BANK FOR INTERNATIONAL SETTLEMENTS

65th ANNUAL REPORT

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Bank for International Settlements

65th Annual Report

1st April 1994–31st March 1995 Basle, 12th June 1995

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65th Annual Report

submitted to the Annual General Meeting
of the Bank for International Settlements
held in Basle on 12th June 1995

Ladies and Gentlemen,

It is my pleasure to submit to you the sixty-fifth Annual Report of the Bank for International Settlements for the financial year which began on 1st April 1994 and ended on 31st March 1995.

The net profit for the year amounted to 162,408,716 gold francs, after transfer of 3,389,388 gold francs to the Provision for Exceptional Costs of Administration and 4,741,170 gold francs to the Provision for Modernisation of Premises and Renewal of Equipment. This compares with a net profit for the preceding year of 138,085,797 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 53,408,716 gold francs in payment of a dividend of 250 Swiss francs per share.

The Board further recommends that 32,700,000 gold francs be transferred to the General Reserve Fund, 3,000,000 gold francs to the Special Dividend Reserve Fund and the remainder of 73,300,000 gold francs to the Free Reserve Fund.

If these proposals are approved, the Bank's dividend for the financial year 1994/95 will be payable to shareholders on 1st July 1995.

I. Fundamentals and financial markets: changing perceptions of risk

Global financial markets experienced some abrupt adjustments in 1994 and early 1995. The sharp rise in long-term interest rates in early 1994, which affected to similar degrees industrial countries at different stages of the economic cycle, was particularly striking. It came after a long period of declining rates and easy investment profits and caused many investors to reassess the assumptions underlying their global investment strategies. Perceptions of risk sharpened, leading to a shift in liquidity and currency preferences in favour of assets judged to carry less risk. Subsequent shifts in asset prices have only served to reinforce the need to be more conscious of fundamentals in assessing risk exposures. Disruptive as such sudden changes can be in the short run, these recent trends may have salutary effects over the longer term if they lead to more prudent behaviour on the part of investors and better policies on the part of borrowers. These are essential requirements if stability in financial markets is to be preserved.

Many other developments over the last year are to be welcomed in themselves. The principal one is that economic expansion in the major industrial countries has continued and become more broadly based. Indeed, the rate of growth of output in the continental European countries in 1994 was significantly higher than had been expected at the beginning of the year. Moreover, while normal cyclical pressures are emerging in the industrial countries furthest advanced in the cycle, there has not been any sharp rebound in inflation. Even in countries whose currencies have depreciated significantly in recent years – Italy, the United Kingdom, Sweden and Canada – the effects to date on domestic prices have been surprisingly muted.

In short, we would seem still to be on the longer-run trend towards greater price stability which was initiated by the policy shifts of the late 1970s. While the advent of a period of relatively low inflation raises some difficult questions – in particular, how low is low enough – few would dispute that the progress made towards stable prices should be maintained.

There was also much to applaud in the economic performance of the non-industrial countries in 1994. Although buffeted at times by international financial developments, many countries in South-East Asia and Latin America again experienced rapid growth. A number of countries in eastern Europe also recorded increases in output after years of decline. While somewhat reduced from 1993, large amounts of international capital, much of it in the form of direct investment, continued to flow into many developing countries in the course of the year. This indicates a conviction that the longer-run prospects remain generally favourable for countries following market-oriented policies.

To emphasise the positive aspects of global economic developments in 1994 is not to deny that many sources of concern can also be identified. Indeed, this Annual Report puts particular emphasis on such concerns. Some of the policy problems which emerged were essentially cyclical and posed traditional difficulties. However, others have much deeper roots: debt accumulation in many countries, high unemployment in Europe, and still large imbalances and persistent inflation in many developing economies. In addition, there were other problems which arose which could be defined as atypical or specific to 1994, in particular the abruptness of the change in attitude of market participants towards risk-bearing.

Recent developments indicate that most industrial and many developing economies do seem to be on the right path towards sustainable growth and higher living standards, although the path has been somewhat bumpier than might have been foreseen a year or two ago. It is true that the global financial system has proved very resilient to the cascade of diverse shocks which characterised the past year, which is encouraging. Nevertheless, continued close attention will be required on the part of market participants and policy-makers alike to ensure that this systemic stability is maintained.

Monetary policy and problems of inflationary pressure

Cyclical pressures on inflation do appear to be increasing in some industrial countries. The long decline in the average inflation rate for the Group of Ten countries came to an end in mid-1994, and consumer price inflation has since been drifting upwards. If one looks at commodity prices, production costs and producer prices, the turn in direction is even more apparent. This development is not very surprising. Inflation came down in many countries over the last few years in an environment of excess capacity, and it has tended to stabilise more recently as capacity limits have come closer, at least in some countries. Anecdotal accounts to the contrary notwithstanding, it is difficult to detect from econometric evidence any significant shifts in traditional structural relationships affecting inflation.

While this might sound comforting to policy-makers looking for stable economic indicators to guide the future conduct of monetary policy, it is less reassuring to the extent that many offsetting changes affecting inflation may have been at work in recent years. Such a neat offset cannot be guaranteed in the future. On the one hand, international competition, faster productivity growth and significant improvements in retail distribution networks in some countries may all have contributed to lower inflation in 1994. On the other hand, inflationary pressures may have been exacerbated by increases in structural unemployment in certain countries. One question in continental Europe is the extent to which cyclically related increases in unemployment are being transformed over time into permanent unemployment. There is a further complication in Italy, the United Kingdom, Sweden and Canada, which have recently experienced large currency depreciations. In consequence, the tradable goods sector has been expanding rapidly and sectoral capacity constraints may already be biting. Finally, there is the issue of structural adjustment associated with technological change and the globalisation of trade. This is a continuous

process which destroys one part of the capital stock while acting to augment capacity in other ways. Assessing the net impact on "potential" and on inflationary pressures is not easy.

Faced with such difficulties, policy-makers in 1994 continued their search for other frameworks and indicators both to guide monetary policy and to assure economic agents of their longer-term commitment to price stability. This latter consideration, the establishment and maintenance of "credibility", is important in that it may reduce inflation expectations and in turn the output losses normally associated with controlling inflation. In both Germany and Switzerland, the traditional commitment to specifying monetary policy in terms of some measure of monetary expansion was reaffirmed in 1994. In spite of some significant problems during the year with respect to M3 in Germany, this framework has served both countries well over time. In many other countries, emphasis has been increasingly placed on announced quantitative targets or target bands for inflation control. While it is clearly too early to give a final assessment of whether this new approach will fill a void, and significantly enhance the credibility of policy-makers, the testing time seems to be rapidly approaching as cyclical pressures on inflation mount.

What has never been at issue is that policy credibility is more dependent on actions than words. Recognising this, and determined not to repeat past policy errors, the authorities in both the United States and the United Kingdom tightened monetary policy during 1994 well before objective measures of inflation began to rise. This was both unusual and welcome and increases the probability of a sustained expansion in those countries. In Germany, the decision to interrupt the lowering of short rates in the summer of last year, when the recovery had only just begun, was subsequently validated by rising output and rates of capacity utilisation as well as associated wage pressures. The decision of the Bundesbank to lower short rates further in the spring of 1995 was primarily a response to an easing of inflationary pressures in Germany, as a result of slower monetary growth and strong upward pressure on the Deutsche Mark. In Japan, the decision to lower interest rates in April this year was taken only in the context of a further, substantial rise in the effective value of the yen. Efforts made to maintain the links between a number of European currencies and the Deutsche Mark, while not always successful, did underline the anti-inflation commitment of the monetary authorities.

Financial market volatility and problems rooted in the past

The progressive tightening of US monetary policy as from February 1994 contributed to the slowing of the US economy in early 1995 and thus to some recent alleviation of fears of rising inflation. However, it is less clear that it had an immediate effect on such expectations. Bond yields rose sharply in the wake of the first policy move and generally continued to react in similar fashion until late in the year. Moreover, the increase in US rates was broadly matched or even exceeded by bond rate increases in other industrial countries, including those less advanced in the business cycle. Finally, there was a particularly sharp and durable rise in the volatility of European interest rates. On the whole, it was a

difficult year for bondholders, with some highly leveraged investors suffering large and well-publicised losses.

With hindsight, these bond rate movements now look much less worrisome than they did in the spring of 1994. In part, the initial rise in rates seems to have been a reversal of a speculative overshoot in late 1993, which took inflation-adjusted (ex post) bond yields in many countries well below average rates prevailing since the early 1980s. But it may also have been due to the bond market anticipating the stronger economic growth in 1994 that subsequently materialised. Since the level of real rates by the end of the year was not above that normally observed at similar stages of earlier cyclical upswings, it would have been more surprising had bond rates not risen significantly.

Recent developments also point to a renewed capacity on the part of financial markets to discriminate between countries with different fundamentals. A comparison of interest rate movements across countries indicates that increases were particularly large for countries with a relatively poor track record on inflation – with history seeming to play a greater role than recent performance in this regard. Investors also seemed to demonstrate an aversion to high government deficits, especially when it appeared that domestic political uncertainties might constrain efforts to redress the problem. For countries such as Italy, Sweden, Canada and Australia, where a combination of these factors was at work, the effects on interest rate differentials were at times pronounced, threatening a pattern of higher debt service payments and still higher interest rates if underlying problems were not adequately addressed.

The sharp and persistent rise in the volatility of interest rate movements, notably in Europe, seemed to belie the hope that low inflation rates would lead ultimately to greater market stability. However, some preliminary evidence suggests that countries with histories of high inflation and large fiscal deficits do experience higher interest rate volatility. Moreover, the increase in volatility was most pronounced in those European countries with a large proportion of government debt held by non-residents, and the biggest price changes occurred in months when heavily leveraged foreign buyers were selling. All this provides grounds for hoping that, when temporary liquidity problems are overcome and fiscal deficits brought under better control, lower inflation will indeed result in lower and less volatile bond yields.

A similar and related set of phenomena has been observed in the major foreign exchange markets over the last year or so. At the beginning of 1994 many market commentators were forecasting a rise in the value of the US dollar, reflecting expectations of a relatively stronger US economy and associated changes in interest rate differentials. In the event, however, the US dollar has been under constant pressure against the yen and the Deutsche Mark in spite of interest rate differentials (both short and long-term) that generally moved in favour of the United States. As in the case of the inflation history referred to above, the market seems to be putting increasing emphasis on the long history of US current account deficits, the associated build-up of external debt and fears about the prospects for a timely and adequate degree of fiscal restraint. This dollar weakness stands in sharp contrast to earlier periods when both government and external debt levels were much lower.

A renewed market focus on the long-run track record is also consistent with the continued strength of the yen, the Deutsche Mark and the Swiss franc, and the corresponding weakness of the Italian, Swedish and Canadian currencies. To hold assets denominated in the latter currencies, the market is demanding a larger risk premium in the form of higher interest rates or a lower exchange rate. However, it is also possible that recent developments reflect a degree of overshooting in exchange markets. For example, the growing reluctance of private Japanese investors to recycle current account surpluses back into dollars, after many years of losses in this currency, might be thought a potentially destabilising form of extrapolative behaviour. Such behaviour should nevertheless be viewed as a deviation from a basically desirable trend towards greater market attention to fundamentals.

A similar but more brutal shift in market focus towards longer-term considerations has been seen in the case of investment in emerging economies. The wide differences between countries, particularly in terms of government policies and underlying patterns of saving and investment, are being increasingly recognised. Capital flows into emerging economies in 1994 reflected such considerations, but the Mexican crisis which broke near the end of the year threw many of the issues into stark relief. This was all the more so since Mexico had, in recent years, established a very sound reputation as a result of reform efforts pursued consistently for almost a decade. What emerged from the Mexican experience is that a balanced fiscal position does not ensure macroeconomic stabilisation; external balance and other considerations also matter. In Mexico, the combination of deregulation of the banking system and heavy capital inflows led to a very rapid expansion of bank credit that permitted a reduction in domestic savings. This resulted in a significant increase in the real exchange rate and a large and eventually unsustainable current account deficit.

Even if the cause of the crisis can be found in the weakness of certain economic fundamentals, the fact that it could occur so suddenly is nevertheless disquieting. The trigger for the crisis was a series of political shocks which eventually made it impossible for the Mexican authorities to roll over short-term dollar-linked debt held by non-residents. This suddenness points to the dangers inherent in large upward movements in real exchange rates generated by easily reversible capital flows. Finally, the subsequent difficulties of the Mexican financial system underline the importance of sound banking, regulatory and supervisory structures in emerging economies, and the desirability of making regular assessments of the capacity of financial systems to accommodate large and unexpected changes in macroeconomic variables.

Problems with market instruments and infrastructure

The global financial system has been buffeted by many shocks over the last year or so. To those mentioned above must be added the failure of Baring Brothers and the revelation that a number of other financial intermediaries and end-users also suffered large losses on derivative transactions in 1994. It is noteworthy, however, that the system at large has functioned without interruption. While risk spreads of various sorts have ebbed and flowed in consequence, funds have

generally continued to flow smoothly from ultimate lenders to borrowers, with the international banking system maintaining an important intermediary role. This stability is to be welcomed, and reflects in part the great efforts made to improve risk management procedures in recent years by financial institutions as well as oversight bodies, both national and international.

With respect to better risk management at the level of firms, the recognition that some firms experienced large losses will have had an important salutary effect on others. The decision of the UK authorities not to bail out Baring Brothers will act in the same direction. Over the year, there was indeed a shift towards the use of "plain-vanilla" derivatives, away from more complex instruments. The more defensive stance of investors was also reflected in a preference for shorter-term assets and a swing towards investments with well-capitalised financial institutions.

A number of reports released in 1994 also stressed the usefulness of market discipline for policing the use of derivatives, and noted that increased disclosure by firms of their general attitude to risk-taking was necessary for the market to play such a role. Over time, this approach could prove a desirable complement to more traditional supervisory practices, which have in any event been changing progressively. In April 1995 the Basle Committee on Banking Supervision announced proposals for a supplement to the 1988 Capital Accord to cover market risks. In addition, it published a discussion paper analysing the issues which arise in connection with the use of risk assessment models, developed by firms for their own internal purposes, as a basis for calculating capital requirements for market risks. In all of these endeavours, the Basle Committee and the authorities supervising other financial firms that are internationally active have tried to deepen their mutual understanding and cooperation.

With regard to the management of systemic risks, numerous steps were taken over the past year to enhance the reliability of domestic and cross-border clearing and settlement systems in the face of ever-expanding turnover in financial markets. The globalisation of financial markets means that international cooperation between central banks, which have general responsibilities in this area, has become more important. In March 1995 the Committee on Payment and Settlement Systems of the Group of Ten published an analytical report on cross-border securities settlements, and it is currently studying various measures which could be taken to reduce risk in this area. Needless to say, in spite of recent efforts and broadly favourable experience, much remains to be done to adapt the financial infrastructure to a global and increasingly deregulated financial environment.

II. Developments in the world economy

Highlights

The desynchronisation of the business cycle in the main regions of the world economy since the early 1990s gave way to more balanced and evenly spread growth in 1994. Continued strong growth in the United States and the South-East Asian countries provided a solid foundation for a faster than expected export-led recovery in most of Europe last year. The US expansion, together with the implementation of domestic liberalisation and stabilisation programmes, helped sustain Latin American growth, while the recovery in western Europe allowed a number of eastern European countries to reap the rewards of rapid transformation strategies by posting positive growth rates for the first time in the 1990s. The African continent also benefited from the pick-up in world demand and the rise in commodity prices.

The increase in global demand in 1994 took place against a background of stable inflation in the industrial countries. However, for countries in the early phase of cyclical recovery, such stability is not unusual as prices continue to be influenced by the negative gap between actual and potential output. Unusually low inflation in a number of countries during the current cycle can be explained by the depth and length of the recent recession, partly the result of asset price deflation and excessive indebtedness.

Looking ahead, the question arises whether the upswing and the inflationary process in the industrial countries will be different from previous cycles. In the United States nominal wages have thus far been subdued in spite of relatively low unemployment and high capacity utilisation. In many countries restructuring in industry has been widespread, leading to large productivity gains and declining unit labour costs. However, in other countries there are already signs that low nominal wage inflation has reached a turning-point despite relatively high rates of unemployment. Moreover, rapidly rising exports in several countries that have experienced currency depreciation have substantially raised capacity utilisation rates and inflationary pressures in the manufacturing sector.

A number of structural problems in the industrial countries also seem likely to persist. High unemployment is a continuing preoccupation in many European countries, suggesting that attempts by governments to increase labour market flexibility have so far been insufficient. Relatively high real interest rates continue to reflect low saving rates, largely the result of government budget deficits. The government net debt ratio in the industrial countries rose further in 1994, bringing the total increase since the end of the 1980s to more than 10% of GDP.

Elsewhere in the world the picture was more mixed, with strong demand growth often leading to pressure on inflation and external balances. In many Latin American countries a fall in inflation was associated with an appreciating real

exchange rate and a deteriorating current account. The liquidity crisis and subsequent surge in prices in Mexico at the beginning of this year show that the underlying improvement in inflation may have been less than earlier figures suggested. These events indicate the extent to which many reforming countries, including formerly centrally planned economies, face a difficult balancing act between the need for external competitiveness, to allow the open sector to adjust to the new regime of trade liberalisation and import competition, and the desire to use the nominal exchange rate as an anchor for domestic stabilisation efforts.

In many Asian countries current account deficits have been limited by high domestic saving, resulting in part from a climate of macroeconomic stability and selective government incentives. Although inflation remains moderate, there does appear to be a risk of overheating in some countries as industrial capacity and infrastructure are strained and wages continue to grow at a brisk pace.

Six years of transition experience in the formerly centrally planned economies, with a wide variety of transformation strategies, have shown that rapid liberalisation and stabilisation are not inconsistent with the fact that structural transformation is necessarily a lengthy process. Firm macroeconomic policies have played an important role in facilitating microeconomic change and in reviving private initiative. Yet inflation has proved stubborn in most of these countries, owing in many cases to comparatively large government budget deficits.

Economic developments in the industrial countries

Main features of the current upswing

Unexpectedly high growth with stable inflation

A general recovery of output in the industrial countries took place in 1994. The growth rate of 3.0% was significantly higher than forecast a year ago. This unexpected strength characterised not only countries which had been in recession in 1993, but also those that were already well advanced in the cycle. In the United States output grew at an annual rate of 4.1%, the highest in a decade. At the same time, average inflation, as measured by consumer prices, decreased further to 2.4% for the industrial countries as a group.

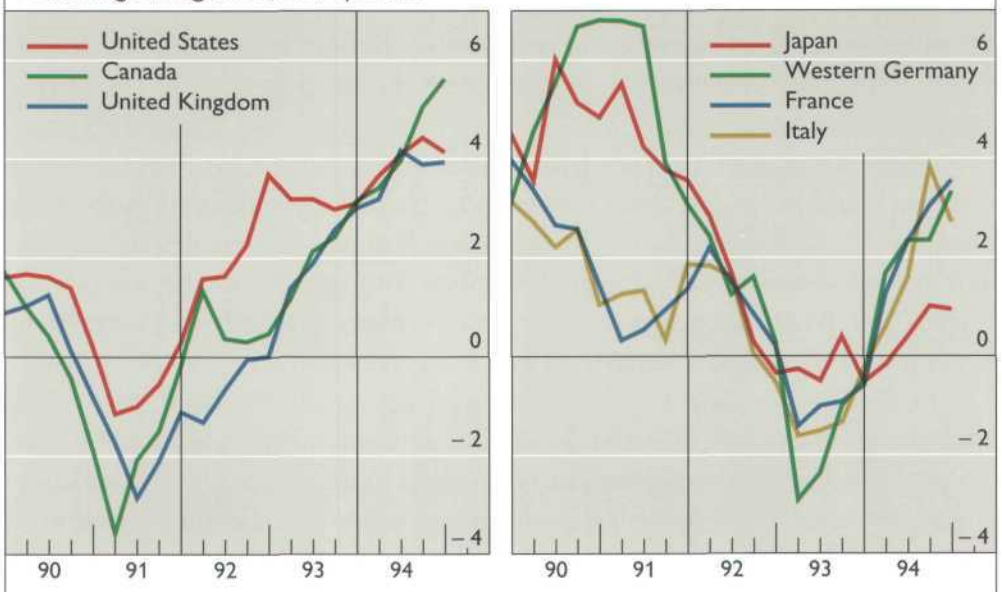
If there are similarities across the industrial countries, there are also differences. Graph II.1 indicates that the current cycle in continental European countries and Japan remains out of phase with that in English-speaking countries. Indeed, the major continental European economies are now estimated to lag the US cycle by more than six quarters, compared with an average lag of about one to two quarters in the 1970s and early 1980s. This desynchronisation is most evident from a comparison of the two extreme cases, the United States and Japan. The US economy is well into its fourth year of economic expansion. The Japanese economy, in contrast, is only gradually working its way out of a deep and long recession, with continuing uncertainty about the pace of recovery due to the appreciation of the yen, ongoing balance-sheet restructuring by banks and the corporate sector and the aftermath of the Kobe earthquake.

