	69	562	87	3
Options	3,548	13	60	9	2
Other products	216	1	7	1	3
Equity and stock indices	579	100	50	100	9
Forwards and swaps	52	9	7	14	13
Options	527	91	43	86	8
Commodities	318	100	28	100	9
Forwards and swaps	208	66	21	78	10
Options	109	34	6	22	6
Total	40,637		1,773		4

[1] Adjusted for local and cross-border double-counting. [2] To put the shares accounted for by different foreign exchange instruments on a comparable basis, percentages have been calculated on data that exclude figures for currency swaps and options reported by dealers in the United Kingdom. [3] Data are incomplete because they do not include outstanding forward and foreign exchange swap positions of market participants in the United Kingdom. [4] Notional amounts excluding data from reporting dealers in the United Kingdom amounted to $1,307 billion. [5] Notional amounts excluding data from reporting dealers in the United Kingdom amounted to $1,995 billion.

Source: BIS. Table VIII.8

counterparties (55% of the total for interest rate and foreign exchange contracts), a phenomenon which is also becoming increasingly evident in exchange-traded markets with the rapid multiplication of trading links. Finally, the survey confirmed that the US dollar was generally the base currency for OTC currency contracts (on one side of contracts in 82% of cases) but was much less important for interest rate contracts (35%).

The higher notional value of OTC *interest rate contracts* outstanding ($26.6 trillion at end-March 1995) than of exchange-traded contracts ($8.9 trillion at end-1994) can be explained not only by inherent differences in the way risk is traded (as mentioned above) but also by a number of competitive advantages of OTC instruments. Their customised nature means that they can be structured to meet a wide variety of timing and exposure requirements. At the same time, the progressive development of risk reduction techniques (such as collateral arrangements) and the standardisation of market practices (such as those pertaining to documentation) have strengthened the competitive edge already provided by the OTC market's wholesale nature. In particular, the versatility of interest rate swaps has made them an increasingly popular instrument for both financial and non-financial users (with 69% of all interest rate contracts outstanding at end-March 1995). Financial institutions make active use of swaps to hedge and trade exposures, thus providing the market with a high degree of liquidity. Swaps are also well suited to the overall asset and liability management strategies of a broader spectrum of users, encompassing larger individual amounts, longer maturities and a greater number of reference rates than exchange-traded instruments (as illustrated by the wider currency dispersion of interest rate swaps than of short-term interest rate futures). For non-financial users, in particular, swaps generally require less administration than transactions on exchanges. Lastly, the liquidity of the well-established forward rate agreements (FRA) market (which accounts for 17% of interest rate contracts) and the availability of a wide range of hedging strategies through the interbank deposit market have also tended to favour cash and OTC markets over exchange-traded instruments in the area of short-term interest rate products.

... which are of a more wholesale nature ...

In spite of repeated attempts to introduce *currency contracts*, exchanges appear to have failed so far to compete successfully with OTC markets in this segment. This may be explained by the ample availability in the long-established international interbank market of a wide range of short-term cash and derivative hedging instruments covering a broad spread of currency exposures. The higher risk and related capital costs of instruments involving an exchange of principal may account for the small share of currency swaps in the total amount of currency contracts outstanding (15%).

... and in currency products, which are well established

The apparent domination of the OTC market does not, however, preclude complementarity with organised markets. For example, interest rate futures and shorter-term swaps remain to a large extent substitute products, with pricing differences quickly arbitraged away. However, the growth of large derivatives portfolios with offsetting exposures has meant that exchange-traded markets are increasingly used only at the margin to hedge the net overall residual positions of intermediaries. This may, in addition to the factors mentioned in the discussion

of exchange-traded instruments above, partly explain the slower growth of organised markets compared with that of OTC markets last year.

However, market values represented only 4% of notional amounts ...

Notional amounts outstanding are useful for comparing derivatives business with underlying markets. However, a more meaningful measure of the economic significance of OTC contracts is their gross market value. This represents the cost incurred had contracts been replaced at prices prevailing on 31st March 1995, which stood, on that date, at $1.8 trillion, or 4% of the reported notional amount. It should be stressed that this figure greatly overstates actual credit exposures because of the growing use of netting and collateral arrangements. Foreign exchange contracts accounted for 59% of total gross market value, interest rate contracts for 36% and equity and commodity contracts for 3 and 2% respectively. There were, however, wide variations between market risk categories in the ratio of gross market values to notional amounts. This was substantially lower for interest rate contracts (2%) than for other broad market risk categories (between 8 and 9%), reflecting in part the generally lower volatility of the underlying in the first group. There were also major differences at the level of individual products, ranging from a negligible proportion for FRAs (where exposure is of a short-term nature) to as much as 18% for currency swaps (owing to their longer duration and the exchange of principal at maturity). It is important to bear in mind that market values are heavily dependent upon prevailing financial market conditions. The period under review was characterised by a fairly high degree of volatility on the foreign exchange markets and a temporary respite in interest rate fluctuations, which may have exacerbated the differences in the replacement cost of the two sets of products.

... with wide variations between products ...

... and a relatively balanced position of dealers

Another interesting finding of the survey was that the net market value (the difference between gross positive and negative market values) of the dealer sector vis-à-vis customers was negligible, being in favour of the dealer group for an amount equivalent to only 1% of the gross market value of dealer-to-customer contracts. This suggests that customers were well represented on both sides of the market and that dealers played a broadly intermediating role in their trading of price risks with customers, a result which should lessen concerns about potential systemic risks arising from dealers' activities in derivatives markets. However, these aggregate results do not indicate whether the distribution of risks within the dealer community was equally well-balanced, nor do they shed light on the overall risk profile of intermediaries (given that data on cash market positions were not requested). The national results also showed some imbalances between the various risk categories and a degree of concentration of business in certain types of instrument, but the identity of the largest dealers varied significantly from one type of product to another.

Derivatives, regulation and the management of risks

Growing official emphasis on internal risk management ...

Growing public recognition of the benefits offered by derivatives markets and more prudent use of derivative products reduced pressures during 1995 for restrictive regulatory action. Official efforts continued to be aimed primarily at encouraging improvements in *internal risk management*, *transparency* and *the infrastructure of markets*. Efforts to encourage greater responsibility in internal risk

management were exemplified by the official endorsement in December of proposals to amend the Basle Capital Accord of July 1988 to include market risks. Following three years of consultation, the revised accord will allow banks that meet certain standards to use internal "value-at-risk" measurement systems for capital adequacy purposes, supplemented by model validation and stress testing exercises (see page 172).

... external transparency ...

At the same time, new official initiatives were undertaken to promote transparency at both the micro and macro levels. Following separate recommendations made in 1994 by the Institute of International Finance and by the central banks of the Group of Ten countries with respect to the public disclosure of market and credit risks, in November 1995 the Basle Committee on Banking Supervision and the International Organization of Securities Commissions (IOSCO) jointly released the results of a survey which revealed that a number of financial intermediaries had improved their trading and derivatives-related disclosure. The report also contained recommendations for further improvements in this area. Furthermore, in the light of the findings of the central bank survey of derivatives market activity, the G-10 Euro-currency Standing Committee is considering ways of implementing a regular globally consistent reporting system for OTC derivatives. This initiative draws on the "common minimum information framework" issued jointly by the Basle Committee and IOSCO in May 1995 (see page 172).

... and the strengthening of market infrastructure ...

Following the collapse of Barings in February 1995, concrete steps were also taken last year to strengthen the infrastructure of markets. Thus, in the Windsor Declaration of May 1995 the regulators of the world's major exchanges addressed issues related to cooperation between market authorities, the protection of customer funds, default procedures and regulatory coordination in emergencies. This was paralleled by a similar initiative by the Futures Industry Association, and the two were followed by a comprehensive agreement in March 1996 to share information between exchanges about common members whose exposures are deemed to be either actually or potentially excessive, and between supervisory authorities. Other initiatives last year included the partial implementation of a set of proposals made in March 1995 by a joint committee of US official representatives and a group of investment banks (the "Derivatives Policy Group") to provide information on the banks' OTC derivatives business, as well as on their counterparty relationships.

... in an increasingly complex financial system

Such official and private initiatives are illustrative of the awareness that, in a complex and rapidly evolving financial environment, standardised quantitative rules and mechanical monitoring of on and off-balance-sheet data are no longer adequate to protect against actual or potential risks. The growing complexity of market practices requires ever closer cooperation between the various actors and active oversight by managers of their firms' use of modern risk management systems. It also means that efforts by regulatory authorities to improve the interaction between market segments and countries need to be pursued further. Developments so far in the area of market risk provide some indication of the challenge involved.