Domestic demand is the driving force ...

In both Japan and the United States domestic demand was the driving force behind growth in 1994, since net exports made a negative contribution. However,

Real GDP in the major industrial countries

Percentage changes over four quarters



Source: National data. Graph II.1

... in the United States ...

the sources of domestic demand expansion differed. In the United States a key factor has been the continued rapid growth in business fixed investment, particularly spending on capital equipment, in response to high capacity utilisation rates and the need to restructure in the face of increasing competition from newly industrialising countries. Private consumption spending also continued to rise significantly in 1994, bringing the household saving rate back down to its low pre-recession level of around 4%. Although exports grew quite rapidly in 1994, underpinned by the continuing weakness of the dollar, they were outpaced by imports, reflecting the relatively advanced cyclical position of the US economy.

... and Japan

In contrast to the US experience, private investment in Japan remained subdued in 1994 following the investment boom and bust of the late 1980s and the related asset price bubble. Private investment has contributed negatively to growth for a record three years. Domestic demand was driven mainly by consumption, stimulated by a further improvement in the terms of trade and the resulting downward pressure on domestic prices, as well as by a temporary reduction in taxes. Some recovery of consumer confidence was also reflected in a rise in housing investment, following several years of decline.

Signs of a "dual" expansion in countries with depreciating currencies

A common feature of the current economic situation in many countries has been strong export and import growth, reflecting the fact that most of the strengthening of demand has taken place in the tradable goods sector (see Table II.1 and Chapter III). Indeed, in the countries which have experienced quite large currency depreciations in the present cycle – Canada, Italy, Finland, Sweden, Spain and the United Kingdom – signs of an imbalanced or "dual" expansion are evident, combining a vibrant manufacturing sector with a services sector which is still subdued in some countries after earlier excesses. Graph II.2 illustrates the very different dynamics of retail and export sales in certain of these countries. By increasing the price of tradables relative to non-tradables, nominal depreciation

should help shift resources towards the open sector of the economy. However, to the extent that such a reallocation of factors of production takes time, existing unemployment in the sheltered sector may not fall rapidly and inflationary pressures in the open sector could rise. As the recovery becomes more broadly based, the former problem may be alleviated, though potentially at the cost of aggravating the latter one.

There are signs that a more balanced demand expansion has started in some of these countries as increased profits and high capacity utilisation rates in the open sector are not only leading to stronger investment but are also spilling over into increased demand for non-tradable goods. This process is most advanced in Canada and the United Kingdom, where the recovery is already well established, but it is also evident in a number of other economies.

In Canada investment in machinery and equipment has been very strong since the second half of 1993 and non-residential construction began to rise again last year. Consumer spending was also somewhat more buoyant in 1994, although it remains constrained by high unemployment and only moderate increases in real disposable income. In the United Kingdom a pick-up in investment only

Real GDP, domestic demand, imports and exports

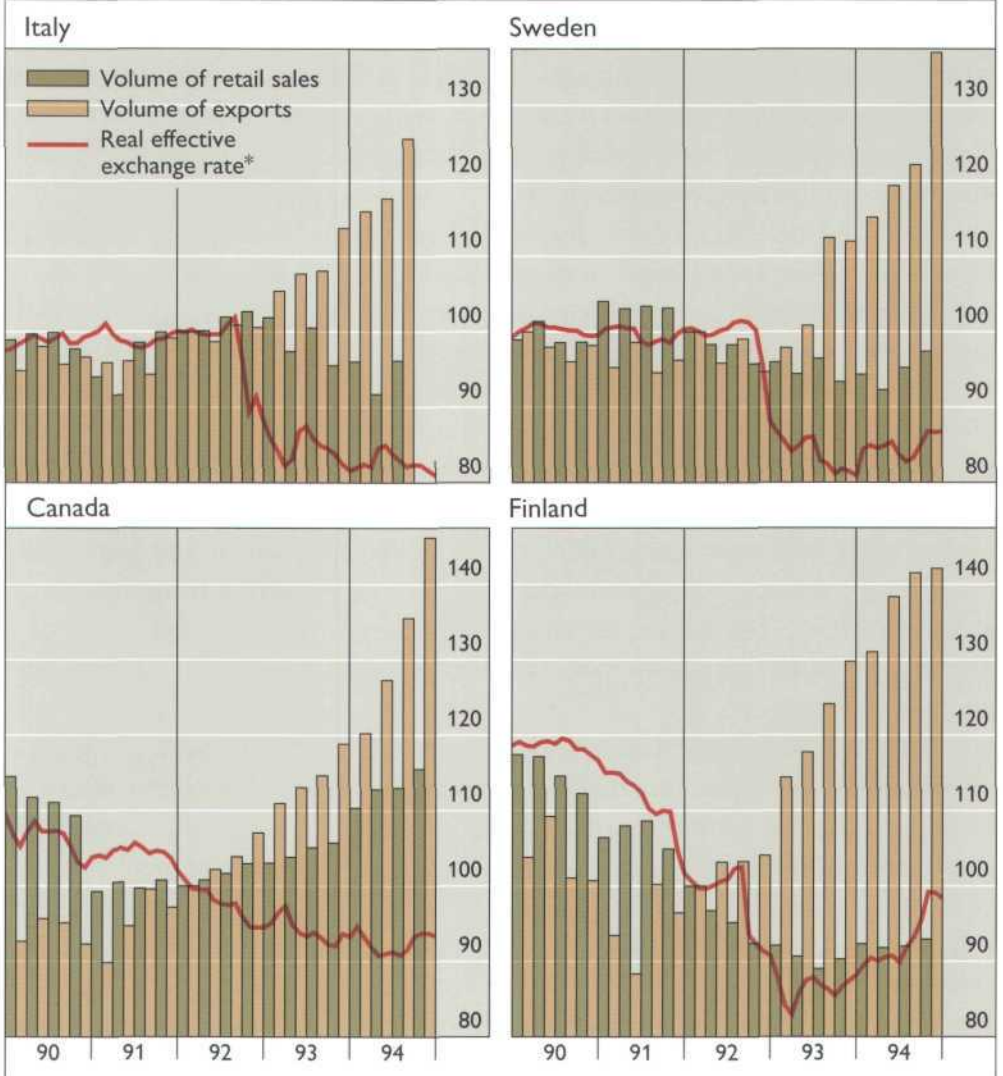
Countries	Real GDP			Domestic demand		Imports		Exports	
	1983–92	1993	1994	1993	1994	1993	1994	1993	1994
	annual percentage changes								
United States	2.8	3.1	4.1	3.9	4.7	10.7	13.4	4.1	9.0
Japan	4.0	−0.2	0.5	−0.1	1.1	−0.3	6.7	−1.1	3.3
Western Germany	3.0	−1.7	2.4	−1.6	2.7	−3.0	8.0	−3.0	6.3
France	2.2	−1.5	2.7	−2.3	2.9	−3.4	6.6	−0.4	5.8
Italy	2.3	−1.2	2.2	−5.5	1.9	−7.8	9.8	9.4	10.9
United Kingdom	2.4	2.3	3.7	2.2	3.0	2.8	5.9	3.3	8.9
Canada	2.7	2.2	4.5	1.8	3.0	8.8	9.6	10.4	14.4
Group of Seven[1]	*2.9*	*1.2*	*3.0*	*1.2*	*3.3*	*4.1*	*10.1*	*2.7*	*7.8*
Australia	3.0	3.9	5.4	3.5	6.5	5.2	14.7	7.4	8.4
Austria	2.6	−0.1	2.7	0.1	4.1	−0.6	7.8	−1.0	4.9
Belgium	2.3	−1.7	2.3	−1.7	1.6	1.6	5.4	1.6	6.2
Denmark	2.0	1.5	4.4	1.0	5.5	−4.1	10.5	−2.0	6.9
Finland	1.5	−1.5	3.9	−5.9	3.3	0.7	12.6	16.7	12.5
Greece	1.8	−0.5	1.0	0.4	1.3	2.3	3.7	−0.7	4.0
Ireland	3.9	4.0	5.5	0.2	4.0	5.9	9.0	9.6	9.8
Netherlands	2.6	0.4	2.4	−0.6	2.0	0.2	5.2	1.7	5.6
New Zealand[2]	1.4	5.3	3.8	6.2	7.2	11.9	19.1	8.4	7.4
Norway	2.8	2.4	5.1	3.2	4.7	3.2	7.2	1.6	7.6
Portugal	2.6	−1.2	1.0	−0.9	0.5	−3.2	−0.2	−5.1	1.1
Spain	3.2	−1.1	2.0	−4.1	0.7	−5.1	11.0	8.3	17.7
Sweden	1.6	−2.6	2.2	−5.6	1.4	−2.8	13.2	7.6	13.8
Switzerland	2.0	−0.9	2.1	−1.8	4.4	−1.0	8.8	1.3	3.9
Other industrial[1]	*2.5*	*0.1*	*2.9*	*−1.2*	*2.9*	*−0.3*	*9.4*	*4.5*	*9.4*
All industrial[1]	2.9	1.1	3.0	0.9	3.2	3.5	10.0	2.9	8.0

[1] Calculated using weights based on 1990 GDP and PPP exchange rates. [2] Fiscal years beginning 1st April.

Sources: OECD, national data and BIS estimates. Table II.1

Retail and export sales and the exchange rate in selected countries

First quarter 1992 = 100



* In terms of relative wholesale prices.

Sources: OECD and national data.

Graph II.2

became evident in the second quarter of 1994, raising concerns about increasing inflationary pressure from early capacity constraints. Consumer expenditure remained relatively strong in 1994 in spite of the squeeze on real incomes due to modest real wage growth, tax increases and deteriorating terms of trade resulting from currency depreciation. In most other European countries that experienced large nominal depreciations, investment in machinery and equipment also rose quite sharply in the second half of 1994, accounting for a rapid increase in imports. Growing consumer confidence and the recent pick-up in retail sales suggest that the recovery is spreading to the private consumption sector in these countries as well. In Italy, for example, consumer expenditure bounced back quite vigorously after a steep decline in 1993.

Export-led recovery in Germany ...

In European countries with relatively strong currencies, a traditional export-led recovery is nevertheless apparent. In western Germany export demand began

to strengthen in 1993 and this was followed by an upsurge in investment activity as capacity utilisation rates started to rise. However, consumption demand remained subdued as higher taxes, high unemployment and slow real wage growth limited the growth in real household disposable income. Eastern Germany's already high growth accelerated further to over 9%, driven by both strong investment and consumption demand. In France, on the other hand, investment was slow to pick up despite a high level of corporate cash flow. Consumption demand for durable goods rose largely on account of government incentives for the purchase of new cars.

... and France

With the exception of the United Kingdom, the economies most advanced in the cycle also experienced a strong acceleration in the rate of growth of employment. As a result, unemployment rates have fallen significantly from their peak levels, with the most rapid improvements over the last year being seen in Canada, New Zealand and Australia (see Table II.2). The initial fears that widespread downsizing and restructuring would lead to a jobless recovery were exaggerated. As is shown in Graph II.3, in the English-speaking countries the growth of aggregate labour productivity has been similar to that in previous recoveries. While total employment in the United Kingdom is still lower than the level at the trough three years ago, this is not very different from experience in earlier cycles. The fall in the unemployment rate is mainly the result of a decrease in the labour supply, reflecting demographic factors and a "discouraged workers" effect.

Employment accelerates in economies ahead in the cycle ...

The negative or very slow employment growth since the trough of the cycle in continental European countries may reflect the early phase of the recovery. At such a stage it is normal for productivity to rise faster owing to the unwinding of previous labour hoarding and the reluctance of firms to hire new workers until the recovery is firmly established. It remains to be seen whether employment creation in Europe will pick up as the expansion continues. The evidence from European countries which recorded high growth rates in 1994 is encouraging: in Denmark, Ireland and Norway private sector employment is estimated to have increased by about 2% last year. In a number of countries, such as Italy, the labour market shake-out was exceptionally large in the current cycle. While this gave rise to unusual gains in labour productivity in the early phase of the recovery, it may also lead to relatively faster growth in employment at a later stage.

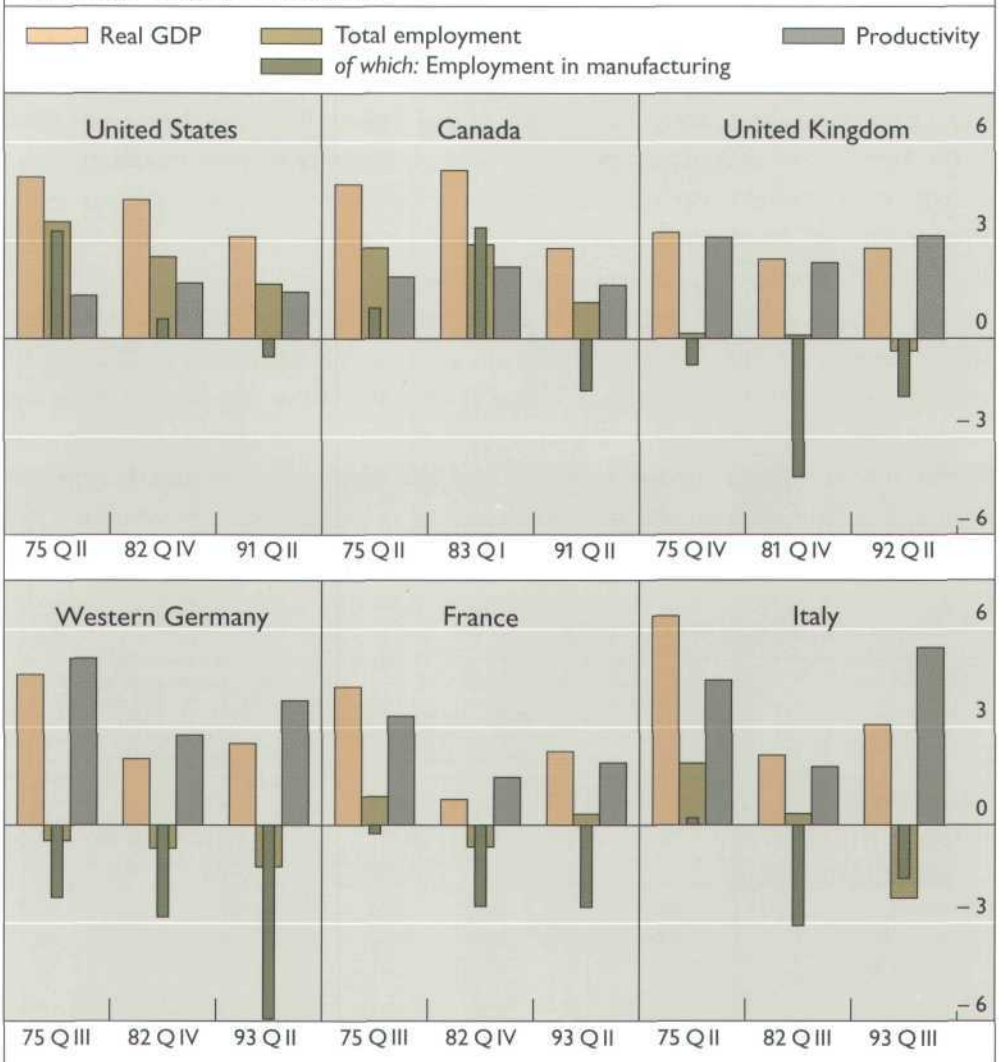
... but has not yet recovered in most continental European countries

The pattern of employment growth has also differed across economic sectors, with service industries generally adding more jobs than goods-producing industries. In the United States and Canada impressive gains were registered in the manufacturing and construction sectors last year, although in neither case has employment reached the level recorded at the time of the cyclical trough. In contrast, job creation in services has been very strong, in part reflecting the increasing importance of part-time work. Within Europe patterns differ, depending, among other things, on exchange rate developments. In western Germany the labour shake-out in manufacturing was extraordinary, with a fall in employment of more than 10% since the trough in output in early 1993. In Italy employment fell more in the services sector owing to the effects of real exchange rate depreciation and to the structural reforms which have introduced greater

Different patterns across sectors

Output and employment growth during periods of recovery

Percentage changes, at annual rates



Note: The dates refer to the start of each recovery period and cover: for the United States and Canada, fifteen quarters; for the United Kingdom, eleven quarters; for western Germany and France, seven quarters; for Italy, five quarters.

Source: National data. Graph II.3

competition into the sheltered sector. Nevertheless, recent developments generally confirm the longer-term trend towards relatively faster job creation in the services sector. To some extent, they may also reflect a statistical phenomenon since many manufacturing industries have started to outsource services which previously were provided in-house.

Stable or falling inflation ...

Higher than expected growth in the industrial countries in 1994 took place against a background of relatively low, and in many countries still falling, inflation (see Table II.2). The decline in trend inflation since the early 1980s is uniform across the industrial countries and is consistent with the deliberate strategy of monetary authorities of keeping inflation at low and stable levels in order to promote long-term growth and investment.

... responding to negative output gaps

That inflation in most countries is still subdued in this phase of the cycle is not too surprising as prices are still responding to the output gaps that opened

up during the recession. Graph II.4 indicates how rising inflation was stopped and reversed in the early 1990s as real output fell below its trend. However, as the margin of under-utilised capital and labour diminishes, the economy's growth rate becomes increasingly constrained by the growth rate of potential, which is determined by the growth of the labour force, net additions to the capital stock and increases in the productivity of labour and capital. If, in the absence of slack in the labour and product markets, increases in aggregate demand outstrip the growth of potential output, pressures to raise wages and prices are likely to emerge. Indeed, "potential output" is sometimes defined as that level of output above which such pressures begin to arise.

A discussion of the implications for monetary policy of closing output gaps and various other indicators of inflationary pressures is presented in Chapter IV. With a view to that discussion it is useful to assess how the path of potential output might have changed in the current cycle and what the implications may be for future inflationary pressures. This might shed light on whether recent developments in inflation are part of the normal cyclical process or whether they indicate underlying structural changes. However, not all the risks are on the

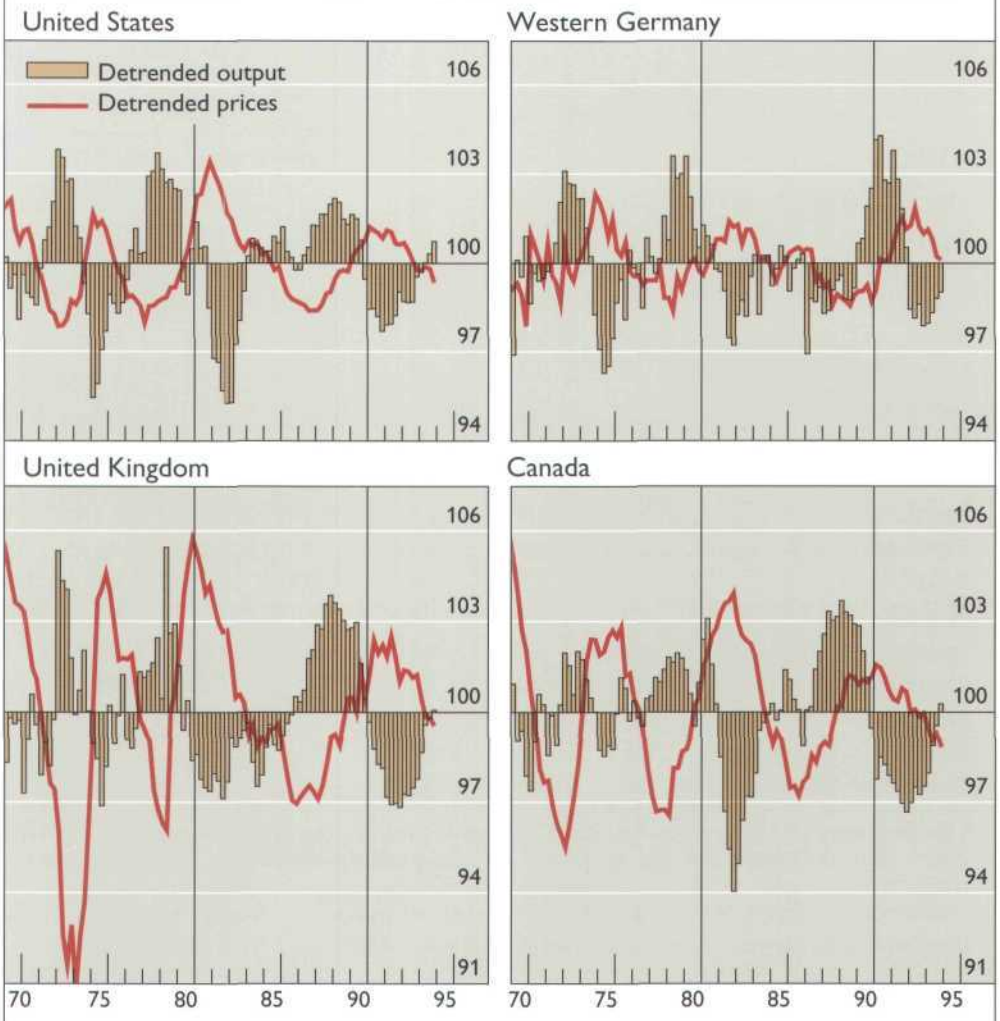
Inflation and unemployment

Countries	Consumer prices				Unemployment rate			
	1983–92	1993	1994	1995 Q1	1983–92	1993	1994	1995 Q1
	annual percentage changes				in percentages			
United States	3.8	3.0	2.6	2.8	6.8	6.8	6.1	5.5
Japan	1.8	1.3	0.7	0.1	2.5	2.5	2.9	3.0
Western Germany	2.2	4.1	3.0	2.3	8.2	8.3	9.2	9.1
France	4.4	2.1	1.7	1.7	9.7	11.7	12.5	12.3
Italy	7.4	4.2	3.9	4.4	9.5	10.4	11.5	12.1
United Kingdom	5.5	1.6	2.5	3.4	9.1	10.3	9.3	8.4
Canada	4.3	1.8	0.2	1.6	9.7	11.3	10.4	9.7
Group of Seven[1]	*3.7*	*2.6*	*2.2*	*2.3*	*6.8*	*7.3*	*7.1*	*6.9*
Australia	6.4	1.8	1.9	3.9	8.4	10.9	9.7	8.9
Austria	3.0	3.6	3.0	2.5	5.2	6.8	6.6	6.3
Belgium	3.5	2.8	2.4	1.8	10.2	9.4	10.0	10.0
Denmark	4.2	1.3	2.0	2.4	9.3	12.3	12.1	10.7
Finland	5.3	2.2	1.1	1.8	5.8	17.9	18.4	16.9
Greece	18.0	14.4	10.9	10.6	6.1	7.1	7.2	6.9
Ireland	4.7	1.4	2.3	2.5	15.5	15.6	14.8	14.4
Netherlands	1.8	2.6	2.8	2.4	7.9	6.4	7.5	7.4
New Zealand	7.9	1.3	1.8	4.0	6.4	9.5	8.2	7.5[2]
Norway	5.7	2.3	1.4	2.6	3.3	5.5	5.2	5.0
Portugal	14.9	6.5	5.2	4.5	6.4	5.5	6.8	6.8[2]
Spain	7.6	4.6	4.7	4.8	18.9	22.7	24.2	23.8[2]
Sweden	6.7	4.6	2.2	2.6	2.6	8.2	8.0	7.6
Switzerland	3.2	3.3	0.9	1.4	1.0	4.5	4.7	4.2
Other industrial[1]	*6.1*	*3.7*	*3.1*	*3.4*	*9.5*	*11.9*	*12.3*	*11.9*
All industrial[1]	4.1	2.8	2.4	2.5	7.3	8.1	8.0	7.7

[1] For inflation, calculated using weights based on 1990 GDP and PPP exchange rates; for the unemployment rate, calculated on the basis of the labour force in 1990. [2] Fourth quarter 1994.

Source: National data. Table II.2

Output and prices in selected countries*



* Detrended quarterly real GDP and GDP deflator using a Hodrick-Prescott filter.

Source: National data. Graph II.4

upside. A number of structural problems, such as stubbornly high unemployment and persistent government deficits, could restrain the recovery in countries which are lagging in this cycle, in particular when export demand slows.

Potential output during the current cycle

The level of potential output is not directly observable and, in consequence, neither is the size of the gap between actual and potential output. Table II.3 presents two estimates of output gaps in 1994 taken from a recent OECD study. It is clear that, although most industrial economies other than the United States are still operating below potential, in many of them the gap is closing quite quickly. In the countries that are well advanced in the cycle, such as Australia, Canada, the United Kingdom and the United States, growth rates in 1994 outstripped the estimated growth in potential by quite a wide margin. On the other hand, growth in most continental European countries was not much above potential. Nevertheless, in many of them output gaps are fairly modest, often reflecting relatively mild recessions.

Actual and potential GDP

Countries	Actual GDP growth			Potential output growth[1]				Output gap[2]	
				Total	Employ-ment[3]	Capital[3]	Produc-tivity[3,4]	A	B
	1971–80	1981–90	1994	1994				1994	
	annual percentage changes							in percentages	
United States	2.8	2.6	4.1	2.7	1.0	0.9	0.7	1.0	0.4
Japan	4.5	4.1	0.5	3.5	1.0[5]	3.8[5]	2.4[5]	−2.3	−2.0
Western Germany	2.7	2.3	2.4	2.5	0.0	0.7	1.7	−1.2	−1.1
France	3.3	2.4	2.7	2.2	0.2	0.6	1.4	−3.5	−2.3
Italy	3.7	2.2	2.2	2.2	0.2	0.4	1.7	−2.0	−1.7
United Kingdom	2.0	2.6	3.7	2.3	0.3	0.2	1.8	−3.9	−2.0
Canada	4.6	2.9	4.5	2.7	1.2	1.0	0.5	−2.9	−2.8
Australia	3.4	3.2	5.4	2.9	1.2	0.7	1.0	−1.4	−0.6
Austria	3.6	2.1	2.7	2.2	0.4	1.1	0.8	−1.7	−1.2
Belgium	3.2	1.9	2.3	2.3	0.4	0.7	1.2	−2.1	−1.7
Denmark	2.2	2.0	4.4	2.4	0.2	0.6	1.5	−1.9	0.0
Finland	3.5	3.2	3.9	3.3	1.1	0.0	2.2	−5.0	−4.1
Greece	4.7	1.5	1.0	1.5	0.3	0.9	0.3	−2.3	−1.2
Ireland	4.7	3.7	5.5	4.9	1.1	0.4	3.3	−0.1	0.1
Netherlands	2.9	2.0	2.4	2.4	0.6	0.8	1.0	−2.1	−1.1
Norway[6]	4.8	2.5	3.9	1.2	0.0	0.4	0.8	−2.1	−0.2
Spain	3.5	3.0	2.0	2.1	0.0	0.6	1.5	−3.2	−2.3
Sweden	2.0	2.0	2.2	2.1	0.5	0.4	1.3	−3.9	−1.9

[1] Business sector. [2] Output gap A is based on a production function approach, and B on a univariate time-series approach using a Hodrick-Prescott filter (for details see the source mentioned below). [3] Percentage point contribution to potential output growth (except for Japan). [4] Trend total factor productivity. [5] Annual growth rates; a CES production function is used, so that a comparable decomposition of potential is not available. [6] Except for the first two columns, mainland Norway.

Sources: OECD Working Paper No. 152 and national data. Table II.3

Productivity growth and adjustment in the labour market

Falling unit labour costs

One explanation for the moderation of inflation to date has been the behaviour of domestic labour costs. As can be seen in Table II.4, unit labour costs in many countries have fallen over the last year, the combined result of relatively low wage inflation and high productivity growth compared with the early 1990s. Although a rapid increase in productivity is normal in the early stages of an economic upturn, widespread restructuring and cost-cutting in manufacturing may have contributed to a structural improvement in productivity, reducing labour demand and restraining wage-push effects.

Widespread restructuring in manufacturing following a squeeze on profit margins ...

A comparison of US productivity growth in manufacturing in the current cycle with that in the previous cycle does not indicate such an unusual improvement. In contrast, in some other countries such as Canada, Italy, the United Kingdom and possibly Germany, productivity growth was rather different from normal. In these countries a real wage gap developed during the previous boom. That is to say, as real producer wages (i.e. nominal wage costs relative to producer prices) rose faster than productivity, profit margins in manufacturing declined. This increase in real producer wages resulted from a combination of rising nominal wages, due to an overheating of the domestic sector, and constraints on output prices which prevented manufacturing firms from passing

on these wage pressures fully to their customers. The pass-through of wages into output prices was limited not only because of increasing international competition from newly industrialising countries, but also because of nominal exchange rate constraints. In Germany, Italy and the United Kingdom the nominal exchange rate was fixed within the ERM, while in Canada a tight monetary policy stance in the late 1980s led to an appreciation of the currency. As a result profit margins in the open sector were squeezed.

... contributes to high productivity growth, rising unemployment ...

The weak position of the manufacturing sector in these countries was aggravated by the worldwide downturn in economic activity and heightened the incentive to achieve faster productivity growth. Indeed, productivity growth in the manufacturing sector fell much less during the recent recession, with the result that the cumulative increase in productivity since the start of the recession has been significantly greater than in the expansion of the early 1980s. This outcome reflected heavy labour-shedding in the manufacturing sector, leading to a substantial increase in the unemployment rate.

... and a fall in wage inflation

The decline in wage inflation since the early 1990s can be explained for the most part by the response of wages to the rise in unemployment. Faster productivity growth and falling real producer wages have both led to an improvement in profit margins. The speed with which these have been restored has also depended on exchange rate developments. Currency depreciation in a number of countries has helped manufacturing firms to reduce real producer

Unit labour costs and their components*

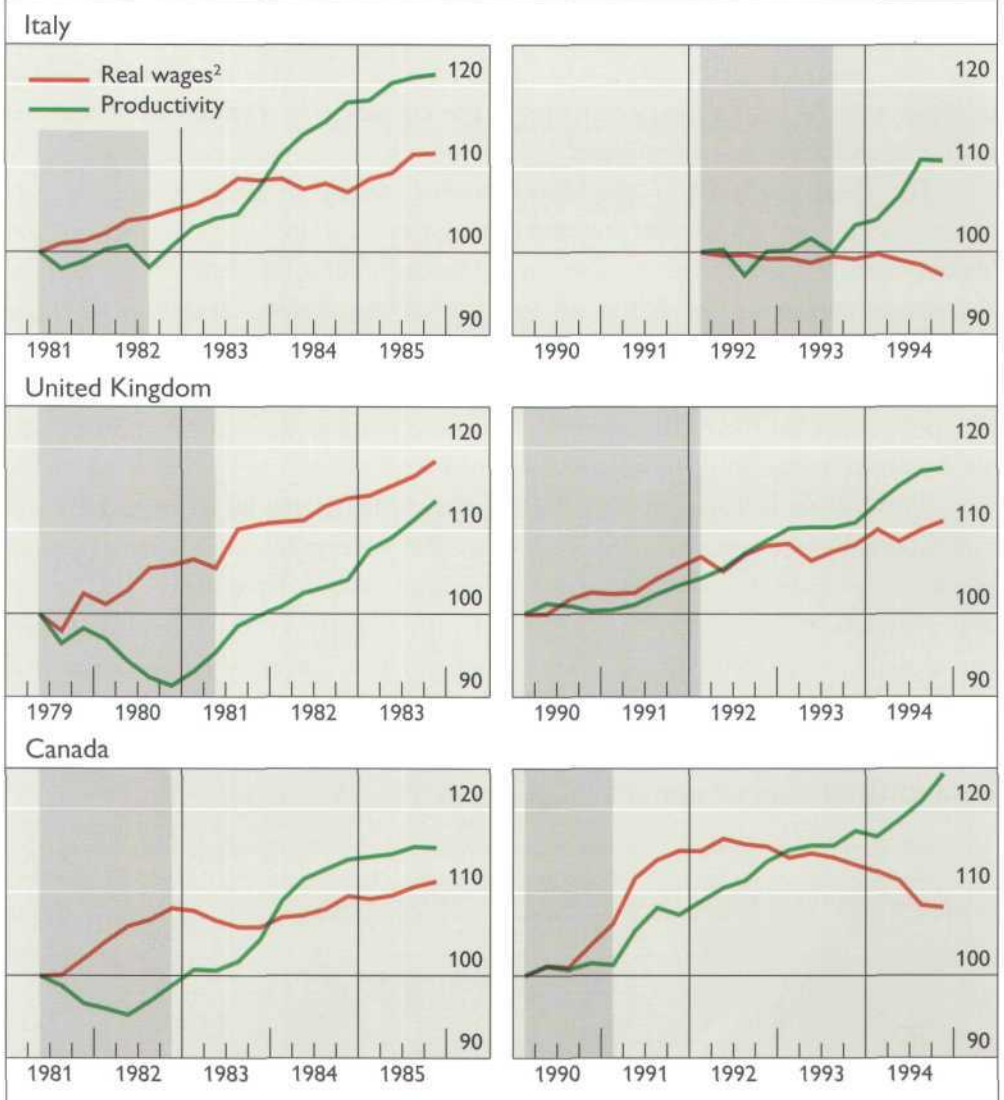
Countries	Unit labour costs	Producer prices	Nominal wages	Consumer prices	Productivity	Unit labour costs	Producer prices	Nominal wages	Consumer prices	Productivity
	1990–93					1994				
	annual percentage changes									
United States	2.2	2.4	4.5	3.9	2.3	–1.9	0.6	2.9	2.6	4.9
Japan	5.0	–0.7	4.9	2.3	–0.1	–0.4	–2.0	2.5	0.7	2.9
Western Germany	3.9	1.3	6.5	3.6	2.5	–6.1	0.7	1.6	3.0	8.3
France	2.6	–1.7	4.5	2.8	1.8	–3.6	1.4	3.0	1.7	7.0
Italy	4.9	3.6	7.4	5.5	2.4	–2.7	3.8	3.9	3.9	6.8
United Kingdom	4.2	4.6	7.2	5.1	2.9	–0.1	2.5	4.7	2.5	4.8
Canada	1.0	0.7	5.5	3.4	4.5	–1.5	5.7	2.0	0.2	3.6
Australia	0.1	2.7	4.1	3.3	3.9	–3.2	0.8	2.8	1.9	6.1
Austria	2.1	2.0	6.1	3.6	4.0	–3.6	2.5	3.9	3.0	7.8
Belgium	1.7	–0.6	4.1	3.0	2.4	..	1.7	2.4	2.4	..
Denmark	1.2	0.2	3.7	2.1	2.5	–7.1	1.1	3.3	2.0	11.3
Finland	–1.2	1.8	4.8	3.9	6.1	–5.9	1.6	4.2	1.1	10.5
Greece	12.0	13.9	15.0	17.5	2.7	11.1	8.7	13.1	10.9	1.9
Ireland	0.0	1.4	5.1	2.8	5.2	–2.5	1.1	2.7	2.3	5.4
Netherlands	3.0	1.2	3.9	2.8	0.9	–5.7	0.5	2.3	2.8	8.5
Norway	3.3	1.5	4.2	3.0	0.8	0.5	1.4	2.9	1.4	2.4
Spain	6.6	3.2	8.0	5.8	1.2	–5.0	4.4	4.7	4.7	10.2
Sweden	0.7	2.6	4.9	6.6	4.2	–0.7	4.2	4.7	2.2	5.3
Switzerland	1.8	1.8	5.2	4.6	3.4	–9.5	–0.3	1.9	0.9	12.5

* In the manufacturing sector. Definitions of series differ across countries.

Sources: National data and BIS estimates. Table II.4

The real wage gap in manufacturing

Quarterly averages, peak of the previous and current business cycles[1] = 100



[1] Peaks to troughs: for Italy, 1981 Q II–1982 Q III and 1992 Q I–1993 Q III; for the United Kingdom, 1979 Q II–1981 Q II and 1990 Q I–1992 Q I; for Canada, 1981 Q II–1982 Q IV and 1990 Q I–1991 Q I.
[2] Wage costs deflated by producer prices.

Source: National data. Graph II.5

wages and increase profit margins quite substantially (see Chapter IV). In Japan, in contrast, the real appreciation of the yen and the resulting rise in import penetration have led to a deflation of output prices, more than offsetting the effect on profits of the recent fall in unit labour costs.

Factors affecting the NAIRU:

Whether the restructuring process in manufacturing has raised potential output and thereby reduced current inflationary pressures also depends on whether the effect of the rise in productivity has been offset by an increase in the "non-accelerating inflation rate of unemployment" (NAIRU) following the recession. During the current cycle, several factors have had potentially offsetting effects on the NAIRU. First, the big sectoral shifts in employment referred to earlier may have contributed to a rise in the NAIRU to the extent that the skills of workers in declining sectors differ from the skills required in service industries.

sectoral shifts;

demographic trends;

Retraining takes time and is costly. Second, demographic trends may also have contributed: as the baby boom generation becomes older, the NAIRU may rise since older workers tend to remain unemployed longer than younger workers.

hysteresis;

Finally, in many countries the NAIRU seems to ratchet up with cyclical increases in unemployment. A combination of different factors such as relatively high unemployment benefits, the loss of skills during periods of unemployment, the strength of unions and strict labour market regulations on hiring and firing implies that it becomes more difficult and less attractive for the unemployed to re-enter the active labour force. As is suggested by the relative share of long-term unemployment, this phenomenon is most acute in Europe.

and government policies

In response to concerns about high structural unemployment, many governments have started to address some of the factors that inhibit labour market flexibility. Over time this should tend to reduce the NAIRU. Substantial labour market reforms in Italy and Spain, for example, may have increased the responsiveness of wages to unemployment by modifying the wage bargaining system and relaxing restrictions on the conditions of employment. Some countries, including Canada, have made changes to the unemployment insurance system, increasing the incentives for the unemployed to look actively for a job. Others, such as Belgium and France, have lowered certain social security contributions so as to reduce the cost of labour and stimulate employment growth.

Wages remain subdued ...

One way of trying to assess whether these measures have increased the flexibility of the labour market is by looking directly at the recent interaction of wages and unemployment (see Graph II.6). In the United States the unemployment rate fell to 5.4% at the end of 1994, which would traditionally have been viewed as being below the NAIRU. However, the upper left-hand panel of the graph provides some evidence that the NAIRU may have declined compared with previous cycles. Econometric estimates of the average relationship between the unemployment rate and the growth rate of hourly compensation also suggest that actual growth in compensation was lower than would have been expected. In Australia, Canada and the United Kingdom, on the other hand, there is no evidence that the NAIRU has slipped downwards. In response to rapid falls in unemployment, wage inflation bottomed out and started edging up somewhat in 1994.

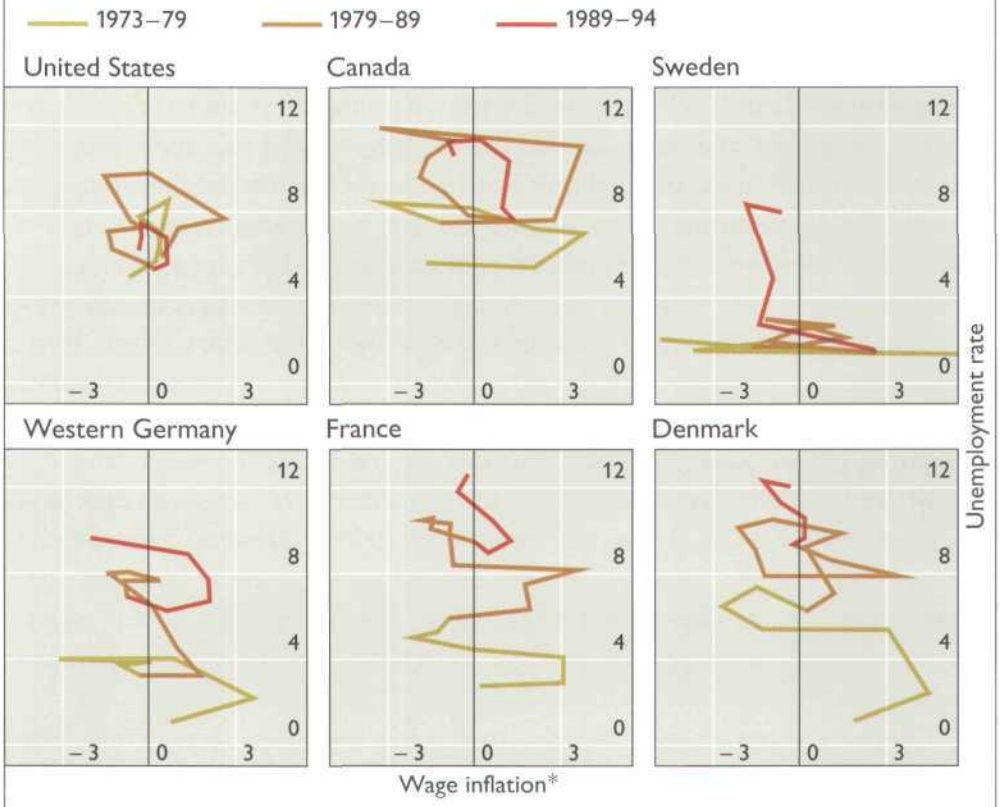
... but are edging up in some countries despite high unemployment

In the continental European countries every cycle over the last twenty years has led to a ratcheting-up of the NAIRU. While this dynamic must be set off against the impact of structural reforms, it seems likely that it will prove predominant. In spite of very high levels of unemployment, there are signs that wage inflation in Europe is picking up again. This is particularly the case in the Nordic countries, where the turning-point occurred in the summer of 1993, but can also be seen in the outcomes of recent wage negotiations in France and Germany.