IX. Conclusion: fostering stability in the midst of change

In spite of generally low inflation, rapidly expanding exports to emerging markets and often buoyant domestic investment, the "feel-good" factor has been conspicuously absent in most industrial countries in 1995 and the early months of 1996. In part, this is because economic activity in the industrial world has been somewhat weaker than expected. The pace of activity in continental Europe has slowed quite sharply, aggravating an already high degree of job insecurity. Similar cyclical concerns were evident for a time in the United States as well, although more recent indicators both there and in Japan are more consistent with continued expansion and recovery respectively.

Perhaps a more important contributor to this continuing anxiety has been the recognition that a number of fundamental forces, some long-standing, are now interacting powerfully in ways that, although sure to create new wealth over time, may threaten job security in the near term. The overhang from the policy excesses of the 1970s and 1980s is still being felt, albeit in diminishing measure. Reverberations from the sharp decline in property prices have not yet been wholly absorbed in some industrial economies and the re-establishment of sustainable fiscal positions is far from complete. At the same time, freer trade and rapid advances in technology have put continuing downward pressure on the relative price of many traded goods, implying a shift of productive resources into other industries in industrial countries. Unfortunately, this is occurring at a time when similar technological advances and increasing competition in many service industries – the financial and telecommunications sectors in particular – seem for the moment to be leading to less job growth, not more. And finally, the general decline in the relative cost of capital has led to a substitution away from labour, particularly in countries with inflexible and heavily protected labour markets.

Confronted with such underlying forces, the tools available to policy-makers in industrial countries might seem inadequate: monetary policy, for example, cannot offset an increase in unemployment due to structural factors without running inflationary risks. Yet policy prescriptions are not entirely lacking, assuming that policy-makers begin by recognising their limitations in an uncertain world, and focus more on avoiding particularly bad outcomes than on seeking impossibly good ones. This clearly means avoiding persistent deviations from price stability, unsustainable fiscal positions and unrealistic exchange rates; all are extremely costly to redress. It also means paying greater attention to the health of the financial system, given the growing and increasingly complex role it plays in a modern market-driven economy. Implicit in these challenges is the need to foster greater international cooperation, not just among industrial countries, but

also with other countries whose economies and financial sectors are expanding very rapidly.

Maintaining price stability

In view of the inflationary experience of industrial countries over the last three decades, it is not surprising that the phrase "price stability" has been generally interpreted to mean a very low level of inflation. By this standard, price stability has been reached, or almost reached, in a large number of countries in the industrial as well as the developing world. Moreover, inflation has in many cases fallen more than might have been expected on the basis of historical relationships, perhaps owing in part to the nexus of trade, technology and enhanced competition referred to above. These disinflationary forces will continue to exert an influence, as will the effects of the excess capacity which still characterises many of the industrial countries other than the United States.

This is not to deny that an inflationary threat still exists. The United States continues to coast on the crest of full capacity. Grain prices have recently risen sharply, as have petrol prices in North America. If the rate of structural unemployment in Europe does not decline, with associated dangers of social unrest, pressures could arise for an inflationary solution. Many developing countries still have high rates of inflation and are pushing against capacity limits. Furthermore, were inflation allowed to drift upwards yet again, inflationary expectations might move up surprisingly quickly.

Yet it remains true that the forces bearing on the price level are now more balanced than they have been for some decades. Thus, it is perhaps the right historical moment to recall the advice of Keynes and Wicksell in the early 1920s. Reacting against the vagaries of the gold standard, which allowed the price level to drift for extended periods in either direction, they concluded that it was appropriate as well as feasible for central banks to resist both inflation and deflation. At a time of rapid social and economic change, with attendant implications for social order and relative prices, it is all the more important that price stability be pursued as an anchor for rational and forward-looking decisions on all fronts.

It is also the case that the two most important macroeconomic problems in the industrial world – which must be tackled promptly – have disinflationary implications. The first is that fiscal deficits are too large virtually everywhere and existing levels of health care and social security provision imply a future level of taxes so onerous as to be implausible. The question is not whether unsustainable policies will eventually be addressed. Rather, what is at issue is the chosen speed of the fiscal adjustment, which must balance the spiralling service costs of delay against the often unwanted short-run effects of timely action on demand. In retrospect, the most common error in many industrial countries has been to opt for further delay, although the dangers of a large number of countries now simultaneously acting to restrain demand cannot be wholly ignored. While the underlying fiscal position in the United States is better than in many other countries, the private saving rate remains very low and steps taken to raise it will also have implications for aggregate demand.

The second problem is the need for further structural reforms in the area of labour and product markets, particularly in continental Europe. This is most evident in the manufacturing sector, where rigid labour practices and high wage and non-wage labour costs are most likely to price workers out of jobs. New job opportunities must also be created in the services sector, although in many countries this is precisely where the thickest layer of regulations impeding competition and expansion is to be found. While important steps have already been taken in some countries, further measures affecting labour markets would give more scope and incentive for individuals and industries to adapt to a changing world. In Europe, increased labour market flexibility will also be needed to compensate for hardening exchange rate relationships within the European Union. As with fiscal consolidation, reforms should be embarked upon as quickly as possible given their double-edged nature and the associated lags before the full benefits are seen.

The adjustment to fiscal restraint, more competitive product markets and lower structural unemployment can be disinflationary, but once in place such changes also catalyse powerful forces which act to stimulate demand. In particular, the pursuit of sustainable medium-term macroeconomic policies should cause interest rates to continue to trend downwards over time. A credible multi-year programme of fiscal consolidation based on expenditure restraint, rather than on tax increases that may be judged politically untenable, is central in this regard. Lower input prices will enhance profits in many areas and lead in time to more output, investment and jobs. It is also likely, as productivity rises and the burden of prospective taxes falls, that confidence will revive and bring with it higher levels of demand. Finally, central banks have the capacity to use monetary policy to adjust demand should it fail to grow at a pace consistent with price stability, and they should be prepared to do so.

Changes in exchange rates can also, in some circumstances, be helpful in redressing macroeconomic imbalances. With Europe and Japan cyclically weak relative to the United States, the tendency of the dollar to strengthen over the past year has usefully served to divert demand growth to where it is most needed. However, the potential limits of this process can also be seen in the stubborn persistence of the US current account deficit and the large trade surplus of the European Union as a whole, in spite of the continuing deficit in Germany.

Within Europe, despite a more stable exchange market environment in 1995, exchange rate issues remain contentious in the light of the events of 1992 and 1993, as well as the decisions that still have to be made prior to economic and monetary union. Different economic circumstances, in particular different fiscal challenges, mean that not all European countries are likely to participate in monetary union from the outset. In that case, continued exchange rate flexibility should be firmly constrained by a formal commitment to domestic price stability. Exchange rate flexibility should not be a palliative for insufficient policy discipline.

Exchange rate considerations have also played a prominent role in the conduct of macroeconomic policy in many developing countries, often, but not always, to good effect. A number of countries have recently used an exchange rate commitment to ratchet down inflation expectations: in Argentina, Brazil and

Russia, the starting-point for this process was hyperinflation. In some cases great progress has been made in reducing inflation, although often at the cost of a rise in the real exchange rate. Some developing countries have tried in recent years to combine the pursuit of both internal and external objectives through the use of a declining target band for the exchange rate. More fundamentally, however, the successful adoption of a "strong currency" policy needs to be supported by other reform policies in general, and by fiscal restraint in particular. Maintaining the stability of the domestic financial system is also crucial since doubts in this regard, fostering a belief that the authorities will be unable to respond adequately to exchange rate pressures, can lead to speculative attacks on the currency. A number of developing countries have begun to pay more attention to such structural weaknesses, but will probably need to persevere with the necessary reforms for some years to come.

In several South-East Asian countries and, to a much lesser degree, eastern European countries, the exchange rate problem is different, although closely related. Real exchange rates are subject to upward pressures in a context of high levels of investment and sharply improving productivity in the tradable goods sector. Given long-standing commitments to a stable exchange rate, commonly against the dollar, this real appreciation has manifested itself in the form of higher domestic inflation. Allowing the nominal exchange rate to rise would, in some countries, help reduce domestic inflationary pressures though it would not affect the underlying process by which capital inflows lead to an appreciation of the real exchange rate and an associated current account deficit. The potential vulnerability created by this situation calls for a combination of policies, including a strengthening of the fiscal position, the promotion of domestic sources of savings, the accumulation of an adequate cushion of reserves, avoidance of excessive short-term debt and a willingness to allow the exchange rate to take some of the strain should capital flows reverse.

Maintaining financial stability

The international financial system continues to grow steadily in size, complexity and geographical scope. Cross-border transactions in bonds and equities among the Group of Seven countries (excluding the United Kingdom) rose from 35% of GDP in 1985 to around 140% last year. The survey of derivatives markets carried out by central banks in April 1995 indicated that the outstanding notional value of derivative contracts amounted to over $40 trillion in over-the-counter markets alone. Moreover, restrictions on cross-border rights of establishment for financial institutions have been virtually eliminated in industrial countries and are being sharply scaled back elsewhere. These developments are to be welcomed. They allow a more efficient allocation of capital both domestically and internationally, lead to lower-cost financial services, and offer new means for hedging risks of all sorts.

Nevertheless, three points should be borne in mind. First, the fact that the system continued to function well in the face of a number of shocks – the Mexican crisis, the failure of Barings, the trading losses at Daiwa – and the difficulties confronting the Japanese banking system should provide no grounds

for complacency. Banking systems are, or will be, under pressure almost everywhere, in spite of recent improvements in profitability. Secondly, financial markets continue to be subject to large, unpredictable price swings. And thirdly, different financial sectors and markets are interacting in increasingly complex ways that will challenge the ability of both regulators and the markets themselves to discipline participants effectively.

Despite a satisfactory outturn in several countries in 1995, profit rates in the banking sectors of industrial countries have generally been declining since the mid-1980s and the pressure to contain costs seems likely to intensify. Bank deposits are facing growing competition from other vehicles for savings, while traditional bank lending is threatened by other forms of financial intermediation involving the unbundling and marketing of discrete price and credit risks. The emergence of electronic or "virtual" banking directly threatens the "bricks-and-mortar" aspect of traditional retail banking. These developments imply continued restructuring and consolidation in the industry.

Financial institutions need to become more responsive to competitive pressures in order to ensure a smooth process of adjustment. This will require clearer signals from the authorities that the fate of financial institutions rests primarily in their own hands. The disclosure of both profits and associated risk exposures also needs to be further enhanced if market discipline is to be fully applied. Finally, the reduction of artificial barriers to takeovers and mergers, particularly cross-border ones, would be helpful, as would deregulation of labour markets to permit adjustment of the workforce. The potential risks associated with an inefficient banking system should provide strong incentives to support such policy changes.

The banking systems in developing economies will eventually have to deal with the same kinds of competitive forces as in the developed world, but many developing countries also have more immediate problems. Liberalisation has often proceeded against a backdrop of loan portfolios heavily weighted towards government-directed credits, inadequate loan diversification, high cost structures and an unhealthy degree of linkage between banks and commercial firms. Moreover, a number of countries have recently experienced rapid rates of credit expansion, often closely related to property speculation, with clear risks in the event of the asset price bubble bursting. In several countries, banks may also be vulnerable to a squeezing of intermediation margins as inflation falls, and to international capital outflows should confidence falter.

How to prevent or contain financial crises has therefore become a key policy issue. One obvious conclusion as far as crisis prevention is concerned is that deregulation of the financial system, particularly with respect to international influences, should be both gradual and carefully phased. The experience of many industrial countries in recent years highlights the dangers inherent in the process. Another lesson is that rapid credit growth should probably be treated as a more dangerous sign than it often is, particularly where bank credit is highly concentrated in certain sectors. In this regard, permitting domestic banks that are sufficiently capitalised to diversify abroad might prove helpful. Lastly, the restructuring of banking systems in developing countries might be assisted in some cases if foreign banks were allowed to play a greater role.

As for managing financial crises when they do occur, lessons drawn from the experience of both developed and developing countries are germane. Financial difficulties should be dealt with quickly and decisively, recognising that the fiscal costs will be substantial but less than those resulting from delay. In addition, it will be essential for policy-makers to seek means to retain the confidence of the financial markets if a significant run on the currency is to be avoided. Since this may require draconian measures, like those carried out recently in Mexico and Argentina, a further conclusion can also be drawn: it would be better to avoid such problems in the first place by taking all possible steps to improve the health of the domestic banking system. The role of banking supervision in this connection is discussed below.

A second source of concern is that developments in financial markets might threaten stability if rapid price changes were to take important participants by surprise, leading to their bankruptcy. While short-term volatility was not particularly high in 1995, there were some significant swings in bond prices, and the sharpness of the reversal in the value of the yen in the spring is hard to reconcile with movements in the underlying fundamentals. Also somewhat worrying was the renewed appetite for risk on the part of investors, which seemed to be prompted by the general reduction in bond yields. This may have contributed to the strength of stock markets, the declining interest rate differentials on lower-quality bonds, and the continued large capital inflows into developing markets. The potential for an abrupt change in this appetite for risk should not be underestimated.

In contrast, a piece of good news that emerged from the April 1995 derivatives market survey was that, while the market tends to be highly concentrated in certain product lines, different players tend to dominate the various segments. Moreover, the net exposure (measured in terms of replacement costs) of the dealer sector to end-users was limited, implying that, as a group, dealers intermediate the offsetting price risks taken on by end-users. This suggests that it is unlikely that a large price swing could by itself cause damage to the financial sector as a whole, though it does not exclude the possibility that specific institutions are excessively exposed. More timely information on developments in derivatives markets would be useful, and consideration is now being given to having the central banks (coordinated through the BIS) collect and publish aggregated data based on the consolidated books of leading global derivatives dealers.

The third area of concern, while long-standing, was accentuated by financial developments in 1995. The distinctions between different market instruments and between different categories of market participant continue to become more blurred, making it harder to determine who is doing what and why. This poses a challenge to the disciplinary powers of both regulators and markets. In the developed world, regulators have responded to these rapid changes by putting more emphasis on disclosure with a view to relying on market discipline as a complement to traditional regulatory oversight. Further public sector efforts may be required to ensure that a high degree of disclosure becomes a private sector "norm" of good behaviour. Further steps to deal with the blurring of lines between different kinds of financial institution are also necessary, building on the

progress made by the Basle Committee and IOSCO in recent years. Given trends already evident, which favour the formation of large international financial conglomerates, some formalisation of responsibility for their consolidated supervision is a high priority. What is less clear is whether the concept of a designated "lead regulator" should be adopted or whether some better means can be found to the same end.

Implicit in the discussion of financial system problems in the developing world is the view that supervision in a number of countries has been inadequate. This conclusion does not follow from the failure of individual banks, a normal occurrence in a competitive world, but from the fact that in some economies the whole system has been allowed to slide into a weakened condition, with potentially serious macroeconomic implications. Over the medium term, much needs to be done to increase the effectiveness of rating agencies and market discipline, in particular by addressing the unsatisfactory state of accounting standards, and other impediments to transparent disclosure, in many developing countries. In the short term, however, the authorities cannot rely principally on market discipline: supervisory practices must be significantly strengthened as well. A major programme of education and training for supervisors, based on some agreed standards of prudent banking practice, would be helpful, as would efforts to insulate both banks and supervisors from political influences.

Fostering international financial cooperation

It is a sad truth in the postwar world that most initiatives to reinforce international financial cooperation have been taken under the pressure of some kind of financial crisis. With the exception of the ongoing discussions pertaining to economic and monetary union in Europe, the period under review was no different. The Mexican crisis led to a call at the G-7 Summit for an examination of two specific areas where there was felt to be room for improvement. First, consideration was to be given to ways of enhancing the General Arrangements to Borrow, so that funds raised from non-G-10 countries could also be put at the disposal of the IMF in times of crisis. The second issue was the possibility of more orderly procedures for working out sovereign liquidity crises. While negotiations on the first issue are still in progress, a report dealing with the second issue made some suggestions about how current practices could be improved to take account of the growing importance of bonds and other types of debt that have been exempt from rescheduling in the past. Specifically, it was suggested that official support be given to a market-led process to develop contractual provisions in sovereign debt instruments that would, in the event of a crisis, facilitate consultation and cooperation between debtors and creditors, as well as among creditors themselves. The report concluded, however, that it was neither desirable nor practicable to establish more formal workout ("bankruptcy") procedures for highly indebted sovereign countries. The particular issue of countries heavily indebted to international financial institutions is being addressed directly.

Finally, and as a further by-product of the Mexican affair, a number of Asian countries agreed during the period under review to provide each other with a

limited degree of liquidity support in the form of repurchase agreements against reserve holdings. The difficulties involved in putting together the package of liquidity support for Mexico have apparently encouraged a new and welcome form of self-reliance.

A recurring theme in this Annual Report has been the globalisation of markets, and especially financial markets. The implications of such developments need to be discussed by policy-makers as well as reflected in institutional arrangements. Over the past year, the BIS has continued to foster discussion and cooperation among central banks in areas of traditional interest – the pursuit of price and financial market stability – but with an increasing emphasis on developments in the larger emerging economies. A fuller discussion of these and other initiatives is contained in the following section on "Activities of the Bank". The BIS has also taken steps to enhance significantly its contacts at all levels with central banks in the developing world. These contacts will be further extended to ensure global input in the formulation of policies having a global impact. At the same time, however, it will of course be necessary to respect the informality of the procedures which has always characterised the discussions at the BIS. Combining necessary changes with due regard for successful traditions would seem the best formula for encouraging central bank cooperation in the years ahead.