Given all the uncertainties implicit in the above analysis, one should be cautious about treating recent trends in unit labour costs as a permanent feature protecting against a rise in inflation. After years of negative or very small real wage increases, there exists the danger of a catch-up process of higher wage demands leading to rising unit labour costs as productivity growth settles down

Unemployment and wage inflation in selected countries

In percentages and percentage points



* Measured as the deviation from trend.

Sources: OECD and BIS estimates. Graph II.6

to a more normal path. Moreover, in a number of countries, such as Australia, Finland, Italy, Norway, Spain, Sweden and Switzerland, the measured level of inflation is already picking up in 1995 owing to increases in indirect taxes. This will raise the risk of a wage-price spiral if workers seek compensation for these tax increases.

Investment and the capital stock

As in other downturns, the level of investment fell in most countries during the recent recession. In some cases, such as France, the United Kingdom and Belgium, investment has also been slow to pick up during the recovery. Moreover, in many countries there has been a shift in emphasis from capacity-enhancing to restructuring investments (for example, in computers). Although the latter reduce costs and help keep prices down, they may not significantly raise the total productive capacity of the economy. As a result there is some concern that supply bottlenecks and price pressures could arise from relatively weak net capital formation during the recession. The evidence is mixed.

Declining growth of the net capital stock ...

The estimated rate of growth of the net capital stock in the business sector has indeed fallen in many countries in the 1990s; it should be noted, however, that such estimates require inherently uncertain assumptions about depreciation, and in some cases could be biased downwards because the fall in the price of

many investment goods is not properly taken into account. In Japan, the United Kingdom and Canada the rate of growth of the capital stock has declined by around 2 percentage points since the beginning of the 1990s, while in France and Italy the slowdown has been limited to 1 percentage point. In western Germany the rate of growth has been maintained due to reunification, while in the United States strong investment growth since 1992 has lifted the growth rate of the capital stock above the previous peak level in 1989.

... but no serious capital shortage?

Where there have been declines in the rate of capital accumulation, they do not necessarily point to an unusual capital shortage problem. A secular decline in capital formation has been evident since the early 1970s. In the two previous cycles the rate of growth of the capital stock in the seven major countries fell by approximately 1 percentage point on average. Moreover, in Canada, the United Kingdom and Japan the larger fall in this cycle was preceded by a more pronounced investment boom in the late 1980s. Finally, as in previous recessions, the capital/labour ratio has again increased substantially in most countries.

Rising capacity utilisation in manufacturing ...

Nevertheless, since the expansion of demand in many countries has been concentrated in manufacturing, the picture for the business sector as a whole might conceal the potential for supply bottlenecks. For example, in the countries which have experienced quite large currency depreciations, the rise in export demand is primarily being satisfied by the manufacturing sector, raising capacity utilisation rates very fast. Moreover, in many continental European countries, a combination of factors, such as low capacity growth in manufacturing (Belgium, France), a comparatively moderate recession (Denmark, the Netherlands) and an unusually rapid pick-up in industrial production (Austria, Germany), has also raised capacity utilisation rates to high levels at a relatively early stage in the recovery. It is worrisome to note that the fall in producer price inflation has been stopped relatively early in the cycle and that price expectations in manufacturing are clearly on the rise. At the same time, however, as is shown in Graph II.7, these high capacity utilisation rates have recently led to high investment rates. Whether actual bottlenecks arise will depend on how fast new capital can be installed and brought into use. In the short run, investment may add more to demand than to supply.

... leads to increasing price expectations and heavy investment

Constraints on domestic demand

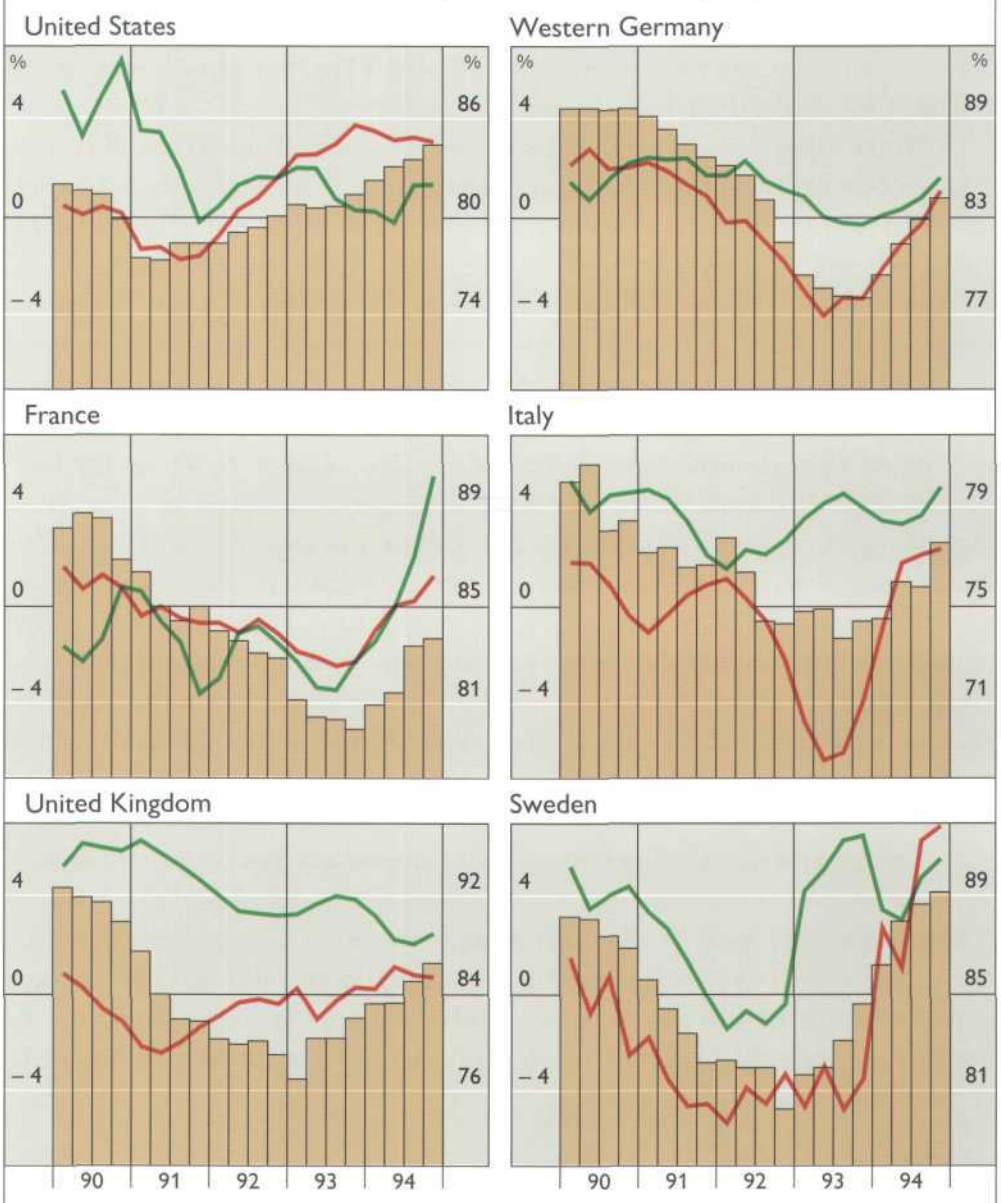
In countries with rapidly closing output gaps the sustainability of the expansion will depend on whether actual growth rates come down to more moderate levels. At the same time, as growth rates moderate in the countries which are reaching full capacity, domestic demand will need to strengthen in other countries which are currently relying on export demand to sustain output and employment. A number of structural problems linger which could affect the likelihood of a balanced and sustained recovery.

Unemployment and private consumption expenditure

Household income strong in economies ahead in the cycle ...

Table II.5 illustrates that in the countries which are well advanced in the cycle growth in domestic demand has been underpinned by strong growth in real household disposable income. In Australia, for example, wage compensation rose by more than 5% in real terms in 1994. A large part of the increase in the wage

Capacity utilisation, investment and producer prices



[1] Changes over four quarters (at quarterly rates) in non-residential fixed investment (for Italy and Sweden, machinery and equipment). [2] Changes over four quarters. [3] In manufacturing. [4] The horizontal line represents the approximate average over the period 1976–94.

Sources: National data and BIS calculations. Graph II.7

bill in these countries can be accounted for by the decline in unemployment, as real wages themselves have remained relatively sluggish.

... but weak in many others ...

In contrast, many European countries recorded little or no growth in household purchasing power for the second year in succession. Exceptions to this were Ireland and Norway, which have experienced a fairly rapid improvement in employment, and Austria and Denmark, where the growth of real disposable income was primarily due to tax reductions and higher transfers. As a result, the moderate increase in real consumer expenditure in the major European countries

... leading to a fall in the saving rate

in 1994 was chiefly attributable to a fall in the saving rate. This is not unusual in the aftermath of a recession as consumers try to maintain their consumption at lower income levels, but the effect will presumably be offset by a rise in the saving rate when real disposable income recovers. Two unusual elements restraining consumption might also manifest themselves. First, in many European countries the upturn in economic activity has not yet led to a noticeable decline in unemployment. If this does not change, or if unemployment rises further as the restructuring of European industry continues, consumer confidence could be affected along with spending. Second, in a number of countries, most notably Germany and the United Kingdom, rises in taxes are having a negative impact on disposable income in 1995, tending to depress consumption. Even in countries where this is not the case, concerns that rising debt service ratios will eventually make higher taxes unavoidable might also raise precautionary saving.

High real interest rates

Higher real interest rates ...

The sharp rise in long-term interest rates in 1994 brought inflation-adjusted rates back to the relatively high levels common during most of the 1980s. While the causes of this are analysed in Chapter V, the focus here is on the risks higher rates entail for the recovery. Although the rise in real rates can be viewed as an

Real household disposable income, real consumer expenditure and the household saving rate

Countries	Disposable income			Consumer expenditure			Saving rate*		
	1992	1993	1994	1992	1993	1994	1992	1993	1994
	annual percentage changes						in percentages		
United States	3.1	1.5	3.5	2.8	3.3	3.5	5.5	4.1	4.1
Japan	0.8	2.3	3.5	1.7	1.0	2.2	14.4	15.6	16.6
Western Germany	1.7	−0.5	−0.3	2.0	0.2	0.8	13.9	13.3	12.3
France	2.0	0.4	1.1	1.4	0.2	1.5	13.7	13.8	13.5
Italy	1.5	−3.4	0.5	1.1	−2.5	1.6	17.4	16.8	15.5
United Kingdom	2.7	1.4	1.2	0.0	2.7	2.6	12.8	11.7	10.4
Canada	1.0	0.8	1.3	1.3	1.6	3.1	9.6	9.1	7.6
Australia	2.2	1.6	3.7	3.3	2.0	4.0	5.1	4.7	4.4
Austria	0.3	−0.7	3.2	2.0	0.2	2.3	12.5	11.7	12.5
Belgium	3.2	1.1	1.1	2.6	−1.0	0.7	20.4	22.0	20.7
Denmark	0.4	3.8	3.9	1.1	2.3	7.1	15.9	16.8	11.8
Finland	−2.8	−4.3	−1.2	−4.9	−3.9	2.0	7.1	6.6	3.7
Greece	−0.5	3.0	1.9	1.8	0.2	1.5	19.1	21.3	21.6
Ireland	3.6	4.9	2.8	2.9	1.2	5.3	12.6	14.8	13.1
Netherlands	2.8	−0.1	1.0	2.5	0.7	1.6	13.0	12.3	12.3
Norway	4.3	1.6	4.2	1.8	2.2	4.5	4.8	4.8	4.0
Portugal	1.9	1.6	1.0	3.7	0.4	0.3	18.0	18.3	18.2
Spain	0.7	0.5	−0.4	2.2	−2.0	0.9	9.7	12.5	12.0
Sweden	3.5	−3.1	1.2	−1.4	−3.7	0.5	6.2	7.1	7.8
Switzerland	−0.5	−1.6	0.3	−0.1	−0.8	1.3	12.7	12.0	11.1

* Net household saving (for France, Italy and the United Kingdom, gross saving) as a percentage of household disposable income.

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

equilibrating mechanism, which may be welcome in countries with rapidly closing output gaps, there is also a fear that higher rates could threaten economic recovery in countries that are lagging in the cycle.

... not yet restraining non-residential investment ...

The effect of the increase in interest rates on non-residential investment may well be offset by other, more favourable factors. As was noted above, investment in countries further advanced in the recovery is growing quite vigorously following the rise in capacity utilisation rates. In the countries just coming out of recession, high profitability in manufacturing and good prospects for demand will be more important than the rise in real interest rates. Moreover, in many countries several years of low investment have enabled firms to reduce debt burdens built up in the late 1980s, leaving them initially with adequate internal funds to finance new investment.

... but curtailing housing investment

The more interest-sensitive components of household demand may be affected to a greater degree. In many countries long-term mortgage rates have risen by between 1 and 2 percentage points since the beginning of last year, leading to a weakening of the housing sector. This is a recent development in

Nominal and inflation-adjusted real estate prices

Countries and cities	Nominal prices				Inflation-adjusted prices			
	1991	1992	1993	1994	1991	1992	1993	1994
	indices, 1986 = 100							
	Residential property prices							
United States	130	133	136	138	105	104	103	102
Japan	165	151	143	141	150	135	127	124
United Kingdom	172	166	162	164	126	117	112	111
Canada	156	159	161	166	123	124	124	127
Australia	180	182	186	201	130	130	130	138
Western Germany[1]	138	150	150	152	125	131	125	123
France[2]	206	183	173	171	176	153	141	137
Sweden	189	171	153	159	133	118	101	103
Norway	94	90	91	103	72	67	67	74
Finland	149	122	113	120	115	92	83	88
	Commercial property prices: major cities							
United States[3]	83	72	67	64	67	56	51	48
Tokyo	169	137	112	94	154	122	99	83
London	99	69	73	92	73	49	51	62
Toronto[4]	119	103	84	73	94	80	64	56
Sydney	119	83	79	94	86	60	56	65
Frankfurt	262	199	182	166	236	173	152	134
Paris	146	120	105	99	125	100	86	79
Milan	234	201	170	145	177	144	117	96
Madrid	245	177	112	114	184	125	76	74
Brussels	173	166	144	135	153	144	121	111
Stockholm	108	95	76	81	76	65	50	52
Oslo	71	60	67	67	55	49	49	48
Helsinki	155	122	118	135	120	91	87	98

[1] Four major cities. [2] Paris only; old housing. [3] North-East. [4] Price index for offices in Ontario.

Sources: National Association of Realtors, Frank Russell, Jones Lang Wootton, various private real estate associations and national data. Table II.6

Debt in 1993:[1] breakdown by interest rate adjustability

Countries	Short-term[2]	Adjustable medium and long-term[3]	Predominantly fixed	*Memorandum item: Total debt as a percentage of GDP*
	as a percentage of total debt			
United States	14	20	66	*114*
Japan	35[4]	–	65	*202*
Germany	16	23	62	*125*
France	17	27	57	*90*
Italy	51	≤22	≥26	*64*
United Kingdom	73[4]	–	27	*117*
Canada	19	40	41	*108*
Australia	40	26	34	*98*
Austria	27	> 0	<73	*88*
Belgium	23	21	56	*86*
Netherlands	17	8	75	*115*
Spain	40	3	57	*79*
Sweden[5]	29	6	65	*143*
Switzerland[5]	22	8	69	*179*[6]

[1] Credit to the non-government sector: loans from banks and other financial institutions as well as securities outstanding; excluding trade credit. [2] Up to one year (for Italy, up to eighteen months; for the Netherlands, up to two years). [3] Adjustable at intervals of up to one year and in line with short-term rates. [4] Includes adjustable medium and long-term. [5] 1992. [6] Pension fund and life assurance company loans partly estimated.

Sources: Central banks and BIS estimates. Table II.7

the United States, but puts further downward pressure on already subdued residential investment in the United Kingdom and Canada. In Germany, in contrast, the rise in housing investment generated by reunification and mortgage interest tax relief has not shown much sign of reversing, though it may do so when tax relief comes to an end.

Wealth effects

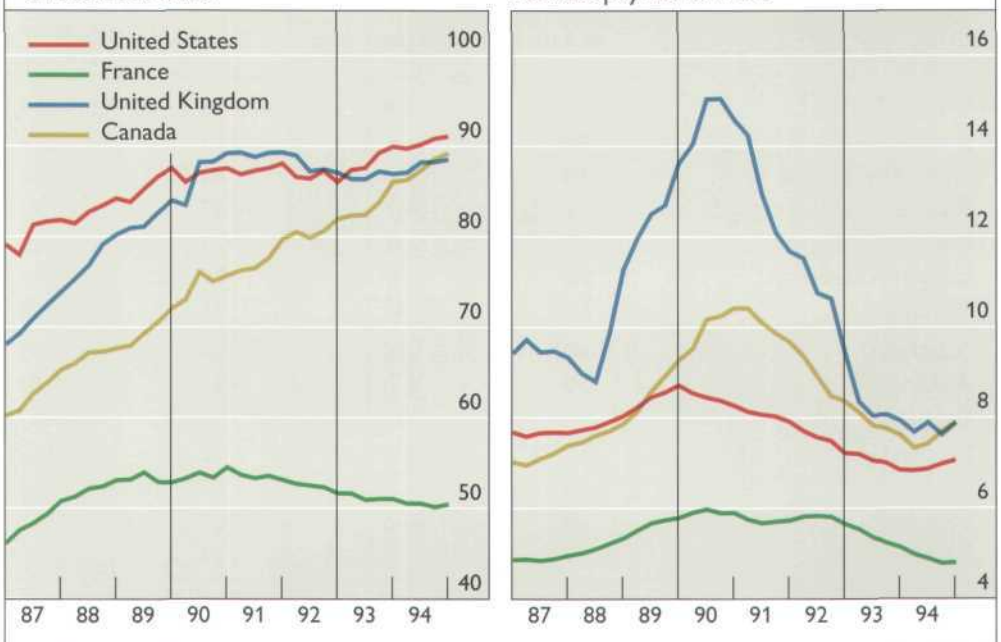
The wealth and cash-flow effects of interest rate changes may in fact be more important than the traditional substitution effects. With respect to the former, as is discussed in Chapter V, equity prices were not much affected by the sharp decline in bond prices that began in February 1994. Moreover, despite higher interest rates, house prices in the countries most advanced in the cycle picked up slightly in 1994, while the house price declines in others bottomed out. Commercial property prices are generally still very depressed.

Stronger cash-flow effects in English-speaking countries

The cash-flow effects of higher interest rates depend primarily on the extent to which households and firms are liquidity-constrained and on the size and the maturity structure of their asset and liability positions. The rise in interest rates should have only limited effects on cash flows in countries where both the household and corporate sectors rely mainly on long-term financing at fixed rates. However, as can be seen from Table II.7, in the English-speaking countries, with the exception of the United States, the share of adjustable rate debt is relatively high, implying a rapid adjustment of debt service burdens to higher short-term interest rates. Although interest burdens as a proportion of household disposable income have fallen significantly following the easing of monetary policy starting

Gross debt and interest payments ratios in the household sector

As a percentage of household disposable income



Source: National data.

Graph II.8

in the early 1990s, gross debt ratios have remained quite high and have even exceeded recession levels. As monetary authorities have started increasing short-term interest rates to head off inflationary pressures, interest burdens are likely to go up again, restraining the growth of spending.

High government debt

A further rise in debt ratios ...

Despite higher than expected growth and structural improvements in the primary budget deficits of a number of countries, the average debt ratio in the countries listed in Table II.8 rose further in 1994, bringing the total increase in government net debt since the end of the 1980s to more than 10% of GDP. Although the average primary deficit in these countries fell by 0.9% of GDP, an additional improvement of 1.7% would have been necessary to prevent the debt ratio from rising in 1994. Obviously this average reflects quite different experiences across countries: at one extreme, Sweden again recorded an increase in net debt of about 6% of GDP, while Ireland saw its debt ratio drop by almost 5% of GDP. With the exception of the United States, all the major industrial countries experienced an increase in the debt ratio of more than 2% of GDP in 1994.