Activities of the Bank

1. Cooperation between central banks and international organisations

During the past year, the Bank has continued to play its traditional role in fostering international monetary cooperation. It organised periodic meetings of central bank officials on a wide variety of subjects, such as the sustainability of debt and deficits, the changing shape of the banking industry and the measurement, causes and implications of financial market volatility. In the monetary policy area, a particular focus was the scope for using indicators derived from such financial instruments as options to support the implementation of monetary policy. Several meetings centred on the analysis of, and ways to strengthen, financial and banking systems. As described in Chapter VII, these are at the interface between global capital markets and domestic economies. The ability of the financial and banking system to cope smoothly with rapid shifts in capital flows, exchange rates and interest rates can be vital for domestic and international stability.

The global nature of these issues, and the need for central bank cooperation to include all the major players in the markets, were reflected in the increasing involvement in the Bank's meetings of central banks from emerging markets. Integrated global capital markets have also left their imprint on central bank cooperation in another way. The blurring of borders between formerly distinct financial markets has made it more important for different expert groups as well as regulators and supervisors to cooperate more closely; several examples of cooperative efforts are discussed in detail below. As usual, the Bank participated as an observer at meetings of the Interim Committee of the Board of Governors of the International Monetary Fund and of the Finance Ministers and central bank Governors of the Group of Ten countries, and it contributed to the work of the Deputies of the G-10 Ministers and Governors referred to below. The Bank also provided the secretariats for various committees and groups of experts.

Over the past year, the Basle Committee on Banking Supervision has introduced several initiatives in response to the challenges posed by changing financial markets. Moreover, as the functional, institutional and geographical barriers to financial activities have continued to fall, the Committee has sought to establish closer ties with securities regulators, through the International Organization of Securities Commissions (IOSCO), and with insurance supervisors, through the International Association of Insurance Supervisors (IAIS). In addition, it has reinforced its efforts to strengthen contacts with non-G-10 supervisors.

At the end of 1995, the Committee announced a major amendment to the Basle Capital Accord with the objective of setting capital charges for the market risks arising from banks' trading activities and from their open positions in foreign

exchange and commodities markets. A two-year implementation period is being granted before the introduction of explicit capital charges at the end of 1997. The amendment will allow banks to use their own internal models as a basis for measuring market risk, as an alternative to using a standardised measurement framework. In order to use internal models, banks must not only comply with a series of quantitative parameters, but must also meet strict qualitative standards to ensure that proper risk management controls and systems are in place. Permitting the use of models, with verification of their accuracy through backtesting, represents a significant innovation in supervisory methods and reflects the Committee's commitment to reducing the regulatory burden and to developing supervisory approaches that take account of market practices.

Effective supervision also relies on the integrity of the information reported to supervisors and to the market-place. This is particularly important with respect to banks' trading and derivatives activities, which have grown rapidly in recent years. In November 1995 the Basle Committee and IOSCO jointly issued a paper on Public Disclosure of the Trading and Derivatives Activities of Banks and Securities Firms, which reviews the extent to which major banks and securities firms have begun to disclose information relating to their own trading and use of derivatives. It also makes recommendations for further improvements, both qualitative and quantitative. These recommendations are broadly based on A Framework for Supervisory Information about the Derivatives Activities of Banks and Securities Firms, issued by the Basle Committee and IOSCO in May 1995. The framework's objective is to improve reporting coverage and consistency for internationally active banks and securities firms, thus raising global standards for derivatives reporting, while reducing the burden associated with the development of multiple reporting systems.

A key challenge in recent years has been the emergence of corporate groups offering a comprehensive range of financial services, including banking, securities and insurance services. In July 1995, an informal Tripartite Group of bank, securities and insurance regulators published a report identifying the principal supervisory issues arising from the development of large international financial groups and conglomerates. To carry this work forward, the Basle Committee, IOSCO and the IAIS have established a new Joint Forum comprising senior banking, securities and insurance supervisors.

Another important focus of the Basle Committee's activities has been the strengthening of working relationships with banking supervisors outside the G-10 countries. This has mainly been achieved by creating and supporting regional groups of supervisors who meet periodically to discuss common problems. These groups are an important link in the process of reinforcing supervisory standards and enable assistance, advice and training to be provided by the Basle Committee on a multilateral basis. The chairmen of these regional groups meet the Basle Committee annually. These meetings, together with the attendance of the Committee's Chairman or members of its Secretariat at regional group meetings, ensure that non-G-10 supervisors are kept abreast of developments in Basle with a view to increasing their input into the Committee's work.

Every two years, the world's banking supervisors meet under the aegis of the Basle Committee. The next conference, to be held in Stockholm on 11th–13th

June 1996, will discuss two main topics, namely cross-border banking and improving supervisory methods. The main paper for consideration will be a report on the supervision of cross-border banking prepared by a joint working group of the Basle Committee and the Offshore Group of Banking Supervisors. This working group has drawn up recommendations concerning effective consolidated supervision, procedures for cross-border inspections and the legislative changes needed in national jurisdictions to remove impediments to supervisory cooperation.

The Euro-currency Standing Committee continued to monitor developments in international financial markets and to discuss issues bearing on their functioning and stability. In particular, the Committee addressed questions relating to the robustness of markets and their infrastructure in the face of the Mexican crisis, the collapse of Barings and tensions in foreign exchange markets in the spring of 1995. It also examined changes over time in patterns of asset price volatility and discussed forces for change in the structure of banking markets. In addition, the Committee reviewed developments in derivatives markets. In this connection, it assessed progress in public disclosure since the release by one of its working groups in 1994 of a Discussion Paper on the Public Disclosure of Market and Credit Risk by Financial Intermediaries. It also considered the results of the first survey of global derivatives market activity carried out by central banks and monetary authorities in 26 countries in April 1995, and set in train work to develop, in coordination with banking supervisory authorities, proposals for improved statistical monitoring of the size and structure of derivatives markets. The Committee also examined developments affecting the legal enforceability of domestic and cross-border netting arrangements.

Under a mandate from the Euro-currency Standing Committee, the Bank continued to compile, analyse and publish statistical data on activity in international banking and financial markets. The Committee confirmed the continuing usefulness of these statistics, in particular in view of the need to monitor external balances and shifts in capital flows that has been identified by the G-10 Deputies. In this regard it discussed possible improvements to data on countries' external debt to internationally active banks.

The Committee on Payment and Settlement Systems pursued its ongoing analysis of developments in domestic and cross-border payment, netting and settlement arrangements and their potential impact on the stability and efficiency of the international financial system. One major area on which attention has been focused over the past year is risk in foreign exchange transactions. Financial liberalisation, expanded cross-border capital flows and major advances in trading technology have led to dramatic changes and growth in foreign exchange trading in the last 20 years. While banks have upgraded their operational capacity to settle these trades over time, current settlement practices generally expose each trading bank to the risk that it could pay the funds it owes on a transaction but not receive the funds due to it from its counterparty. Given the estimated US$ 1.2 trillion of foreign exchange trades carried out daily, the resulting large exposures raise significant concerns for individual banks and the international financial system as a whole. Although the probability of a major disruption in the

foreign exchange settlement process is low, its potential consequences in a market of this size and complexity are considerable.

Against this background, in March 1996 the Committee published a report on Settlement Risk in Foreign Exchange Transactions. The report sets out a strategy for reducing foreign exchange settlement risk which has been endorsed by the G-10 central bank Governors. Specifically, over the next two years the G-10 central banks will be implementing a three-track strategy. The first track is directed towards action by individual banks, which are recommended to take immediate steps to apply an appropriate credit control process to their foreign exchange settlement exposures. This recognises the considerable scope for individual banks to address the problem by improving their current practices for measuring and managing such exposures. The second track aims at action by industry groups, which are encouraged to develop well-constructed multi-currency services that would contribute to the risk reduction efforts of individual banks. The G-10 central banks take the view that such services are better provided by the private than the public sector. The third track comprises action by central banks to foster rapid private sector progress. Each G-10 central bank, in cooperation where appropriate with the relevant supervisory authorities, will choose the most effective steps to stimulate satisfactory private sector action in its domestic market. In addition, where appropriate and feasible, central banks will seek to achieve key enhancements to national payment systems and will consider other steps to facilitate private sector risk reduction efforts. This recognises the likely need for public authorities to encourage action by individual banks and industry groups and to cooperate with these groups so that they can bring about timely, market-wide progress.