... despite faster growth

The further accumulation of government debt occurred in spite of the fact that faster growth in 1994 more than offset the negative impact of higher interest rates. Faster growth not only reduces debt ratios directly via its effect on the denominator of the ratio, it also reduces government deficits by increasing tax revenues while lowering government expenditures on unemployment insurance and other income assistance programmes. In 1994 these effects were most clearly visible in the countries that are relatively advanced in the cycle. In Canada, for

example, faster growth is estimated to have led to a cyclical improvement in the primary deficit of 0.9% of GDP. In Japan, in contrast, the cyclical deficit worsened by 0.9% of GDP. Although higher future growth rates could alleviate some of the debt consolidation burden in the continental European countries, in many cases a considerable additional structural improvement in the primary balance will be necessary. In France and Spain, for example, the improvement required to stabilise the ratio at the 1994 level is estimated to be more than 4% of GDP. This is considerably more than could be expected from a cyclical improvement in the primary balance.

The effect of higher interest rates on the debt ratio depends on the size of existing debt and its maturity structure. A combination of high government debt and a short maturity structure can make the fiscal situation extremely vulnerable to short-term interest rate increases. Such a possibility underlines the need for further fiscal consolidation, in particular in high-debt countries. A strengthening of budgetary positions will not only contribute to lower real interest rates by increasing the pool of savings, but is also necessary if governments are to address

Sources of general government debt accumulation

Countries	Net interest payments	Primary deficit		Growth effect	Net debt	Net interest payments	Primary deficit		Growth effect	Net debt
		Total	Cyclical				Total	Cyclical		
	1993					1994				
	as a percentage of GDP									
United States	1.9	1.5	0.1	– 1.9	38.1	1.9	0.1	–0.4	– 2.2	37.7
Japan	0.4	1.0	0.1	0.0	7.7	0.5	2.9	1.0	– 0.1	11.0
Germany	2.6	0.7	0.6	– 0.7	35.2	2.8	–0.4	0.5	– 1.7	37.9
France	3.1	2.7	2.3	– 0.3	27.2	3.3	2.3	2.0	– 1.0	31.8
Italy	11.5	2.0	1.2	– 3.9	117.9	10.3	–1.1	1.1	– 6.3	120.8
United Kingdom	2.2	5.5	1.9	– 1.8	40.7	2.5	3.8	1.3	– 2.3	44.8
Canada	4.9	2.2	2.5	– 1.9	61.8	5.0	0.3	1.6	– 3.1	64.0
Australia	1.1	2.6	1.1	– 0.7	19.7	2.1	2.7	0.3	– 1.2	23.9
Austria	3.6	0.5	0.8	– 1.9	58.4	3.4	0.6	0.5	– 3.3	59.1
Belgium	9.6	–3.0	1.3	– 3.2	129.9	9.4	–4.0	1.2	– 5.7	129.5
Denmark	3.8	0.7	2.4	– 0.8	33.7	3.8	0.4	1.2	– 2.1	35.8
Finland	–0.5	8.4	3.6	0.0	–11.0	0.7	4.9	2.6	0.7	– 9.0
Greece	12.7	0.7	1.1	–10.2	117.2	14.0	–0.9	1.3	–12.7	120.8
Ireland	4.8	–2.5	0.1	– 6.6	92.7	3.8	–1.7	0.0	– 6.7	87.9
Netherlands	4.7	–1.6	1.7	– 1.1	59.7	4.5	–1.5	1.5	– 2.5	60.2
Norway	–0.8	3.5	1.8	0.8	–14.7	–0.2	1.0	0.8	0.8	–13.1
Portugal	6.8	0.6	0.6	– 3.6	67.0	5.6	0.2	1.1	– 3.8	69.9
Spain	4.9	2.7	1.2	– 1.1	42.8	5.7	1.1	1.3	– 2.6	47.1
Sweden	1.5	11.9	3.1	0.0	18.8	3.0	8.2	2.4	– 0.9	25.1
Average*	2.9	1.8	0.8	– 1.5	40.1	2.9	0.9	0.6	– 2.1	41.9

Note: The change in the debt ratio comprises the interest payments ratio, the primary deficit and the growth effect (discrepancies reflect debt valuation changes and accounting differences); a positive sign implies an increase in the debt ratio. The sum of the first two components equals the net borrowing/GDP ratio of general government. The growth effect is calculated as $-g/(1+g)$ times the debt/GDP ratio at the end of the previous period, where g is the current growth rate of nominal GDP.

* Calculated using weights based on 1990 GDP and PPP exchange rates.

Sources: OECD and BIS estimates. Table II.8

pressing future challenges such as the impact of ageing populations on pension and health expenditures and the need for increased infrastructure investment. Strong consolidation efforts could help create a virtuous circle of lower interest payments and falling debt ratios.

Developing and formerly centrally planned economies

Growth and structural reform in developing economies

Faster output growth ...

Output in the developing countries grew by 6% in 1994, faster than in any of the four preceding years. Growth in Latin America rose from 3% in 1993 to 4.5% last year, while Asia recorded its third year of growth of over 8%. Although growth in many Asian economies accelerated, the Chinese economy slowed down somewhat from its earlier rapid pace of expansion. In Africa a modest rate of economic expansion was recorded (see Table II.9).

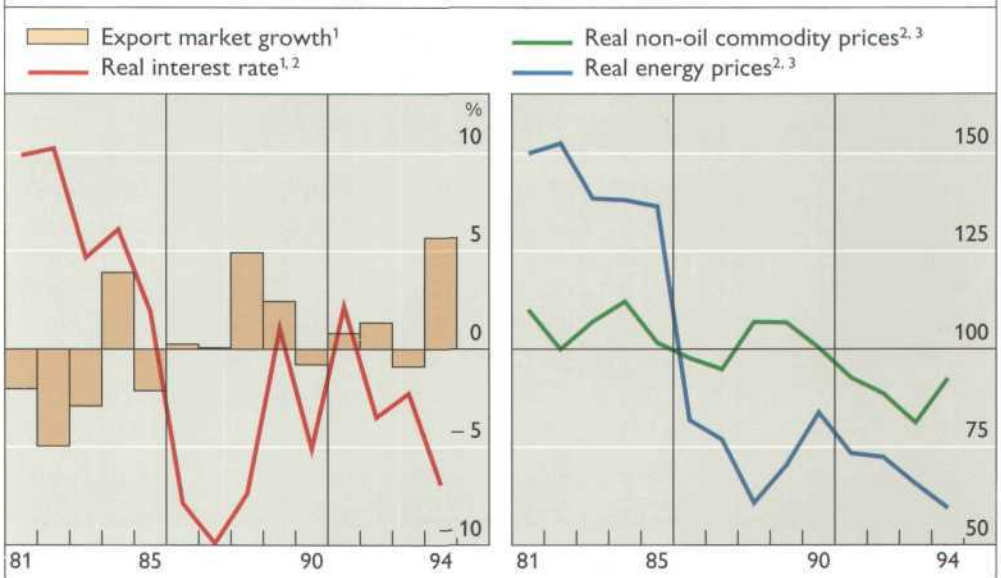
... due to favourable external factors ...

The more propitious external environment last year undoubtedly contributed to the improved performance of developing countries. An important factor was the boost given to exports by the quickening pace of the expansion in the industrial countries. Furthermore, non-oil commodity prices rose sharply in 1994 while real energy prices continued their downward trend, yielding terms-of-trade gains for many countries. Finally, the monetary tightening in the United States notwithstanding, real short-term interest rates remained relatively low and kept debt service burdens at moderate levels (see Graph II.9).

... and structural reforms

Determined structural reforms in many countries have been even more decisive in improving growth potential and actual performance. The view that growth is best encouraged by the operation of market forces in a stable low-inflation environment now seems generally accepted. In Latin America chronic

The external environment



[1] Difference from average 1981–93. [2] Using export unit values of manufactured products for the non-industrial countries as deflator. [3] Average 1981–93 = 100.

Sources: HWWA, OECD and national data. Graph II.9

Growth and inflation

Countries and regions	Real GDP				Consumer prices			
	1982–91	1992	1993	1994	1982–91	1992	1993	1994
	annual percentage changes							
Asia[1]	7.0	8.1	8.3	8.3	7.9	8.6	10.4	10.8
China	9.3	12.8	13.4	11.8	7.6	8.6	19.8	24.9
India	5.2	4.0	3.8	5.3	8.9	11.8	6.4	9.8
Indonesia	5.4	6.5	6.5	7.3	8.3	7.3	9.5	8.4
Korea	9.5	5.1	5.8	8.4	5.2	6.2	4.8	6.3
Thailand	8.1	7.6	8.2	8.5	3.7	4.1	3.6	6.3
Taiwan	7.8	6.5	6.3	6.5	1.8	4.7	2.9	4.1
Philippines	1.1	0.6	2.1	4.3	14.5	8.9	7.6	9.1
Malaysia	6.1	7.8	8.3	8.7	2.7	4.8	3.6	3.7
Hong Kong	6.1	6.3	5.8	5.5	7.8	9.6	8.7	8.6
Singapore	6.8	6.0	10.1	10.1	1.8	2.3	2.4	3.6
Latin America[1]	1.7	2.5	3.0	4.5	214.8	384.0	736.8	792.6
Brazil	2.0	– 0.8	4.1	5.7	377.2	982.2	1,933.5	2,084.8
Mexico	1.2	2.8	0.7	3.5	64.4	15.5	9.8	7.0
Argentina	0.5	8.7	6.0	7.1	453.1	25.0	10.6	4.2
Venezuela	1.9	6.8	– 0.4	– 3.3	25.1	31.4	38.1	60.8
Chile	3.2	11.1	6.2	4.2	20.5	15.4	12.7	11.4
Economies in transition[1]	0.3	–14.7	– 9.6	–10.8	24.9	956.5[2]	1,097.4[2]	600.1[2]
Eastern Europe[1]	–1.8	– 6.7	– 2.2	3.5	59.9	117.8[2]	142.0[2]	49.0[2]
Poland	0.1	2.6	3.8	5.1	77.7	43.0	35.3	32.2
Czech Republic	–1.2[3]	– 6.4	– 0.9	2.6	9.9[3]	11.1	20.8	10.0
Hungary	–0.4	– 4.3	– 2.3	2.0	13.6	23.0	22.5	18.8
Baltic states[1]	–3.0[4]	–31.5	–17.0	0.1	24.3[3]	1,007.6	210.2	51.8
Russian Federation	–0.4[3]	–19.0	–12.0	–15.0	19.6[3]	1,533.2	883.3	302.9
Ukraine	–4.0[4]	–17.0	–17.1	–23.0	46.6[4]	925.6	3,849.7	894.6
Africa[1]	2.5	0.4	0.4	2.3	18.8	44.9	37.2	60.5
Sub-Saharan Africa[1]	2.3	0.0	0.5	1.6	23.7	42.9	34.3	49.3
South Africa	0.9	– 2.2	1.1	2.3	14.7	13.9	9.7	9.0
Middle East[1]	1.8	5.1	2.8	1.5	16.7	11.4	11.2	12.5
Saudi Arabia	1.3	2.2	0.5	– 2.0	0.0	–0.1	1.0	0.6

Note: Data for 1994 are partly estimated.

[1] Calculated using weights based on 1990 GDP and PPP exchange rates. [2] Excludes Bosnia-Hercegovina and Serbia and Montenegro. [3] 1986–1991. [4] 1989–1991.

Sources: IMF, OECD, UN Economic Commission for Europe and national data. Table II.9

budget deficits have been largely eliminated. The liberalisation of economic activity in India has also made significant progress, and in Africa a number of countries have given markets a greater role to play.

Financial market turbulence ...

This generally favourable picture for the developing countries was clouded by several bouts of financial market turbulence. Effects emanating first from the interest rate increases in the United States and then, much more powerfully, from the liquidity crisis in Mexico, were also felt in other emerging markets. In the first instance, even countries with sound fundamentals experienced pressure on their stock markets and currencies. However, over time financial markets showed a greater capacity to distinguish between countries on the basis of their respective policies and factors determining levels of saving and investment.

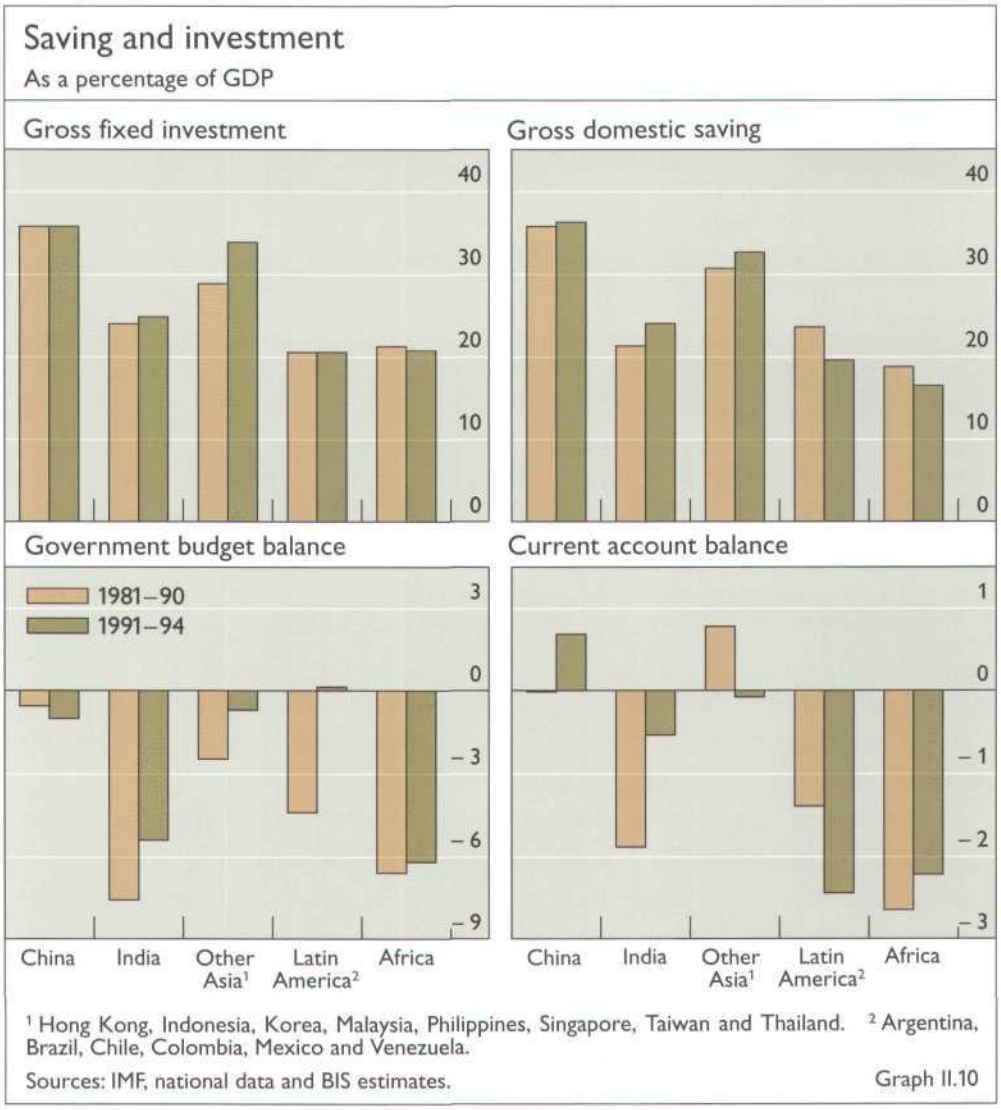
Saving and investment

... related to current account imbalances ...

The financial market turbulence of the past year induced investors to examine more closely the countries in which they were investing and to re-evaluate their investment strategies accordingly. Current account and fiscal balances, as well as the broader concepts of domestic saving and investment, are indicators that are widely used in this context. These indicators, regionally aggregated, point to certain differences between regions while, of course, also masking important differences between countries within each region (see Graph II.10).

... and underlying saving and investment trends

In South-East Asia, investment increased to an average of 34% of GDP in 1991–94, largely in response to record growth in aggregate demand. Saving, though high, did not rise fully in step despite a marked reduction in fiscal deficits. As a result, the current account surplus of the 1980s turned into a small deficit. Rising demand pressures in South-East Asia last year found their expression more in higher inflation and less in deteriorating current accounts as they were primarily the result of an export boom triggered by favourable external circumstances.



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

Sources: IMF, national data and BIS estimates. Graph II.10

In India the adjustment efforts undertaken since 1991 are clearly visible from the graph. The fiscal deficit, though still a source of concern, has been reduced by 2% of GDP compared with the 1980s. Private saving has also risen somewhat in the wake of significant structural reforms. Accordingly, the current account deficit improved to less than 1% of GDP on average in 1991–94. In China, already high domestic saving increased further to 36% of GDP in the last four-year period – probably as a result of accelerating growth. This was reflected in an improvement in the current account, as investment was broadly unchanged.

Latin America presents a rather different picture. Overall investment has remained at the relatively low level of 20% of GDP that was prevalent during the 1980s. This stability masks increases in private investment offset by cutbacks in public investment programmes. But despite the eradication of large fiscal deficits, of the order of 5% of GDP during the 1980s, the current account deficit widened as a result of the private sector's reduced propensity to save. This may be ascribed in part to the perception of higher permanent income in the wake of market-oriented reform, triggering increased consumption before actual production and income could catch up. Another factor in several countries has been the rapid growth of credit from inadequately supervised lending institutions and state banks.

In Africa as a whole, large budget deficits and low saving rates have remained a problem in the 1990s and continue to contribute to persistent current account deficits.

Structural reform and inflationary pressures

Excess demand pressures

As these savings and investment trends suggest, the Achilles' heel of market-oriented reform in many countries has been the emergence of excess demand pressures. Successful macroeconomic stabilisation often increases confidence and thereby raises aggregate demand and capital inflows, while the supply potential of the transformed economies needs time to adjust to the new environment of liberalised markets and greater international competition. Indeed, the supply potential might even fall immediately following the shock of liberalisation. In many countries the resulting excess demand pressures have led to either overt or hidden inflation. While inflation in Latin America has been brought down from very high levels, much of the improvement has been associated with appreciating real exchange rates and deteriorating current accounts. The recent surge in prices in Mexico is the most visible sign that the underlying improvement was less than headline inflation figures suggested. Although inflation remains generally low in Asia, there is a serious risk of overheating, and inflationary pressures have already emerged in a number of countries. In Africa the devaluation of the CFA franc has fuelled price increases, though in most countries there has been some success in preventing a full pass-through to wages.

Structural change in Latin America

Mexico

Economic reforms ...

Although policy decisions played a role in the Mexican crisis, the way in which the crisis unfolded also raises fundamental issues about how to combine

far-reaching structural changes with macroeconomic stability. These issues concern the speed of reform, the capacity of the economy to adjust and the required macroeconomic policy mix. They are relevant not just for Mexico, but also for other large countries in the region which have begun their reform efforts more recently, such as Argentina, Brazil and Venezuela.

... lead to vigorous restructuring and high productivity growth

Economic reforms started in the late 1980s have radically transformed the Mexican economy. The deregulation of economic activity and the privatisation of state enterprises have improved the scope for the private sector to respond to economic incentives. The reduction of tariffs from an average of 25% in the first half of the 1980s to less than 10% in 1994, the abolition of quotas and the liberalisation of prices have strengthened competition. Fiscal deficits were eliminated and interest rates became positive in real terms. The economy responded vigorously to this new economic environment. Higher private investment, mirrored by a rise in the share of capital goods in imports, and increased exposure to external competition clearly had beneficial effects. The economy underwent a large-scale restructuring: some sectors, such as footwear or textiles, shrank, while others, such as machinery or equipment, expanded rapidly. As a result productivity started to increase at an annual rate of over 5%, and non-oil exports grew by more than 20% in 1994.

But supply adjustment takes time ...

Although many factors pointed to a successful transformation of the economy, others gave cause for concern. Large-scale restructuring temporarily reduced the supply potential of the Mexican economy. Despite rapid productivity increases and rising private investment, the economy failed to return to fast growth. Employment declined and real wages remained depressed. The economy's capacity to adjust to import competition and a deregulated economic environment was stretched to the limit. The sectors producing tradable goods needed to rationalise and invest before they could become competitive and therefore the current account deteriorated. Export growth, though eventually vigorous, was initially weak while imports rose.