The Committee studied a number of other issues in the course of the year, including the use of collateral to increase the security of payment and settlement systems, the operation of real-time gross settlement systems, the clearing and settlement arrangements for exchange-traded derivatives and recent trends in retail payment systems. With regard to retail payments, the Committee discussed the recent development of electronic money products and their potential impact on policy issues. The term "electronic money" is used to cover a number of new or proposed electronic payment products generally designed for retail use, including both card schemes (so-called "electronic purses" or multipurpose prepaid cards) and computer-network or software-based schemes (in particular, various proposals to offer non-standard payment services on computer networks such as the Internet). In November 1995, the G-10 central bank Governors commissioned a study of the monetary policy and seigniorage implications of the development of electronic money, the security aspects of the schemes, the challenges they could pose to law enforcement, the legal and contractual framework for the development of the new services, and issues relating to the different potential categories of providers of such new products. This work is being carried out by a number of specialised working groups of the G-10 central banks.

As a follow-up to the publications on delivery versus payment in securities settlements and on cross-border securities settlements, an initiative was taken to develop a framework or checklist of information that could be used to

improve the understanding and disclosure of risk in securities settlement systems. A working group consisting of public and private sector participants from both industrial and emerging market economies was formed in April 1996 to draw up a list of questions aimed at establishing a protocol for reviewing the operation of a settlement system and its allocation of direct and indirect risks.

The Committee also continued in other ways to broaden its cooperation with the central banks of countries outside the Group of Ten and the European Union. It organised, in collaboration with the BIS, seminars on payment and settlement systems with various regional central banking groups and further extended the geographical coverage of its publications on national payment systems (in February 1996 a reference study, one of the series of "Red Books", was published for Saudi Arabia). Finally, cooperation with the Basle Committee on Banking Supervision and with IOSCO was pursued further.

The Coordinating Service for Central Banks and International Organisations again helped to coordinate the training and technical assistance provided by a large number of central banks to their counterparts in eastern Europe, the CIS republics and Asian economies in transition. Because of the progress already made in central and eastern Europe, the focus is now on developing cooperation with the central banks of Asian economies in transition and on improving the coordination of technical assistance for the CIS republics. Representatives of central banks from central and eastern Europe and from the CIS republics meet annually at the BIS to exchange views.

The Bank also participated actively in the work of the Joint Vienna Institute (JVI), which was established in 1992 to provide training to officials from countries in transition. By the end of 1995, the JVI's courses had been attended by more than 4,500 participants from 31 different countries. The BIS has organised seminars in specialised areas of central banking, including monetary policy, banking supervision, payment and settlement systems, legal issues and reserve management.

The Group of Computer Experts discussed the need, given the rapid move towards distributed processing, for central banks to adapt their information technology (IT) departments and to establish a new framework for relations between IT staff and users. It also considered the implications, chiefly from the point of view of IT security, of the growing adoption of client/server architectures and Unix systems. In addition, the Group studied means of ensuring the security of central bank connections to the Internet, which is being used increasingly for exchanging information, accessing external databases and making the central banks' own data public. In the context of the above-mentioned analysis of electronic money products by the Committee on Payment and Settlement Systems, the Group of Computer Experts set up a study group to examine the security of electronic money systems. This group has already undertaken a detailed review of the principal electronic money systems in Europe and the United States.

The Group of Experts on Monetary and Economic Data Bank Questions examined a range of strategic and technical issues concerning the future of BIS Data Bank Services. These included questions relating to the changes to computer software that will be necessary because of the year 2000, the widening

of participation to include countries outside the Group of Ten and the European Union, and the extension of facilities to support a more complete information exchange among central banks by covering documents as well as statistics. There was strong support for the BIS continuing to serve as the hub for electronic exchange of information among central banks. It was agreed that working groups would be established to examine detailed strategic and technical questions connected with an extension of this role. The Group also discussed issues concerning the current use of computers by central bank economists and statisticians and developments in the field of electronic data transmission standards.

The staff of the Monetary and Economic Department also undertook research in a number of fields relevant to the tasks of central banks, and in particular on monetary and financial questions that have a bearing on the conduct of monetary policy. One focus of this research was the causes and consequences of changes in asset price volatility. Another was the information content of asset prices, notably interest rates and option prices, including their usefulness as indicator variables for monetary policy.

2. Functions as Agent and Trustee

During the past financial year the Bank continued to perform various Agency and Trustee functions in connection with international financial settlements.

Agent for the private ECU clearing and settlement system

Since October 1986 the Bank has performed the functions of Agent for the private ECU clearing and settlement system in accordance with the provisions of successive agreements concluded between the ECU Banking Association (EBA), Paris, and the BIS, the most recent of which was signed and entered into force on 15th September 1993. A description of the structure and operation of the clearing system is contained in the 56th Annual Report of June 1986. During the period under review, two further banks were granted the status of clearing bank by the EBA and joined the system at the beginning of 1996. The total number of ECU clearing banks thus increased to 47.

Trustee for international government loans

The Bank continued to perform certain Trustee functions with regard to the funding bonds 1990–2010 of the Dawes and Young Loans, issued by the Government of the Federal Republic of Germany pursuant to the London Agreement on German External Debts of 27th February 1953. Details of these bond issues, the Bank's functions and the appointment of the European Exchange/Paying Agents may be found in the Bank's 63rd Annual Report of June 1993, pages 205–207.

The Deutsche Bundesbank, as Paying Agent for all uncertificated bonds of all issues of the Dawes and Young Loans, notified the Bank that it had paid out approximately DM 7 million to bondholders in respect of the interest maturity dates of 3rd April and 3rd October 1995, as well as interest arrears. The newly calculated redemption values and conversion factors in respect of the aforementioned interest maturity dates were published by the German Federal Debt Administration (Bundesschuldenverwaltung) in the Federal Journal.

Concerning the application of the exchange guarantee clause for the Young Loan by the German Federal Debt Administration, the Bank has repeated its earlier reservations stated in the 50th Annual Report of June 1980 (pages 168–169), which also extend to the funding bonds 1990–2010. The Exchange/Paying Agents have been advised to take the appropriate precautionary measures in order to safeguard the rights of the bondholders. Further details may also be found in a recent announcement published, at the request of the BIS, in the German Federal Journal No. 183 of 27th September 1995 (page 10,755).

Collateral Agent for Brazilian bonds

In accordance with two Collateral Pledge Agreements signed on 15th April 1994, the BIS acts in the capacity of Collateral Agent to hold and invest collateral for the benefit of the holders of certain US dollar denominated bonds, maturing in either 15 or 30 years, which have been issued by Brazil under the external debt restructuring arrangements agreed in November 1993.

3. Financial assistance to central banks

Besides assistance granted to central banks on a bilateral basis, the BIS coordinated two international financial support programmes in the financial year under review.

As reported last year, the BIS arranged a short-term facility of up to US$ 10 billion, backed by a group of participating central banks, in favour of the Banco de México. The facility, which became effective on 15th March 1995, was initially available for a period of some three months. It was subsequently renewed in early June and expired on 1st September 1995.

In addition, the BIS granted a bridging loan of up to US$ 1 billion to the Banco Central de la República Argentina on 28th April 1995. This facility, which was backed by a group of participating central banks, was made available in six separate tranches to prefinance various disbursements under World Bank and Inter-American Development Bank loans. The facility terminated on 30th September 1995.

4. Operations of the Banking Department

Liabilities

Share capital and reserves

The Bank's authorised capital remained unchanged at 1,500 million gold francs; nor was there any change in the issued capital, which is made up of 473,125 shares paid up to the extent of 25%. As a result, the Bank's paid-up capital remains unchanged at GF 295,703,125

The total of the Bank's reserves stands at GF 1,655,483,397

before allocation of the net profit for the financial year.

Borrowed funds

The BIS's borrowed resources primarily reflect its role as a bank for central banks. It provides banking facilities for central banks and international financial institutions, assisting central banks in the management of their foreign exchange reserves. During the last financial year, the Bank continued to develop its depositor base, which comprises more than 100 central banks and international financial institutions throughout the world.

On 31st March 1996 central banks held deposits in gold and currencies totalling 51,138 million gold francs, compared with 58,012 million a year earlier. Although exchange rate movements had a negative effect on the overall volume of deposits, the recorded decrease of 6,874 million gold francs was mainly due to a contraction of balances in currencies.

The share of total borrowed funds accounted for by central bank deposits again fell slightly in 1995/96 to 94.2%, against 95% a year earlier and 96.7% at end-March 1994. Correspondingly, the share of other depositors rose from 5% to 5.8% over the financial year under review, totalling 3,133 million gold francs, compared with 3,079 million on 31st March 1995. This increase reflects new deposits from various international organisations.