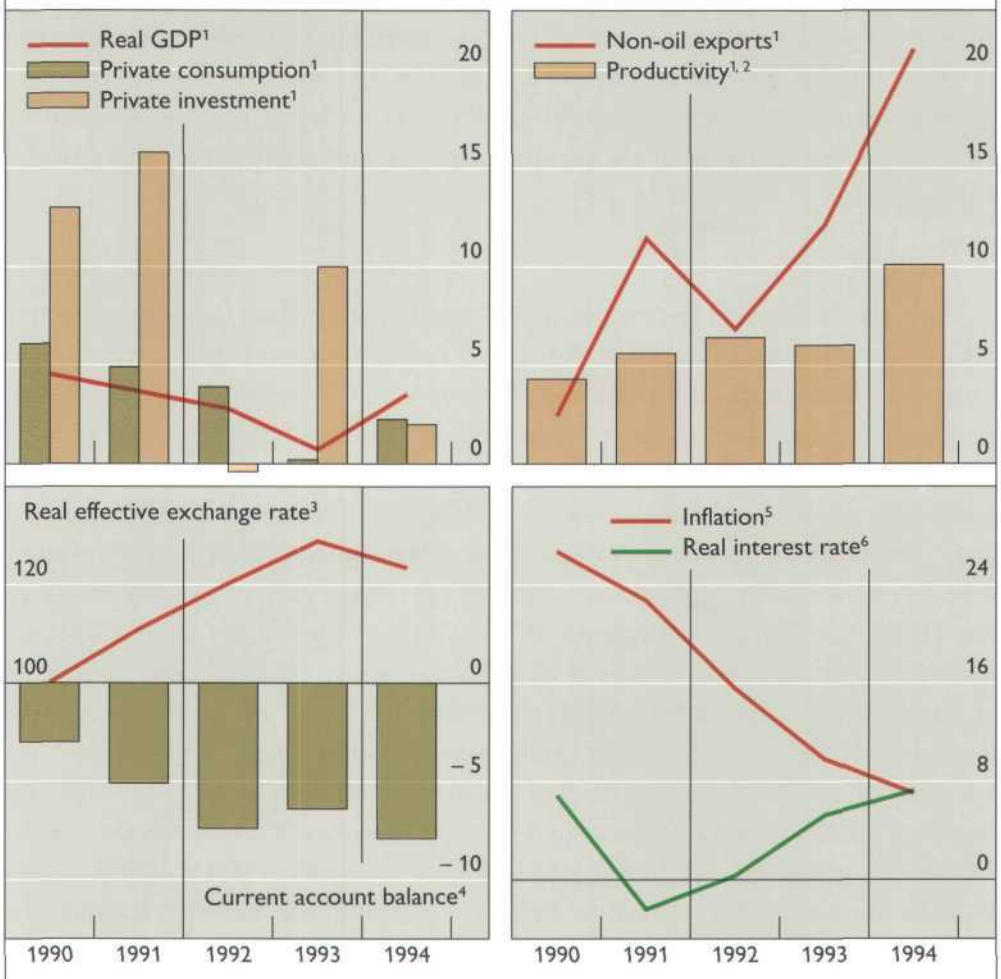
... while demand rises rapidly ...

The deterioration of the current account was exacerbated by the rise in aggregate demand that followed structural reforms and greater macroeconomic stability. While public investment declined, private investment grew rapidly in order to take advantage of the new economic opportunities and to respond to heightened competitive pressure. The view that permanent income had risen as a result of the reforms and the reduced inflation tax on money balances induced higher private consumption, which more than offset the disinflationary effects of the increased demand for money. Consumption may also have been encouraged by the sudden availability of imported consumer products and fears that this might prove only temporary. The result was a low and declining propensity to save: the saving rate dropped from 19% in 1990 to only 15% in 1994. An additional factor behind this decline was the rapid growth of credit that occurred despite high real interest rates. The imbalances created by declining domestic saving and heavy reliance on capital inflows were reflected in a real appreciation of the peso of more than 20% between 1990 and 1994 and a widening of the current account deficit to 8% in the latter years.

... leading to current account imbalances ...

The Mexican experience suggests that a strategy of rapid economic transformation and exchange rate based stabilisation is likely to produce a phase

Economic developments in Mexico



[1] Annual percentage growth rates. [2] In manufacturing. [3] In terms of relative consumer prices (1990 = 100). [4] As a percentage of GDP. [5] Annual percentage changes in consumer prices. [6] Three-month Treasury bills (CETES) deflated by consumer prices, in percentage points.

Sources: OECD, national data and BIS. Graph II.11

... and vulnerability to a loss of investor confidence

of widening current account deficits and appreciating real exchange rates. During such a phase the economy is particularly vulnerable to a loss of investor confidence, even if policies are viable in the longer run. The risks during this period could be reduced by establishing a countervailing force against appreciating real exchange rates and deteriorating current accounts. One way of doing this would be to run a temporary budget surplus, since simply eliminating a fiscal deficit may not be enough to steer the economy through this vulnerable phase. A second would be to aim for a real exchange rate that facilitates the restructuring of the economy, though this is not always easy (see Chapter VII).

Similarities and differences in Chile

Chile, which liberalised its economy much earlier and is sometimes regarded as a model of how to manage reforms, in fact encountered similar problems for many years. Until the mid-1980s it had a low and declining saving rate with large current account deficits, at one point exceeding 10% of GDP. Moreover, output and employment growth in the manufacturing sector were poor. But Chile's experience was also different in several respects, which were key factors in the subsequent success of the reforms. First, the saving rate rose rapidly after the

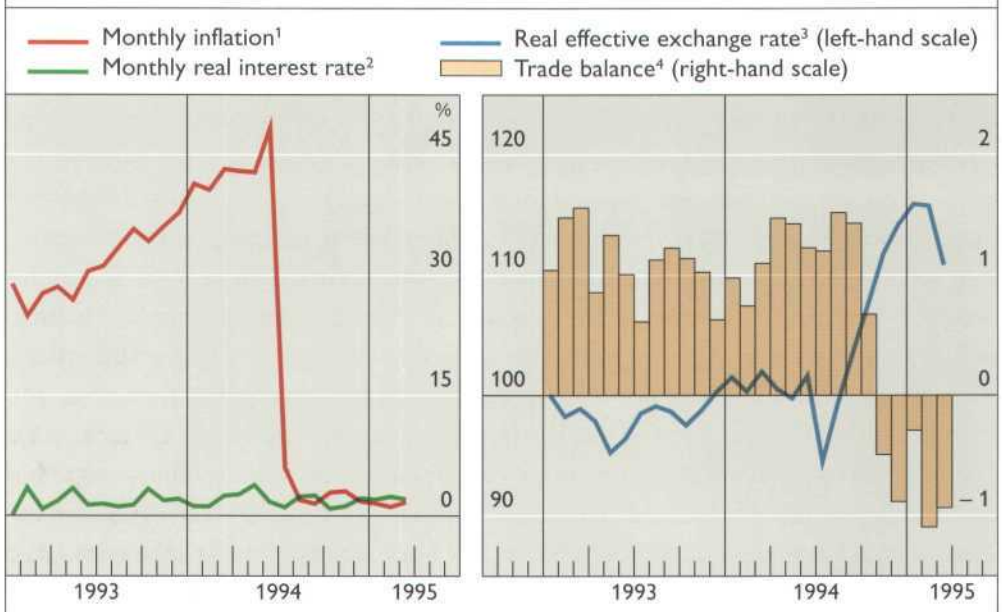
introduction of a private pension system. This points to the importance of institutional mechanisms to increase an economy's propensity to save. Second, Chile maintained an almost constant real exchange rate in order to support the restructuring of the manufacturing sector and the development of exports through adjustments in the nominal exchange rate. Third, the liberalisation of capital flows has proceeded at a cautious pace, facilitating the management of the exchange rate.

Brazil and Argentina

New stabilisation programme in Brazil ...

Excess demand pressures have also been a prominent feature of recent reform experience in Brazil and Argentina. Following several failed attempts in the 1980s, Brazil introduced a new stabilisation programme in July 1994. Earlier in the year, prices and wages had progressively been indexed to an accounting unit with a constant exchange rate against the US dollar. This meant that prices and wages were effectively fixed in US dollars. In July, this unit was transformed into a full-fledged currency, the cruzeiro real, leading to a rapid drop in inflation from over 40% a month to about 1½%. While this was low by Brazilian standards, it was still much higher than the inflation rates of the country's major trading partners. As in the case of Mexico, the reduced inflation tax and better access to consumer credit led to a consumption boom, which together with increased confidence and rising capital inflows contributed to a sharp real appreciation of the exchange rate of more than 20% between July 1994 and February 1995. The result was a rapid deterioration in the trade balance – again similar to what had happened in Mexico a few years earlier. Despite the introduction of credit restrictions, consumer demand and imports continued to rise strongly, and it became increasingly clear that a fixed nominal exchange rate

Stabilisation in Brazil



[1] Changes over one month in consumer prices. [2] Overnight financing rate deflated by consumer prices. [3] In terms of relative consumer prices (January 1993 = 100). [4] In billions of US dollars.

Sources: National data and BIS estimates. Graph II.12

would eventually become unsustainable. The exchange rate regime was modified in March 1995, when an explicit exchange rate band was introduced, allowing some of the appreciation to be reversed. In addition, access to consumer credit was tightened further and import tariffs were raised substantially.

... but unresolved fiscal situation

Unlike in Mexico, where a major fiscal improvement took place, the unresolved fiscal situation remains an important obstacle to a durable reduction of inflation in Brazil. Temporary measures allowed the operational (i.e. inflation-adjusted) budget last year to be balanced, but the structural deficit remains large. A fundamental redistribution of taxing authority and spending obligations between the federal and state governments is necessary to put the public finances on a sound footing. Another difficult issue is the reform of the state-controlled banks, which in the past have served as a major source of financing of quasi-fiscal deficits. Reform in this area would help to eliminate the inflationary bias of the economy.

Rapid growth in Argentina ...

In contrast to Mexico, Argentina has experienced rapid growth of over 7% per year since determined structural reforms began in 1991. Inflation was reduced to only 4% in 1994 through the adoption of a currency board arrangement and the elimination of fiscal deficits. But in Argentina, too, investment and consumption demand has temporarily outstripped supply potential. On the external side increased confidence was reflected in rising capital inflows, a real appreciation of the peso of about 30% since the Convertibility Law was introduced in March 1991, and the widening of the current account deficit from 0.5% of GDP in 1991 to 4.0% in 1994. The fastest-growing sectors of the economy have been construction, transportation and utilities, which by their nature are not exposed to import competition. Investment has also been concentrated in these sectors. In the wake of the Mexican crisis, the Government lowered spending sharply in an attempt to reduce absorption and the current account deficit while maintaining the fixed exchange rate against the US dollar. A large borrowing programme was put in place, boosting reserves and thus providing an additional shock absorber for the country's currency board arrangement.

... but widening current account deficit leads to restraint

Inflationary pressures in Asia

Overheating in Asia ...

The basic reasons for the extraordinary growth performance of most countries in the Asian region over the last decade were analysed in detail in last year's Annual Report. Although the relative importance of the different factors continues to be a matter of debate, it is clear that high saving rates and a judicious mix of macroeconomic stability (low inflation and balanced budgets), economic incentives (positive real interest rates and outward orientation) and selective government intervention have played a decisive role. Growth, already high, accelerated further in most countries in 1994, straining industrial capacity and the infrastructure. Wages have grown at a brisk pace and rising inflation has become the main risk in the region.

... due to strong demand ...

Three main factors explain the overheating of many Asian economies. First, rapid export growth – arising from dynamic intra-regional trade, the strengthening recovery in the industrial countries and the appreciation of the yen – put additional pressure on already high capacity utilisation in the manufacturing

Inflationary pressures in Asia

Countries	Growth[1]	Inflation[2]	Real short-term interest rate in 1994		Real effective exchange rate[4]
			Change[3]	Level	
China	0	+	−2.6	−11.1	13.1
India	++	+	−5.8	− 3.6	8.5
South-East Asia	++	+	−1.5	1.8	1.2
Indonesia	++	–	−1.7	3.3	−1.0
Korea	+	+	−1.5	2.1	0.6
Thailand	++	+	−2.4	0.4	0.7
Taiwan	+	+	−1.2	2.2	−1.5
Philippines	++	+	−1.2	3.3	6.9
Malaysia	++	+	−2.2	1.2	−3.8
Hong Kong	–	–	1.0	− 3.9	3.3
Singapore	++	+	−0.1	0.0	4.1

[1] 1994 real GDP growth; ++ = higher than 1993 and 1983–93 average; + = higher than 1993 and below 1983–93 average; 0 = lower than 1993 and above 1983–93 average; – = lower than 1993 and 1983–93 average. [2] Measured by the average annual change in consumer prices; +/– = the change in 1994 is greater/smaller than in 1993. [3] From 1993. [4] In terms of relative consumer prices; average annual change in 1994.

Sources: National data and BIS estimates. Table II.10

sector. Second, surging private investment and extensive government infrastructure programmes, while boosting capacity and relieving bottlenecks in the longer term, added to demand pressures in the short run. Third, the region continued to attract large flows of capital which contributed to monetary growth.

... and little resistance from policies

These demand pressures initially encountered little resistance from fiscal or monetary policies. With budgets broadly in balance, there seemed to be little urgency to strengthen fiscal positions, while monetary policy remained passive long enough for inflationary pressure to build up. Monetary conditions were not tight, as can be seen from the low and declining level of real short-term interest rates, which was only partly counterbalanced by the generally moderate appreciation of real exchange rates (see Table II.10). However, as measured inflation started edging up, a growing number of countries made efforts to restrain demand growth. In some cases this took the form of increases in policy interest rates, but in other countries direct limits on credit expansion were imposed.

China

Continued rapid inflation ...

In China inflation in 1994 remained at around the 25% level which it had reached in late 1993. This came as something of a surprise, as it seemed to break the usual stop-go cycle that had characterised Chinese macroeconomic policies since 1978. Price rises had accelerated from 8.6% in 1992 to almost 20% in 1993, prompting the Government to introduce a stabilisation programme in mid-1993. In the light of past experience, 1994 might have been a year of further austerity, reduced investment programmes and sluggish credit growth leading to a decline in inflation. Instead, inflation rose to new record levels and output growth, although slowing, remained above 10%.

... due to temporary factors ...

High inflation in 1994 can be explained in part by the influence of temporary factors. The official exchange rate was unified with the rate prevalent in the swap

centres in January, representing a de facto devaluation of around one-third, which fed into import prices. The introduction of value added tax was used by many enterprises as a pretext for raising prices. Finally, the liberalisation of grain prices and reduced fertiliser subsidies, combined with drought in the north and floods in the south, led to a marked rise in food prices. But all these factors cannot explain why inflation was still running at double-digit levels towards the end of the year.

... and resistance to restraint efforts

More important was the fact that the economy proved resistant to restraint efforts. Three factors explain this unexpected development. The first is that state-owned enterprises, 80% of which are controlled by provincial and local governments, remain the backbone of the economy. They still account for half of industrial output and employ more than 100 million people. Since they also provide many social services, governments felt it necessary to continue to finance their losses through direct subsidies and bank lending, and junior levels of government often tried to protect their own enterprises from cutbacks. Investment by state-owned enterprises was reduced substantially in the second half of 1993, but had already started to grow again in early 1994 and accelerated throughout the remainder of the year. The second factor is that the newly expanding private sector also proved resistant to credit tightening, as it is essentially self-financing. A third factor was probably uncertainties surrounding the potential transition in political leadership, which may have made it more difficult to forge a consensus on policy requirements. This uncertainty is also visible in the postponement of some major reforms that had been agreed in November 1993.

India

In 1994 the Indian Government reversed the policy slippage that had occurred in 1993. Monetary tightening combined with a levelling-off of earlier large capital inflows brought inflation back onto a downward trend in the latter half of the year, although year-on-year inflation remained much higher than in 1993. Market confidence was strengthened by the agreement between the central bank and the Government to phase out direct central bank financing of budget deficits. However, while the budget deficit has been reduced somewhat in recent years it remains a matter of concern, being still too large to allow the stabilisation of the debt/GDP ratio. Interest payments increased from 39% of revenues in fiscal 1990 to 50% in 1994. As in China, the reduction of the fiscal deficit may prove very difficult without far-reaching reforms of state-owned enterprises.

Subdued growth in Africa

Moderate growth in favourable external circumstances

After two years of stagnation, growth in African countries increased by almost 2 percentage points in 1994. This improvement must to a large extent be ascribed to favourable circumstances, although renewed reform efforts in many CFA franc zone countries also played a role. Abundant rainfall produced a good harvest; the recovery in Europe provided the opportunity to expand exports; and the 75% price rise in tropical beverages last year dramatically improved the terms of trade of these countries. But the devaluation of the CFA franc by 50% in January 1994 was also an important factor. Domestic prices rose in the wake of

Improved competitiveness in the CFA franc zone

Adjustment in the CFA franc zone

Countries and regions	Real GDP		Consumer prices		Imports[1]		Trade balance	
	1990–93	1994	1990–93	1994[2]	1990–93	1994	1990–93 average	1994
	annual percentage changes						in billions of US dollars	
West Africa	0.2	3.1	0.5	36	3.3	−0.2	0.0	0.6
Côte d'Ivoire	−1.0	1.3	1.8	32	0.7	−6.8	1.1	1.3
Central Africa	−2.4	−0.4	0.7	50	1.4	−7.6	2.7	2.8
Cameroon	−6.3	−1.8	−0.2	48	−5.8	−6.4	0.7	0.8
Total franc zone	−0.8	1.5	0.6	42	2.6	−2.7	2.7	3.4

[1] Measured in US dollars. [2] Twelve months ending in December.

Sources: Bank of France, IMF, national data and BIS estimates. Table II.11

devaluation, inflation was generally held at around 40% and wages increased by substantially less, leading to an improvement in competitiveness. Among the most visible consequences of the new situation were the sudden decline in imports from Europe and the rapid development of intra-regional trade.

While the economies of the CFA franc zone seem to have escaped successfully from the overvaluation trap, a number of important problems remain to be tackled. For instance, budget deficits continue to be large and in some cases substantial trade restrictions are still in place. The suspension of IMF-supported programmes in several countries, notably in Central Africa, points to the need to strengthen adjustment efforts in order to consolidate the gains reaped from a more realistic exchange rate.

Growing confidence in South Africa

In South Africa the new Government has continued to pursue prudent macroeconomic policies. The fiscal deficit was contained at around 6% of GDP last year and the budget presented for 1995 envisages a further reduction to 5.8% despite ambitious plans for raising social and infrastructure spending enshrined in the Reconstruction and Development Programme. Incipient inflationary pressures in the second half of the year were met with determined monetary tightening. Towards the end of 1994 and in early 1995, signs of increasing confidence in the Government's policies and the economy's growth potential multiplied. Investment and output rebounded strongly, while the parallel exchange rate for capital transactions, the financial rand, continued to strengthen, allowing the Government to unify the exchange rate system in March. The major challenge for the Government is to reconcile the need for greater social spending with a further consolidation of the public finances.

Reform in formerly centrally planned economies

Eastern Europe

Varied transformation strategies ...

After several years of declining output, growth returned to many countries in the region last year while other countries, such as Poland, saw an acceleration in the rate of expansion. The region as a whole is beginning to show the positive effects of the transformation strategies that were adopted five years ago. The strategies relied to varying degrees on three main pillars: the rapid liberalisation

of prices and trade, determined macroeconomic stabilisation and institutional reform including privatisation, and the adoption of a legal framework suitable for a market economy.

... lead to a rapid development of the private sector

Many policy-makers were convinced that only a policy which combined rapid liberalisation and stabilisation had a chance of success: freed prices would signal what should be produced; reduced subsidies and bank credit would force state enterprises to heed those signals; and trade liberalisation would introduce the necessary competitive pressure into an otherwise oligopolistic economy. As a result of such policies, the economies in eastern Europe have been radically transformed over the last five years. The private sector, almost non-existent under central planning, now accounts for between 27% (Bulgaria) and 70% (Czech Republic) of GDP (see Table II.12). After the initial collapse of trade, exports have recovered, growing by between 8% (Czech Republic) and 23% (Romania and the Slovak Republic) in 1994. Several of the countries have also attracted sizable amounts of foreign direct investment, with two-fifths of regional FDI flows being accounted for by Hungary.

Stubborn inflation due to demand pressures ...

Inflation has, however, remained stubbornly high in all countries in the region with the exception of the Czech and Slovak Republics. Demand pressures have been a major culprit. Although some countries have managed to balance their budgets – the Czech Republic, Estonia, Latvia, Lithuania and Slovenia – deficits

Indicators of economic transformation

Countries	Private sector share in GDP	Export growth (US dollar basis)		Foreign direct investment		Current account balances[1]		Real effective exchange rates[2]
	1994	1991–93	1994	1990–94	1994	1993	1994	1991–94
	in percentages			in billions of US dollars	as a percentage of GDP			percentage changes
Bulgaria	27	–11	17	0.2	0.5	–9.9	1.5	60
Czech Republic	70	15[3]	8	3.0	2.4	1.4	0.8	28
Hungary	50	– 9	20	6.8	2.9	–9.0	–9.5	32
Poland	56	– 1	20	3.2	1.1	–2.7	–1.0	68
Romania	35	–15	23	1.3	1.8	–4.5	–0.9	– 9
Slovak Republic	58	9[3]	23	0.6	1.5	–6.2	–1.5	24
Croatia	50	–27[4]	9	0.2	0.7	1.9	0.7	– 9
Slovenia	30	0[4]	12	0.4	0.5	1.2	3.4	–17
Estonia	56	–56	66	0.5	8.0	1.9	–5.8	208
Latvia	55	–85	– 1	0.2	1.9	8.3	0.0	156
Lithuania	50	–81	5	0.1	0.7	–6.2	–5.1	– 2
Russian Federation	62	–38[5]	8[5]	2.8	0.4	1.0[5]	0.0[5]	–51
Ukraine	38	–71	–20	0.5	0.3	–2.7	–8.4	–82

Note: Data for 1994 are partly estimated.