The past financial year was characterised in particular by a substantial decline in funds received in US dollars and, to a lesser extent, in ECUs, Japanese yen and pounds sterling; on the other hand, resources denominated in Deutsche Mark rose for the second consecutive year. As a result, the share of the Deutsche Mark in total borrowed funds in currencies stood at 32.8% on 31st March 1996 (compared with 22.2% a year earlier), while that of the US dollar declined to 52.3% (from 61.1%).

On 31st March 1996 deposits with a residual maturity not exceeding three months accounted for 95.1% of total resources in currencies; this compares with 98.4% a year earlier.

The total of deposits in gold continued to rise, representing 7.8% of total borrowed funds on 31st March 1996, compared with 6.8% and 6.6% respectively at the end of the two previous financial years.

Assets

As befits its role as the central banks' bank, the investment policy of the BIS is designed to maintain the highest possible standards in terms of safety and liquidity. The bulk of the reserve assets held by central banks with the BIS are at short notice and one of the Bank's prime objectives in employing these resources is therefore to preserve a high degree of liquidity. Equally important, the Bank conducts its operations in a highly conservative and prudent manner to ensure the safety of the deposits entrusted to it; credit risk, maturity transformation and exchange rate risk are rigorously monitored and reduced to the fullest extent possible. Part of the Bank's borrowed funds is invested in the market in the form of deposits with first-class commercial banks of international standing. Another sizable portion is used for the purchase of short-term negotiable securities, including Treasury bills. The Bank's own funds are largely held in gold or investments in sovereign securities issued by the major industrial countries.

With a total of 53,584 million gold francs on 31st March 1996, assets in currencies recorded a year-on-year decline of 6,709 million, mainly reflecting the corresponding decrease in central bank deposits over the financial year under review.

For some years the Bank has made use of certain derivative instruments, essentially with a view to managing its own funds more efficiently and hedging risks on its borrowed funds. Its activity is chiefly concentrated on "first-generation" derivatives such as futures, forward rate agreements and currency and interest rate swaps. The Bank makes only very limited use of options.

5. Net profits and their distribution

The accounts for the 66th financial year ended 31st March 1996 show a net operating surplus of 187,937,032 gold francs, compared with 170,539,274 gold francs for the preceding financial year. A major factor underlying the increase in the profit was the higher income from the Bank's own funds investments. This was partly offset by a decline in income from its borrowed funds operations, caused principally by the fall in the balance-sheet total during the year from the very high levels of 1994/95.

This year's result is shown after deduction of 66,347,998 gold francs in respect of costs of administration, a 13% increase over the previous year's figure of 58,739,784 gold francs. The size of this increase reflects the average value of the Swiss franc in terms of gold francs during the year, which was substantially higher than in the previous financial year. In terms of Swiss francs, in which currency most of the Bank's expenditure is incurred, the increase in costs amounted to less than 2%.

The Board of Directors has decided to transfer 3,529,792 gold francs to the Provision for Exceptional Costs of Administration and 3,073,940 gold francs to the Provision for Modernisation of Premises and Renewal of Equipment, which exists to meet the cost of maintaining the Bank's premises and to finance investment expenditure on technical projects. As a result of these transfers the net profit amounts to 181,333,300 gold francs, against 162,408,716 gold francs for the previous financial year. The allocation of this amount is governed by Article 51 of the Statutes.

On the basis of this Article, the Board of Directors recommends that the net profit of 181,333,300 gold francs be applied by the General Meeting in the following manner:

(i) an amount of 53,333,300 gold francs in payment of a dividend of 260 Swiss francs per share;

(ii) an amount of 38,400,000 gold francs to be transferred to the General Reserve Fund;

(iii) an amount of 3,000,000 gold francs to be transferred to the Special Dividend Reserve Fund; and

(iv) an amount of 86,600,000 gold francs, representing the remainder of the available net profit, to be transferred to the Free Reserve Fund. This fund can be used by the Board of Directors for any purpose that is in conformity with the Statutes.

If the above proposals are accepted, the dividend will be paid on 1st July 1996 to the shareholders whose names are contained in the Bank's share register on 20th June 1996.

The Balance Sheet and Profit and Loss Account, including the notes thereto, and a summary statement showing the movements in the Bank's reserves will be found at the end of this Report. The Bank's accounts have been audited by Price Waterhouse, who have confirmed that the Balance Sheet and the Profit and Loss Account, together with the Notes on pages 186–190, give a true and fair view of the Bank's financial position at 31st March 1996 and of the results of its operations for the year ended on that date. Their report is to be found immediately following the accounts.

6. Changes in the Board of Directors and in the Management

The Board of Directors decided in May 1996 that W.F. Duisenberg's current term of office as Chairman of the Board and President of the Bank for International Settlements, which was due to expire on 31st December 1996, should be extended to 30th June 1997.

At the end of April 1996 Markus Lusser relinquished his appointment as Chairman of the Governing Board of the Swiss National Bank and at the same time gave up his seat on the Board of Directors of the BIS. At its meeting on 15th April 1996 the Board elected Hans Meyer, who had been appointed to succeed Markus Lusser as Chairman of the Governing Board of the Swiss National Bank, as a member of the Board for the unexpired period of Markus Lusser's term of office, namely until 31st March 1998. Urban Bäckström was re-elected as a member of the Board for a further period of three years expiring on 31st March 1999.

Lord Kingsdown was reappointed to the Board under Article 27(2) of the Statutes from May 1996.

In January 1996 Alan S. Blinder's term as member of the Board of Governors of the Federal Reserve System ended and he gave up his position as Alternate to Alan Greenspan. In March 1996 Jean-Claude Trichet appointed Jean-Pierre Patat as his Alternate.

As regards the Management of the Bank, Rémi Gros retired from his position as Assistant General Manager at the end of December 1995. He was succeeded by André Icard. Jean-Claude Dagassan, Assistant Manager, retired at the end of May 1996.

The Bank learned with deep regret of the death of the Rt. Hon. Lord O'Brien of Lothbury on 24th November 1995. Lord O'Brien had been Governor of the Bank of England and an ex officio member of the Board from July 1966 until June 1973. From June 1974 until June 1983 he had been an Appointed Director and from March 1979 until June 1983 had also held the post of Vice-Chairman of the Board of Directors of the BIS.

Balance Sheet and Profit and Loss Account

at 31st March 1996

Balance Sheet at 31st March 1996

(in gold francs - see Note 2(a) to the Accounts)

1995	Assets	1996
	Gold	
4 373 392 132	Held in bars	*4 364 194 019*
541 851 346	Time deposits and advances	*637 302 466*
4 915 243 478		5 001 496 485
9 758 370	Cash on hand and on sight account with banks	9 761 421
5 520 274 016	Treasury bills	4 105 690 444
	Time deposits and advances in currencies	
36 127 056 275	Not exceeding 3 months	*29 998 320 757*
6 351 633 262	Over 3 months	*7 329 811 023*
42 478 689 537		37 328 131 780
	Government and other securities at term	
5 947 524 799	Not exceeding 3 months	*3 539 879 228*
6 336 795 537	Over 3 months	*8 600 477 193*
12 284 320 336		12 140 356 421
19 235 740	Miscellaneous	32 771 184
1	Land, buildings and equipment	1
65 227 521 478		58 618 207 736

After allocation of the year's net profit		Before allocation of the year's net profit	After allocation of the year's net profit
1995	Liabilities	1996	
295 703 125	Paid-up capital	295 703 125	295 703 125
1 655 483 397	Reserves	1 655 483 397	1 783 483 397
	Deposits (gold)		
4 042 312 303	Sight	*4 079 409 773*	*4 079 409 773*
63 254 613	Not exceeding 3 months	*42 095 720*	*42 095 720*
51 403 302	Over 3 months	*123 463 527*	*123 463 527*
4 156 970 218		4 244 969 020	4 244 969 020
	Deposits (currencies)		
1 471 201 653	Sight	*1 129 229 959*	*1 129 229 959*
54 565 114 719	Not exceeding 3 months	*46 437 189 005*	*46 437 189 005*
898 141 686	Over 3 months	*2 459 422 087*	*2 459 422 087*
56 934 458 058		50 025 841 051	50 025 841 051
271 008 944	Staff pension scheme	283 079 270	283 079 270
1 860 489 020	Miscellaneous	1 931 798 573	1 931 798 573
	Profit and Loss Account	181 333 300	
53 408 716	Dividend payable on 1st July		53 333 300
65 227 521 478		58 618 207 736	58 618 207 736

Profit and Loss Account

for the financial year ended 31st March 1996
(in gold francs)