[1] For the Czech and Slovak Republics, Hungary, Poland and Slovenia, convertible currencies only. [2] In terms of relative consumer prices; for Croatia, the Baltic states and Ukraine, US dollar rates only. [3] Excluding bilateral trade between the Czech and Slovak Republics. [4] Excluding exports to former Yugoslavia. [5] Excluding transactions with CIS countries.

Sources: National data and BIS estimates. Table II.12

have proved more resistant in other countries. In Hungary the overall fiscal balance worsened from a surplus in 1990 to a deficit of 6% of GDP in 1994 – reflected in double-digit inflation, a substantial real exchange rate appreciation and a large current account deficit of almost 10% of GDP. In March 1995 the Government finally decided to tackle the twin deficits head-on through a combination of fiscal discipline and a currency devaluation.

... and rising prices for services

But the fact that inflation has remained in double digits everywhere suggests that other factors besides government deficits are also at work. The rise in the price of non-tradable goods relative to tradable goods has played a major role. The increasing relative price of non-tradable goods such as personal services – almost non-existent under central planning – signals growing demand for such services on the part of newly sovereign consumers. Their price, not being subject to international price discipline, can run ahead of tradable goods prices. As growth picks up, large productivity gains in the manufacturing sector are also likely to be reflected in more rapidly rising prices for services. Wages in the non-tradable goods sector will tend to grow more or less in step with those in manufacturing although the scope to improve productivity is smaller.

With the exception of Estonia, Hungary and Lithuania, current account deficits in the region have remained small, of the order of 2% of GDP or less. In some cases, such as Bulgaria and Romania, this has reflected a lack of easily available finance rather than tight macroeconomic policies. Excess demand pressures in those countries showed up in inflation rates of more than 50%. In others, such as the Czech and Slovak Republics or Poland, current account deficits have been contained by restrictive policies. Nonetheless, even some of the countries with tight macroeconomic control (the Czech Republic, Estonia and Latvia) have experienced a marked real appreciation.

Russia

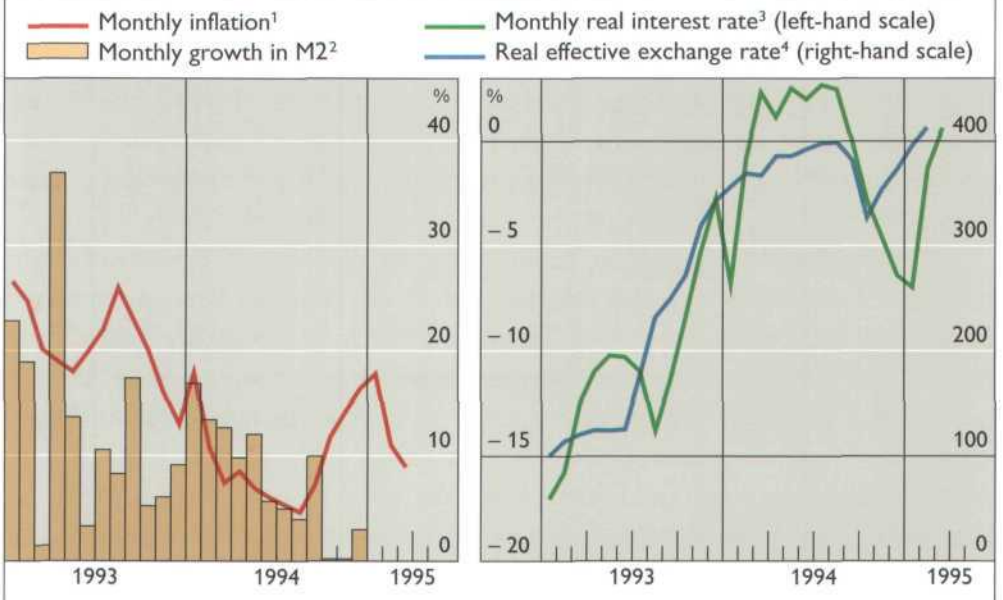
Stop-go on inflation results in rouble crisis

After a period of high inflation and easy money in 1993, credit in Russia was reined in and real short-term interest rates became positive in the first half of last year, bringing monthly inflation down to around 5% by summer. This would have put severe pressure on enterprises to adjust had they not anticipated that policy would be loosened again, repeating a pattern that had been observed in the past. As a result, enterprises resorted to well-known buffers and allowed arrears to accumulate on inter-enterprise accounts, taxes and wages. As in 1992, this duly produced an "arrears crisis", which became the most important policy issue by mid-summer. Credit policy was then eased, and when the authorities stopped supporting the rouble the exchange rate dropped by 22% against the dollar on "Black Tuesday" (11th October). By December, monthly inflation had climbed back to 16%. The hope that this credit expansion would at least maintain the output of enterprises also proved futile as output continued to fall in the second half of 1994.

New stabilisation programme

In response to these developments Russia embarked on an IMF-supported stabilisation programme in early 1995. It had become obvious that neither continued credit to industry nor large budget deficits could halt the output decline, and that adjustment was simply being postponed at the price of high and volatile inflation.

Inflation and monetary conditions in the Russian Federation



[1] Changes in consumer prices over one month. [2] Lagged three months. [3] Official refinancing rate deflated by consumer prices. [4] In terms of relative industrial producer prices (January 1993 = 100).

Sources: National data and BIS. Graph II.13

Reform experience

Reflection on reform experience

The transition from centrally planned to market economies has been a journey into uncharted waters, with limited guidance from historical precedent or economic theory. The variety of transformation strategies that have been adopted over the last six years has added greatly to our knowledge of transition problems, and some preliminary conclusions can be drawn from reform experience to date.

The speed of liberalisation and stabilisation was arguably the thorniest issue policy-makers faced at the beginning of reform. The first conclusion suggested by the experience of such countries as Estonia, the Czech and Slovak Republics and Poland is that rapid liberalisation is possible despite the fact that completing structural transformation is necessarily a lengthy process. The heritage of central planning left economies unprepared for survival in a market environment; for instance, firms had no marketing departments and banks had no experience of credit appraisal. Time was needed to acquire these skills. In the production sector, outmoded machinery could not be replaced overnight, nor could resource allocation decisions easily be shifted to a price basis.

Benefits from rapid liberalisation outweigh costs

Some took this to imply that microeconomic liberalisation should also proceed gradually. The liberalisation of prices and trade in such a situation clearly presented considerable risks. The new relative price structure and import competition were bound to expose the irrationalities of the industrial structure built up under central planning. Enterprise losses would mount, leading to pressure for government subsidies and/or additional loans from state banks. Price liberalisation might thus unleash inflationary forces that could be difficult to

control. But against these risks had to be set the benefits of liberalising the economy. Price and trade liberalisation meant that shortages endemic under central planning would be quickly eliminated. Moreover, liberalisation would set free the powerful forces of private initiative that held out the hope of a rapid supply response – even if behavioural change in the state sector would be muted. The positive experience of some of the countries in eastern Europe which have reformed rapidly indicates that the benefits of such a policy outweigh the evident risks.

Firm macroeconomic policies bring about microeconomic change

A second conclusion to be drawn from the reform process in the more successful countries is that tight macroeconomic policies have been instrumental in bringing about microeconomic change and in reviving private initiative. The hard budget constraints imposed on state enterprises – after an initial bout of inflation and some use of the "safety valve" of inter-enterprise credit and bank lending to loss-making enterprises – forced them to downsize, regardless of whether they were to be privatised or not. At the same time, the constraint on state enterprises provided the necessary breathing-space for the emergence of a dynamic private sector, which then further heightened the competitive pressure on state enterprises. The expectation of large-scale privatisation and its actual implementation in some cases have clearly been important factors, but adjustment in state enterprises started well before privatisation got under way, at least in those countries with tight macroeconomic policies.

III. International trade

Highlights

The increasing internationalisation of economic activity was again evident last year as trade grew more rapidly than for nearly twenty years. Over the past decade, trade has expanded twice as fast as output – well above the ratio seen in the preceding decade. Moreover, the range of countries for which international trade accounts for a major part of activity has grown steadily wider in recent years.

The progressive implementation of the Uruguay Round agreements should further support the growth of trade in the years ahead. Yet protectionist sentiment is far from dormant and much will depend on members observing the World Trade Organization's rules to safeguard the multilateral trading system. Liberalisation in the rapidly expanding services sector will also be one of its major tasks – a not-to-be-underestimated challenge as the difficulties in opening trade in financial services illustrate.

Foreign direct investment has been a key vehicle of the trade boom. Such investment rose again in 1994, with a higher share going outside the industrial countries. Increased corporate willingness to relocate some manufacturing activity from high-cost countries to lower-cost centres has been one important motivation. This in effect contributes to medium-term adjustment in surplus countries – and has been particularly important for Japan. Not only has direct investment served to finance imbalances in deficit countries but, when directed towards expanding capacity in the tradables sector, it has also helped to ensure that such deficits are self-correcting.

Sizable current account imbalances persisted last year. Of growing importance is the fact that diverging international investment positions are starting to have an appreciable impact on investment income flows, which in turn can perpetuate current account imbalances. The very persistence of such imbalances may help explain why current account positions exerted such a large influence on exchange rates last year not only in the industrial world (the US dollar and the yen) but also elsewhere (notably Mexico).

The continued improvement in western Europe's current account position owed much to the stimulus to exports from net currency depreciation in Europe as a whole. In addition, over the last couple of years, the exports of the countries with depreciating currencies have grown faster than those of other European countries.

World trade

Developments

Strong trade growth ...

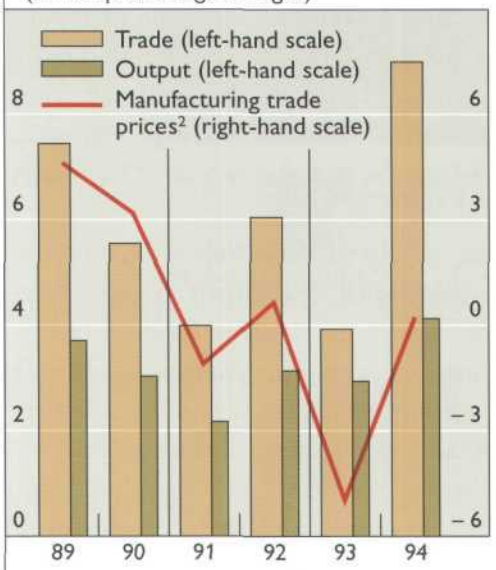
The volume of world merchandise trade rose by about 9% last year, up from 4% in 1993, and more than double the rate of expansion in world GDP. This trend of proportionately faster trade growth, evident for some time, reflected several important factors: generalised trade liberalisation, increased trade within trade blocs and the greater readiness of enterprises to relocate production across national borders. For the industrial world as a whole, the ratio of trade to GDP growth averaged 2 in 1985–94 (compared with 1½ in the previous decade), while for the developing world it was 1½ (compared with 1 in 1975–84). The jump in the ratio for Latin America was particularly sharp – from less than ½ in 1975–84 to 2½ in 1985–94.

... broadly based

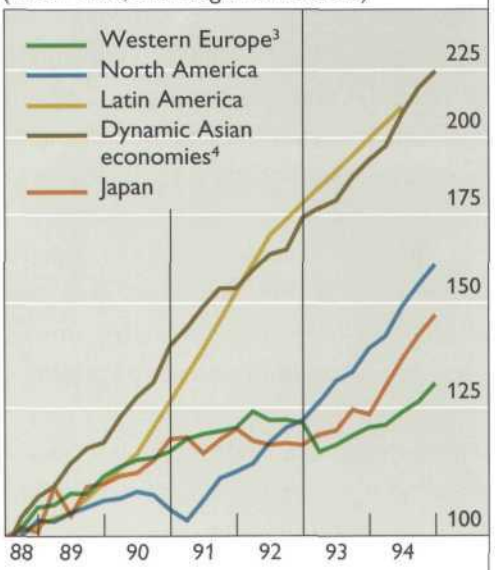
The buoyancy of industrial country imports was broadly based last year with continued strong import growth in North America, a further exchange rate induced boost to Japanese imports and a strong recovery in European import demand (see Graph III.1). The very rapid expansion in Asian and Latin American import demand – which had accounted for about half of the increase in world imports over the 1989–93 period – continued last year at rates just above those of the industrial world. Stimulated by economic recovery in the industrial countries and by trade buoyancy within the developing regions, exports from the developing world also grew rapidly. Accelerating world economic activity provided a particular boost to exporters of minerals after years of sluggish growth.

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, western Germany, Italy, the Netherlands, Spain, Sweden, Switzerland and the United Kingdom. [4] Hong Kong, Indonesia, Korea, Malaysia, Singapore, Taiwan and Thailand.

Graph III.1

A small increase in world trade prices in dollar terms contributed to last year's expansion in the value of merchandise trade of about 11½%. After falling by nearly 5% in 1993, dollar trade prices rose by just over 2% last year. This was broadly in line with the depreciation of the dollar against the SDR and thus not indicative of general upward pressure on world trade prices. Within this overall stability, however, oil prices fell while other prices rose, some sharply.

Oil prices weaken ...

Measured by average c.i.f. values in industrial countries, crude oil prices weakened to just under $16 per barrel in 1994. Relative to manufactured goods, oil prices thus reached their lowest average level in over twenty years, falling to just 55% of the level recorded in the wake of the first oil price shock in 1974. Oil price volatility was also marked, perhaps accentuated by OPEC quota decisions (and varying compliance with them) and by the mid-year threat to supply from labour strikes in Nigeria. OPEC's decision in late 1994 to leave production quotas unchanged for another year, in an economic environment of growing oil demand, helped support oil prices in early 1995.

... while manufacturing prices edge up ...

However, the prices of some other groups of traded goods rose last year. Manufactured goods prices, expressed in SDRs, started to edge up again in 1994, after having fallen by 5% in 1993 (see Graph III.1). Non-oil commodity prices increased by about 10% in SDR terms, compared with a drop of 3% in 1993 (and a cumulative decline of 20% between 1988 and 1993). These higher prices gave non-oil commodity exporters a terms-of-trade gain of 2.5%.

... and commodity prices rise

Cyclical and certain special factors accounted for much of the rise in non-oil commodity prices. The recovery-related pick-up in commodity demand in industrial countries and buoyant demand in the commodity-intensive manufacturing sectors in South-East Asia put upward pressure on prices. A second contributory factor was a decline in the volume of stocks of raw materials unloaded by some transition economies on world markets. Finally, weather-related supply problems in major coffee-growing areas explained much of the run-up in beverages prices (which in turn accounted for about half of the rise in non-oil commodity prices as measured by the IMF index). One new influence last year was speculative buying by investment and hedge funds that may have inflated commodity demand: such investment fund activity contributed to the 35% increase in the volume of contracts traded on the London Metal Exchange in 1994. Having bought metal contracts or holding them as collateral, financial institutions came, during 1994, to hold the lion's share of metal supplies offered at this exchange. However, there was a significant unwinding of speculative positions in early 1995.

Oil market trends

Oil production ...

An important medium-term feature of oil market developments in the first half of the 1990s was that dependence on OPEC supplies, which had risen sharply during the second half of the 1980s, reached a plateau (see Table III.1). A major factor behind this was an appreciable recovery in industrial country oil production (as well as in proven reserves), especially in the North Sea: Norwegian and UK net exports averaged 3.3 mb/d last year, compared with only 1.6 mb/d in 1990. Improved technology and greater cost efficiency have contributed in recent years to offsetting the negative impact of falling prices on industrial country production in the late 1980s.

World trade in oil[1]

Areas and countries	1985	1990	1991	1992	1993	1994[2]
	in millions of barrels per day					
Industrial countries	14.6	19.5	18.9	19.7	20.1	19.9
Importing countries	16.5	21.2	21.2	22.3	23.1	23.7
of which: United States	*4.0*	*7.2*	*6.6*	*7.3*	*8.1*	*8.7*
Japan	*4.1*	*4.8*	*4.7*	*4.8*	*4.8*	*4.9*
Western Europe	*8.3*	*9.2*	*9.8*	*10.0*	*9.9*	*9.9*
Exporting countries	– 1.9	– 1.7	– 2.3	– 2.6	– 3.0	– 3.8
Canada	*– 0.3*	*– 0.1*	*– 0.4*	*– 0.3*	*– 0.4*	*– 0.5*
Norway	*– 0.6*	*– 1.4*	*– 1.8*	*– 2.0*	*– 2.2*	*– 2.3*
United Kingdom	*– 1.0*	*– 0.1*	*– 0.1*	*– 0.2*	*– 0.4*	*– 0.9*
Non-OPEC LDCs[3]	0.1	2.5	3.2	3.2	3.4	3.5
of which: Asian NIEs[4]	*1.3*	*1.9*	*2.2*	*2.5*	*2.6*	*2.8*
Mexico	*– 1.6*	*– 1.2*	*– 1.2*	*– 1.3*	*– 1.2*	*– 1.3*
OPEC	–13.4	–20.3	–21.1	–21.3	–21.6	–21.6
of which: Saudi Arabia	*– 3.5*	*– 5.7*	*– 8.0*	*– 8.1*	*– 7.5*	*– 7.4*
Eastern Europe	1.7	1.4	1.0	0.8	0.6	0.6
Former Soviet Union	– 3.0	– 3.2	– 2.2	– 2.2	– 2.4	– 2.4

[1] Net imports (– = net exports). [2] Estimated. [3] Calculated as a residual. [4] Hong Kong, Korea, Singapore and Taiwan.

Table III.1

... and consumption

The elasticity of industrial country oil consumption with respect to GDP growth has risen from about ½ in 1985–90 to about 1 more recently: one legacy of much lower oil prices since the mid-1980s may well have been to weaken efforts to increase the efficiency of energy use. The expansion of oil demand has even exceeded GDP growth in western Europe. Nevertheless, the oil intensity of western European production remains well below that in North America: as a share of (PPP-valued) GDP, Europe uses 40% less oil than Canada and the United States. Net imports by non-OPEC developing countries have risen by some 40% since 1990. While the developing world as a whole uses much less oil relative to output, the rapidly industrialising economies in Asia now have an intensity of oil use that is almost as high as in North America.

Saudi Arabia

The stagnation in world demand for OPEC oil has had a major impact on Saudi Arabia. After having more than doubled oil output from 1985 to 1992, the country has since had to scale back production to limit price declines. Its current account deficit in 1994 was about $13 billion, bringing the cumulative deficit since 1983 to $166 billion. This deterioration has been mirrored in large budget deficits, and in 1994 the authorities announced a major fiscal correction.

Changing trade structures in developing countries

Export diversification in Asia ...

Many developing countries have diversified exports away from raw materials towards manufactured goods. The South-East Asian economies have been most successful in this – a shift supported by trade policy reforms, macroeconomic stability, exchange rate policies aimed at maintaining competitiveness and heavy foreign direct investment. Manufactured goods now account for over 80% of these countries' exports to the industrial world, compared with 50% in the early

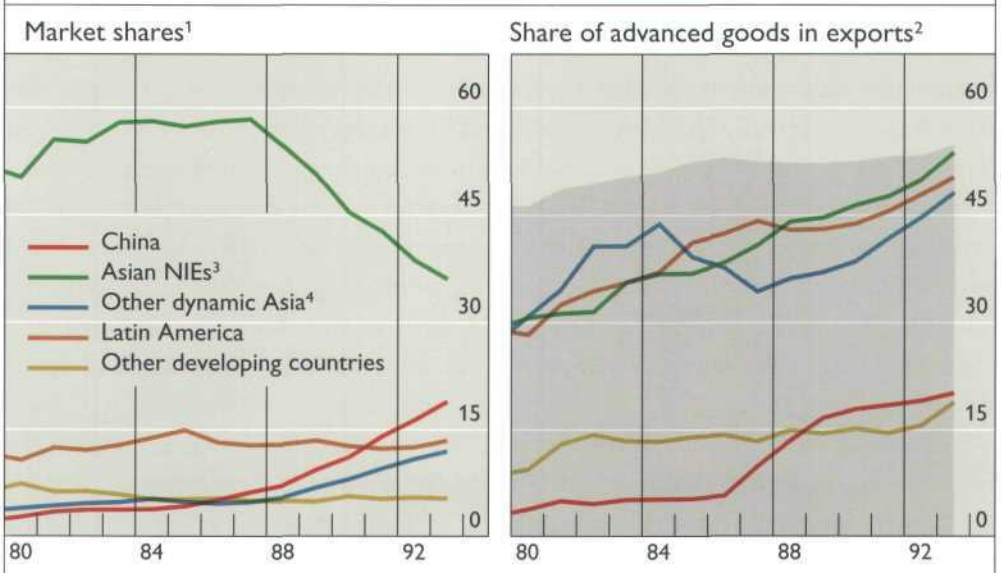
1970s. The steady fall in the Asian NIEs' share of developing country exports of finished manufactured goods to industrial countries since the mid-1980s has reflected the increase in the share of other Asian countries. China has overtaken Taiwan as the largest developing country exporter in Asia.