	1995	1996
Interest and discount, and other operating income	3 919 399 762	3 692 892 528
Less: interest and discount expense	3 690 120 704	3 438 607 498
Net interest and other operating income	229 279 058	254 285 030
Less: costs of administration		
Board of Directors	*1 167 611*	*1 460 882*
Management and staff	*40 207 740*	*46 568 445*
Office and other expenses	*17 364 433*	*18 318 671*
	58 739 784	66 347 998
Net operating surplus	170 539 274	187 937 032
Less: amounts transferred to		
Provision for exceptional costs of administration	*3 389 388*	*3 529 792*
Provision for modernisation of premises and renewal of equipment	*4 741 170*	*3 073 940*
	8 130 558	6 603 732
Net profit for the financial year	162 408 716	181 333 300
The Board of Directors recommends to the Annual General Meeting that the net profit for the year ended 31st March 1996 be allocated in accordance with Article 51 of the Statutes as follows:		
Dividend: 260 Swiss francs per share on 473 125 shares (1995: 250 Swiss francs)	53 408 716	53 333 300
	109 000 000	128 000 000
Transfer to general reserve fund	32 700 000	38 400 000
	76 300 000	89 600 000
Transfer to special dividend reserve fund	3 000 000	3 000 000
	73 300 000	86 600 000
Transfer to free reserve fund	73 300 000	86 600 000
	—	—

Movements in the Bank's reserves

during the financial year ended 31st March 1996
(in gold francs)

I. Development of the reserve funds resulting from allocations for the financial year 1995/96

	Legal reserve fund	General reserve fund	Special dividend reserve fund	Free reserve fund	Total of reserve funds
Balances at 1st April 1995, after allocation of net profit for the financial year 1994/95	30 070 313	764 916 157	53 530 055	806 966 872	1 655 483 397
Add: allocations of net profit for the financial year 1995/96	—	38 400 000	3 000 000	86 600 000	128 000 000
Balances at 31st March 1996 as per Balance Sheet	30 070 313	803 316 157	56 530 055	893 566 872	1 783 483 397

II. Paid-up capital and reserve funds at 31st March 1996 (after allocation) were represented by:

	Paid-up capital	Reserve funds	Total of capital and reserves
Net assets in			
Gold	295 703 125	366 179 267	661 882 392
Currencies	—	1 417 304 130	1 417 304 130
Balances at 31st March 1996 as per Balance Sheet	295 703 125	1 783 483 397	2 079 186 522

Notes to the Accounts

for the financial year ended 31st March 1996

1. Introduction

The Bank for International Settlements (BIS) is an international financial institution which was established pursuant to the Hague Agreements of 20th January 1930. The headquarters of the Bank are in Basle, Switzerland. The objects of the BIS, as laid down in Article 3 of its Statutes, are to promote the cooperation of central banks, to provide additional facilities for international financial operations and to act as trustee or agent for international financial settlements. Thirty-two central banks are currently members of the Bank and exercise the rights of representation and voting at General Meetings in proportion to the number of BIS shares issued in their respective countries. The Board of Directors of the Bank is composed of the Governors of the central banks of Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States of America, as well as appointed directors from six of those countries.

The accounts for the financial year 1995/96 are presented in a revised format, as approved by the Board of Directors pursuant to Article 49 of the Bank's Statutes. The revisions are of a presentational nature and do not affect comparability with the figures for the preceding financial year.

2. Significant accounting policies

(a) Unit of account and currency translation

The unit of account of the Bank is the gold franc, which is equivalent to US$ 1.941 49... . Article 4 of the Bank's Statutes defines the gold franc (abbreviated to GF) as representing 0.290 322 58... grammes of fine gold. Items representing claims on gold are translated into gold francs on the basis of their fine weight. Items denominated in US dollars are translated into gold francs on the basis of a gold price of US$ 208 per ounce of fine gold (this price was established by the Bank's Board of Directors in 1979, resulting in the conversion factor of 1 gold franc = US$ 1.941 49...). Items denominated in other currencies are translated into US dollars at the spot market rates of exchange prevailing at the balance sheet date, with the resulting US dollar balances converted into gold francs accordingly.

Exchange differences arising on the translation of currency assets and liabilities denominated in currencies other than the US dollar are taken to the valuation difference account, which is included under miscellaneous liabilities.

The net balance resulting from exchange differences on the translation of forward currency contracts and swaps is included under miscellaneous assets or liabilities.

(b) Basis of valuation and determination of profit

Except as otherwise stated, the accounts of the Bank are drawn up on the historical cost basis and income and expense items are recorded on the accruals basis. Profits and losses are determined on a monthly basis, translated into US dollars at the spot market rate of exchange prevailing at each month-end and translated into gold francs as set forth above; the monthly profits thus calculated are accumulated for the year.

Profits and losses arising on the sale of investment securities are taken to the securities equalisation account, which is incorporated within miscellaneous liabilities. Credit balances accumulated in this account are amortised to the Profit and Loss Account over a period corresponding to the average term to maturity of the Bank's investment portfolio; a net debit balance at the year-end would be charged immediately to the Profit and Loss Account.

(c) Gold

Gold assets and liabilities are stated on the basis of their fine weight.

(d) Treasury bills; Government and other securities at term

Treasury bills and Government and other securities at term which are owned outright are stated at cost, plus accrued interest where applicable, adjusted for the amortisation of premiums or discounts over the period to maturity; interest and discount income includes such amortisation.

Securities included under either of the above headings which are acquired in connection with purchase and resale agreements are stated at the amount advanced to the counterparty plus accrued interest.

(e) Time deposits and advances in currencies

Time deposits and advances are stated at their principal value plus accrued interest.

(f) Land, buildings and equipment

These are stated at the value of 1 gold franc. Capital expenditure on land, buildings or equipment is charged to the provision for building purposes or to the provision for modernisation of premises and renewal of equipment.

(g) Deposits

Deposits are book claims on the Bank and are stated at their principal value plus accrued interest. Certain claims are issued at a discount to the value payable on the maturity of the deposit; in such cases the accounting treatment is analogous to that applied to dated securities held by the Bank (see item (d) above).

(h) Staff pension scheme

The staff pension scheme represents the Bank's liability in respect of current staff members and pensioners, based on annual actuarial advice.

(i) Provisions

(i) General

The Board of Directors sets aside an amount each year to a provision for banking risks and other eventualities; this provision is incorporated in miscellaneous liabilities.

(ii) Specific

Amounts may be allocated from the Bank's annual earnings by the Bank's Board of Directors for the following purposes:

1. Provision for exceptional costs of administration
2. Provision for building purposes
3. Provision for modernisation of premises and renewal of equipment.

The transfers to specific provisions are shown in the Profit and Loss Account and the unspent amount of these provisions is included in miscellaneous liabilities.

(j) Off-balance-sheet items

(i) Derivatives

In the normal course of business, the Bank is party to off-balance-sheet financial transactions including forward exchange contracts, currency and interest rate swaps, forward rate agreements, futures and options. These instruments are used to hedge the Bank's interest rate and currency exposure on assets and liabilities, and to manage the duration of its liquid assets. The Bank applies the same credit criteria in considering off-balance-sheet commitments as it does for all other investments.

(ii) Fiduciary transactions

Fiduciary transactions are not included in the Balance Sheet, since they are effected on behalf of and at the risk of the Bank's customers, albeit in its own name. Transactions falling under this heading comprise gold held under earmark as well as safe custody holdings of bills and other securities for account of central banks and other depositors.

Notes to the Balance Sheet

for the financial year ended 31st March 1996

1. Gold holdings

The following table shows the composition of the Bank's total gold holdings:

Assets	1995	1996
Gold bars held at central banks	4 373 392 132	4 364 194 019
Gold time deposits:		
Not exceeding 3 months	282 781 538	236 533 897
Over 3 months	259 069 808	400 768 569
	4 915 243 478	5 001 496 485

The Bank's own gold holdings amounted to GF 661 882 392, equivalent to 192 tonnes of fine gold (1995: GF 661 881 612; 192 tonnes).
Gold held under earmark for customers is not included in the Balance Sheet; this item amounted to GF 982.5 million (1995: 1 574.7 million).

2. Treasury bills

The following table shows the composition of the Bank's holdings of Treasury bills:

	1995	1996
– Owned outright	5 483 050 016	4 105 690 444
– Held under purchase and resale agreements	37 224 000	—
	5 520 274 016	4 105 690 444

The market value of Treasury bills owned outright at 31st March 1996 was GF 4 105.8 million.

3. Government and other securities at term

The following table shows the breakdown of the Bank's holdings of these securities:

	1995	1996
– Owned outright	9 332 862 549	10 488 115 419
– Held under purchase and resale agreements	2 951 457 787	1 652 241 002
	12 284 320 336	12 140 356 421

The market value of government and other securities owned outright at 31st March 1996 was GF 10 532.7 million.

4. Capital

The Bank's share capital consists of:

	1995	1996
Authorised capital:		
600 000 shares,		
each of 2 500 gold francs	1 500 000 000	1 500 000 000
Issued capital: 473 125 shares	1 182 812 500	1 182 812 500
of which 25% paid up	295 703 125	295 703 125

5. Reserves

The Bank's reserves consist of:

	1995	1996
Legal reserve fund	30 070 313	30 070 313
General reserve fund	764 916 157	803 316 157
Special dividend reserve fund	53 530 055	56 530 055
Free reserve fund	806 966 872	893 566 872
	1 655 483 397	1 783 483 397

The yearly allocations to the various reserve funds are governed by Article 51 of the Bank's Statutes. The amounts transferred are also shown in the table entitled "Movements in the Bank's reserves".

6. Deposits

Gold deposits placed with the Bank originate entirely from central banks. The composition of currency deposits placed with the Bank was as follows:

	1995	1996
Central banks		
Sight	1 401 930 963	1 060 459 178
Not exceeding 3 months	51 969 341 951	43 770 492 278
Over 3 months	484 017 087	2 062 276 087
Other depositors		
Sight	69 270 690	68 770 781
Not exceeding 3 months	2 595 772 768	2 666 696 727
Over 3 months	414 124 599	397 146 000
	56 934 458 058	50 025 841 051

Report of the Auditors

Report of the Auditors
to the Board of Directors and to the General Meeting
of the Bank for International Settlements, Basle

We have audited the accompanying Balance Sheet and Profit and Loss Account, including the notes thereto, of the Bank for International Settlements. The Balance Sheet and Profit and Loss Account have been prepared by the Management of the Bank in accordance with the Statutes and with the principles of valuation described under significant accounting policies in the notes. Our responsibility under the Statutes of the Bank is to form an opinion on the Balance Sheet and Profit and Loss Account based on our audit and to report our opinion to you.

Our audit included examining, on a test basis, evidence supporting the amounts in the Balance Sheet and Profit and Loss Account and related disclosures. We have received all the information and explanations which we have required to obtain assurance that the Balance Sheet and Profit and Loss Account are free of material misstatement, and believe that our audit provides a reasonable basis for our opinion.

In our opinion, the Balance Sheet and Profit and Loss Account, including the notes thereto, have been properly drawn up and give a true and fair view of the financial position of the Bank for International Settlements at 31st March 1996 and the results of its operations for the year then ended so as to comply with the Statutes of the Bank.

Price Waterhouse AG

Ralph R. Reinertsen — Jack W. Flamson

Auditors in charge

Basle, 26th April 1996

Five-year summary of the Balance Sheet

(in millions of gold francs)

Financial year ended 31st March	1992	1993	1994	1995	1996
Gold					
Held in bars	*4 807.7*	*4 726.9*	*4 338.3*	*4 373.4*	*4 364.2*
Time deposits and advances	*459.9*	*413.0*	*579.8*	*541.8*	*637.3*
	5 267.6	5 139.9	4 918.1	4 915.2	5 001.5
Cash on hand and on sight account with banks	12.4	7.5	12.0	9.8	9.8
Treasury bills	3 623.2	2 175.4	3 510.7	5 520.3	4 105.7
Time deposits and advances in currencies	31 588.0	41 183.9	41 370.4	42 478.7	37 328.1
Government and other securities at term	7 457.9	11 428.3	15 087.9	12 284.3	12 140.3
Miscellaneous assets	12.0	31.4	76.6	19.2	32.8
Land, buildings and equipment	-	-	-	-	-
Total assets	47 961.1	59 966.4	64 975.7	65 227.5	58 618.2
Paid-up capital	295.7	295.7	295.7	295.7	295.7
Reserves (after allocation of the net profit for the year)					
Legal reserve fund	*30.1*	*30.1*	*30.1*	*30.1*	*30.1*
General reserve fund	*672.8*	*703.1*	*732.2*	*764.9*	*803.3*
Special dividend reserve fund	*42.5*	*47.5*	*50.5*	*53.5*	*56.5*
Free reserve fund	*603.1*	*668.8*	*733.7*	*807.0*	*893.6*
	1 348.5	1 449.5	1 546.5	1 655.5	1 783.5
Deposits					
Gold	*4 571.2*	*4 367.3*	*4 061.1*	*4 157.0*	*4 245.0*
Currencies	*40 295.1*	*52 147.7*	*57 164.9*	*56 934.4*	*50 025.8*
	44 866.3	56 515.0	61 226.0	61 091.4	54 270.8
Staff pension scheme	158.3	172.1	200.2	271.0	283.1
Miscellaneous liabilities	1 259.8	1 495.2	1 666.2	1 860.5	1 931.8
Dividend	32.5	38.9	41.1	53.4	53.3
Total liabilities	47 961.1	59 966.4	64 975.7	65 227.5	58 618.2

Five-year summary of the Profit and Loss Account

(in millions of gold francs)

Financial year ended 31st March	1992	1993	1994	1995	1996
Net interest and other operating income	180.2	211.7	195.7	229.3	254.3
Less: costs of administration					
Board of Directors	*0.7*	*0.8*	*0.8*	*1.2*	*1.5*
Management and staff	*28.3*	*32.2*	*34.1*	*40.2*	*46.6*
Office and other expenses	*17.1*	*16.3*	*15.5*	*17.4*	*18.3*
	46.1	49.3	50.4	58.8	66.4
Net operating surplus	134.1	162.4	145.3	170.5	187.9
Less: amounts transferred to					
Provision for exceptional costs of administration	*3.6*	*3.3*	*3.3*	*3.4*	*3.5*
Provision for building purposes	-	-	-	-	-
Provision for modernisation of premises and renewal of equipment	*11.0*	*19.2*	*3.9*	*4.7*	*3.1*
	14.6	22.5	7.2	8.1	6.6
Net profit for the financial year	119.5	139.9	138.1	162.4	181.3
Dividend	32.5	38.9	41.1	53.4	53.3
	87.0	101.0	97.0	109.0	128.0
Transfer to general reserve fund	26.1	30.3	29.1	32.7	38.4
	60.9	70.7	67.9	76.3	89.6
Transfer to special dividend reserve fund	3.0	5.0	3.0	3.0	3.0
	57.9	65.7	64.9	73.3	86.6
Transfer to free reserve fund	57.9	65.7	64.9	73.3	86.6
	-	-	-	-	-

Board of Directors

W. F. Duisenberg, Amsterdam
Chairman of the Board of Directors,
President of the Bank

Carlo Azeglio Ciampi, Rome
Vice-Chairman

Urban Bäckström, Stockholm
Antonio Fazio, Rome
Edward A. J. George, London
Alan Greenspan, Washington
Hervé Hannoun, Paris
Lord Kingsdown, London
William J. McDonough, New York
Yasuo Matsushita, Tokyo
Hans Meyer, Zurich
Helmut Schlesinger, Frankfurt a/M.
Gordon G. Thiessen, Ottawa
Hans Tietmeyer, Frankfurt a/M.
Jean-Claude Trichet, Paris
Alfons Verplaetse, Brussels
Philippe Wilmès, Brussels

Alternates

Jean-Pierre Patat or
Armand Pujal, Paris
Ian Plenderleith or
Terry R. Smeeton, London
Jean-Jacques Rey, Brussels
Carlo Santini or
Stefano Lo Faso, Rome
Helmut Schieber or
Bernd Goos, Frankfurt a/M.
Edwin M. Truman, Washington

Management

Andrew Crockett	General Manager
André Icard	Assistant General Manager
Gunter D. Baer	Secretary General, Head of Department
Malcolm Gill	Head of the Banking Department
William R. White	Economic Adviser, Head of the Monetary and Economic Department
Marten de Boer	Manager, Accounting, Budgeting and ECU Clearing
Renato Filosa	Manager, Monetary and Economic Department
Mario Giovanoli	Legal Adviser, Manager
Guy Noppen	Manager, General Secretariat
André Bascoul	Deputy Manager, Monetary and Economic Department
Joseph R. Bisignano	Deputy Manager, Monetary and Economic Department
Zenta Nakajima	Deputy Manager, Monetary and Economic Department
Günter Pleines	Deputy Manager, Banking Department
Jean-Marc Andreoli	Assistant Manager, General Secretariat
John A. Bispham	Assistant Manager, Monetary and Economic Department
Paul C. Bridge	Assistant Manager, Banking Department
Yukio Iura	Assistant Manager, Banking Department
Daniel Lefort	Assistant Manager, Legal Service
Alexander Radzyner	Assistant Manager, General Secretariat
Claude Sivy	Assistant Manager, Internal Audit
Frederik C. Musch	Secretary General of the Basle Committee on Banking Supervision, Monetary and Economic Department