In addition, the export focus of the more industrialised economies in South-East Asia has moved from basic to more advanced manufactured goods: Graph III.2 shows how their export structure has become more like that of industrial countries. The very rapid expansion of Asian industrial output and exports has kindled in the mature western economies fears of, and in some instances protectionist reflexes against, competition from Asia. Such reactions overlook a number of important aspects of trade growth. For one thing, the export boom in the newly industrialising countries has not acted as a drag on world demand because these countries import as much as they export. Moreover, the expansion of world industrial capacity to which these countries have contributed has tended to lower prices – particularly evident in the rapidly expanding electronics sectors – which benefits consumers worldwide. The intense competition among Asian companies reinforces this by preventing leading producers from making excessive profits.

... and elsewhere in the developing world

Manufactured goods – many in an advanced processing stage – have also accounted for an appreciable and rising share of Latin American exports to industrial countries. But, at least until recently, Latin America's share of developing country exports of manufactured goods has not grown as fast as that of a number of Asian developing countries. The shares of Africa and the Middle East are both still extremely small. Moreover, these regions have continued to concentrate on basic or semi-manufactured goods.

International comparisons of foreign trade structure



[1] Percentage share of developing countries' exports of finished manufactured goods to industrial countries. [2] Share of finished advanced goods in manufactured goods exports to industrial countries. The shaded area indicates the world average share. [3] Hong Kong, Korea, Singapore and Taiwan. [4] Indonesia, Malaysia and Thailand.

Source: OECD Foreign Trade by Commodities, Series C. Graph III.2

Progress in multilateral trade liberalisation

On 1st January this year the World Trade Organization (WTO) came into being, bringing together more than 120 member countries and institutionalising the process of liberalisation of international merchandise and services flows. The creation of the WTO represented the culmination of a protracted round of trade negotiations launched more than eight years previously. As discussed in last year's Annual Report, this trade liberalisation round covered, in addition to the traditional area of merchandise trade, quite new territory including: the application of rule-based disciplines to trade in services, agriculture and textiles; the strengthening of intellectual property rights; the adoption of new rules for subsidies and safeguard measures; and, finally, the implementation of a more effective and unified dispute settlement system. In each of these areas, substantial progress was made.

Negotiations on financial services

Yet a number of unresolved issues had to be left for further negotiation. This is particularly true of the financial services sector, where growth has been so rapid in recent years and on which negotiations continue. By late 1993, as the Uruguay Round negotiations ended, the US authorities considered the progress achieved in the financial services negotiations to be insufficient to warrant the application of the most-favoured-nation principle (the extension to all member countries of concessions granted to one) to trade in financial services. At that stage, the United States was dissatisfied with the progress made in many foreign markets in reducing barriers to the entry of foreign financial firms – including limitations on their local operations, narrowly defined reciprocity requirements, discriminatory capital requirements, exchange controls and other restrictive practices. Further negotiations were scheduled to continue up to the middle of 1995. A first important breakthrough in the negotiations came in early 1995 when the United States and Japan agreed on the relaxation of limits on foreign management of Japanese pension and investment funds. However, a number of important trading partners (mainly in Asia and Latin America) have not yet made additional commitments (judged satisfactory by the United States) to liberalise their financial sectors. The United States has thus continued to decline to commit itself to applying the most-favoured-nation principle to trade in financial services. If maintained, this refusal would open the way for a discriminatory treatment of foreign financial services firms in the United States, which would represent a retreat from that country's present liberal position of applying an "unconditional" national treatment standard to foreign firms. This in turn could invite the introduction of still more restrictive policies in financial services trade in other countries.

Challenges include enlarging WTO membership ...

Many challenges lie ahead for the WTO. One is the enlargement of membership to include a number of major trading nations. For example, China's vastly increased importance in international trade underlines the need for its full involvement in and acceptance of international trading arrangements if recourse to bilateral and managed trade solutions is to be avoided. Even among WTO member countries – which have subscribed to multilateral rules and disciplines – the temptation to manage trade has not always been resisted. Quantitative restrictions (in particular voluntary export restraints and import targets) and

... counteracting managed trade ...

price control measures (often through the improper use of anti-dumping and countervailing duties) have proliferated in recent years. According to OECD calculations, such measures covered 17% of US imports, 12½% of EU imports and 11% of Japanese imports in 1993; in the developing world also, restrictions have sometimes taken the place of earlier high tariff walls. Much will depend on how far the WTO's new rules can counteract discriminatory and often protectionist trade measures, and on the efficacy and speed of its new dispute settlement system.

... and combining regional and multilateral liberalisation

Coping with the risks that may arise from purely regional rather than multilateral trade liberalisation is a further major challenge for the WTO. The Mercosur customs union in South America (which came into force this year) and the recently proposed Asia-Pacific Economic Co-operation (APEC) free trade area (to be introduced over the next ten to twenty years) were the two most visible examples of preferential regional trade arrangements concluded or proposed over the last year. In many ways, regional trade liberalisation is a step forward, but some diversion of trade away from more efficient outside sources can never be fully avoided. Acceptance of the Mercosur common tariff schedule obliged Argentina to tax imported capital goods that had previously been duty-free. On accession to the European Union, Austria, Finland and Sweden had to increase tariffs on a number of imported manufactured goods. If the benefits of free trade within regions are to be combined with a global momentum towards liberalisation, openness to newcomers, a reduction of external barriers and multilateral discipline over rules-of-origin policies (typically adopted in regional arrangements) would seem essential.

Extraneous issues?

A final, and rather recent, challenge to the world trade system arises from attempts to link trade to environmental issues and workers' rights. Trade policy is in general unlikely to provide an effective mechanism for addressing such concerns because the links involved are too indirect and the danger of unintended consequences (e.g. discrimination against low-income countries) too great. The WTO will need to tread very carefully in this area, not least because these newer issues could easily be used as an excuse for seeking more domestic protection.

Current account developments: overview

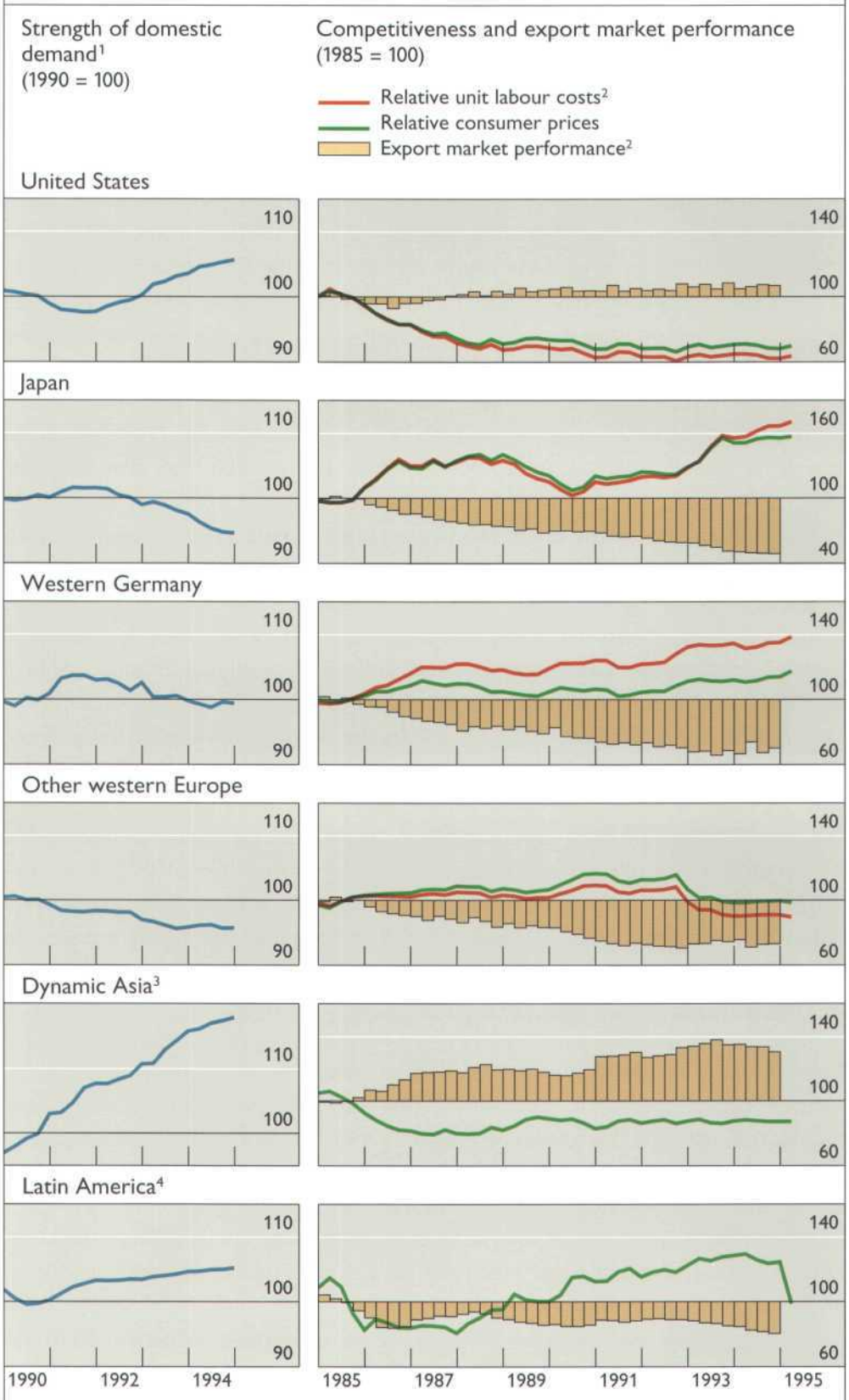
Cyclical factors

Current account developments have been affected mainly by three factors: relative cyclical positions, competitiveness and net international investment balances. Graph III.3 illustrates the significance of different cyclical positions. The fact that recovery got under way in North America and the United Kingdom earlier than in Japan or continental Europe has affected the cross-country pattern of net export growth. Strong domestic demand growth, sometimes to the point of overheating, also tended to widen the deficits of a number of developing Asian and Latin American countries.

Competitiveness

Competitiveness, however, has had a more durable influence on trade performance. The only major industrial country to have maintained (and even increased) its share of world export markets over the last decade in the face of increased Asian competition has been the United States, helped by a significant and sustained real depreciation of the dollar. Real appreciation in Japan and

Strength of domestic demand, competitiveness and export market performance



[1] Change in domestic demand relative to potential (or trend) output growth less the corresponding change in partner countries. [2] In manufacturing. [3] Hong Kong, Indonesia, Korea, Malaysia, Singapore, Taiwan and Thailand. [4] Argentina, Brazil, Chile and Mexico. Graph III.3

Net external assets						
Countries	1975	1985	1990	1991	1992	1993
	as a percentage of GDP, at year-end					
United States*	4.7	3.1	– 4.5	– 6.1	– 8.4	– 8.8
Japan	1.4	9.6	11.1	11.4	14.0	14.5
Germany	9.4	7.2	21.9	18.8	16.4	13.9
France	..	3.0	4.5	– 5.2	– 3.7	– 0.7
Italy	– 3.5	– 1.8	– 7.4	– 8.6	–11.6	– 9.6
United Kingdom	2.5	19.9	– 0.8	– 0.3	1.8	3.2
Canada	–29.4	–36.1	–36.4	–39.4	–42.6	–44.0

* With direct investment valued at current cost. Table III.2

Germany has contributed to extensive losses of market shares. Up until late 1992, real exchange rate appreciation elsewhere in Europe also coincided with a loss of market shares; but sizable subsequent depreciation in several countries put a stop to further declines. In the developing world, similar links between competitiveness and export performance have been in evidence for many years: the dynamic Asian countries maintained their competitiveness and increased their shares of world markets, while Latin America (where competitiveness was eroded) did not.

Shifts in net external assets

The persistence of external imbalances over many years has led to shifts in net international investment positions big enough to have a significant impact on current account imbalances (see Table III.2). For most major industrial countries net external asset positions are now much larger than they were just ten years ago. An important consequence has been that sizable corrections in imbalances on merchandise transactions and non-factor services have tended to be offset by opposite movements in the balances on net interest and investment income – as US and Japanese experience over the last decade illustrates. In both cases, large imbalances (relative to GDP) in trade and non-factor services flows recorded in the mid-1980s have now been considerably reduced, but the impact of this improvement has been offset by growing imbalances in net investment flows.

Industrial countries

United States

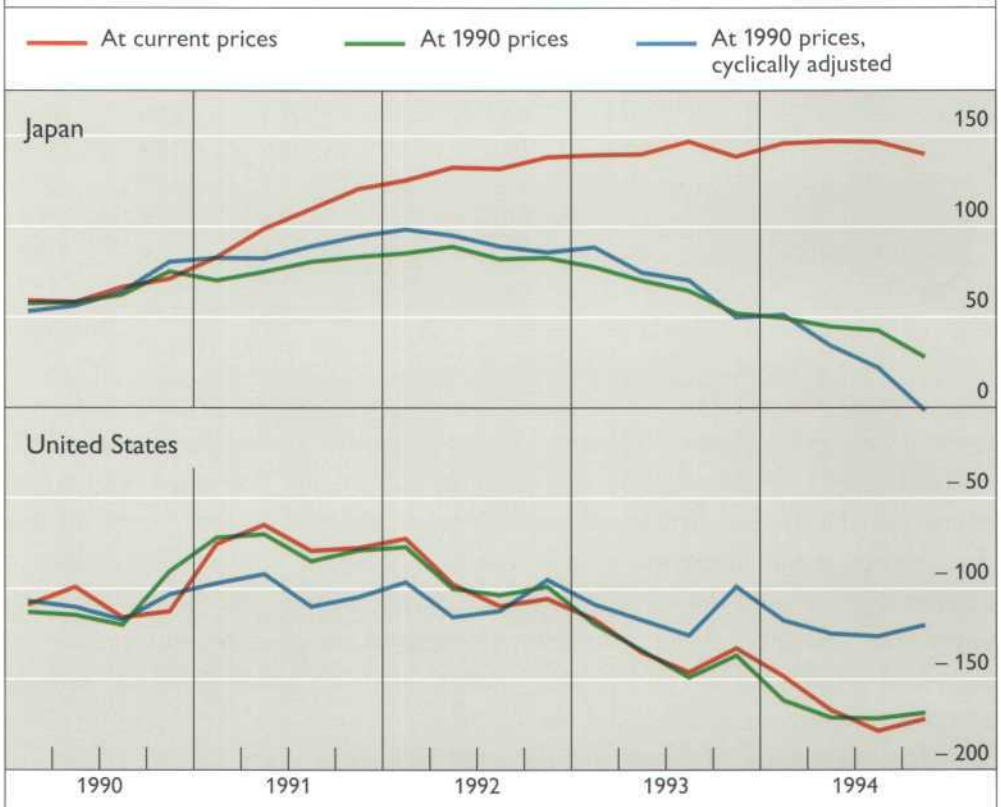
The US current account deficit widened last year by some $50 billion to the equivalent of 2.3% of GDP. Persistent deficits for many years have led to a sizable build-up of external debt. As a result, a deficit on net investment income (the first since before the First World War) compounded the deficit on merchandise and services transactions.

Underlying deterioration

The evolution of the US trade deficit over recent years – a significant narrowing in the late 1980s and early 1990s followed by a deterioration to a record $166 billion in 1994 – has been shaped to some extent by the cyclical desynchronisation between economic activity in the United States and that in its trading partners. Correcting for relative cyclical effects (see Graph III.4) suggests

Japanese and US trade imbalances

In billions of US dollars



Note: The cyclically adjusted levels reflect an estimate of potential that is inevitably uncertain; estimates of year-on-year changes in the adjusted trade balances are usually more robust. Graph III.4

that the underlying US trade account has deteriorated much less than the actual balance. Yet even on a cyclically neutral basis, the US trade deficit has tended to widen somewhat in the 1990s. This underlying deterioration cannot be ascribed to labour cost factors. US unit labour costs have been on a downward trend relative to those in partner countries over the last six years; moreover, they are also among the lowest in major industrial countries in absolute terms. This suggests that macroeconomic factors – such as the low rate of domestic saving – must be more important in explaining the persistence of US deficits over many years. The recent rapid rise in import volumes – up by 15% last year – coinciding with an export boom seems to support this interpretation of excess absorption.

Geographical shifts

A second noteworthy feature of US trade, again in evidence last year, has been the shift away from more traditional trading partners such as western Europe and Japan towards a number of developing countries. Imports from China now account for nearly 6% of US imports, compared with about 1% in the mid-1980s. Mexico, too, has become more important – partly because of growing cross-border processing and assembly operations. Mexico's share of US imports increased to 7½% last year, while more than 10% of US exports went to Mexico. The North American Free Trade Agreement has contributed to the dynamism of US-Mexican trade, not only by liberalising trade flows but also by encouraging and facilitating direct investment.

Japan

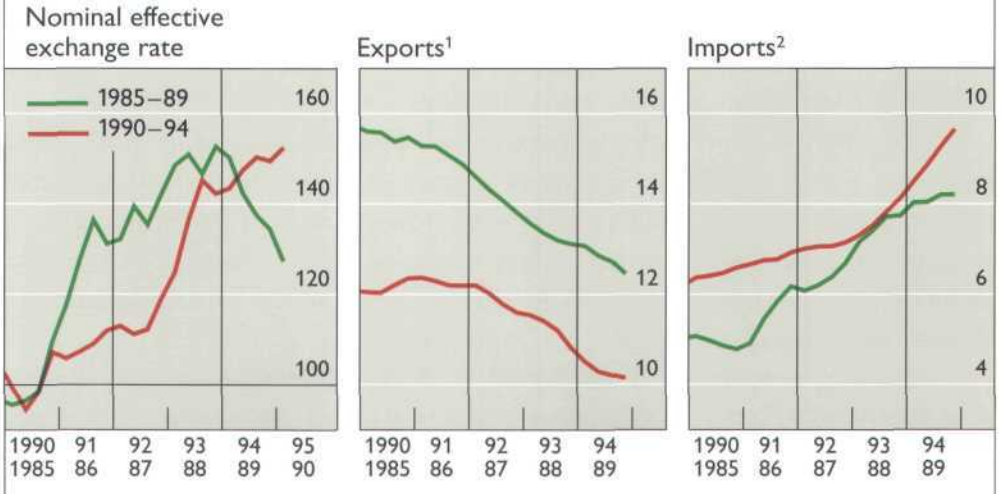
The current account surplus of Japan remained large last year both in US dollar terms (close to $130 billion) and as a percentage of GDP (about 3%). A higher surplus on merchandise transactions offset an increase in the deficit on (non-factor) services, in particular the travel deficit, which swelled as record numbers of Japanese residents travelled overseas. Net investment income stabilised at around $40 billion.

Factors perpetuating the surplus in nominal terms ...

The persistence of a large current account surplus despite substantial yen appreciation is not easy to explain. One element sustaining the surplus has been the rise in net investment income. Japan's net external assets, amounting to $37 billion at the end of 1983, had grown to $611 billion by the end of 1993. This shift to a large external creditor position has entailed a steady rise in net investment income, which now accounts for nearly one-third of the current surplus.

The persistence of the trade surplus is the net effect of opposing forces: powerful relative price effects constraining exports and stimulating imports, offset by the income effects of protracted weakness of economic activity in Japan and by J-curve effects. Relative price effects from the recent appreciation of the yen have had a marked impact on the country's manufacturing trade. The volume of imports of manufactured goods rose by nearly 20% last year, well above the still hesitant pace of recovery of Japanese industrial production and domestic demand. The steep rise in imports of manufactured goods in recent years (see the right-hand panel of Graph III.5) is particularly noteworthy because the unusually low level of such imports in earlier years inevitably fed suspicions that foreign access to the domestic market was effectively restricted. The country's real export share has also declined: last year exports rose by less than 2% despite export market growth of 13%.

The impact of the yen's appreciation on manufacturing trade



Note: The nominal effective exchange rate is rebased to 1985 and 1990 = 100 respectively. Export and import shares are based on value shares in 1985 and 1990 respectively with quarterly changes computed at constant prices.

[1] As a percentage of world exports. [2] As a percentage of gross domestic production. Graph III.5

This substantial real adjustment, however, has been masked by the sharp nominal appreciation of the yen, which has generated large terms-of-trade gains over the last four years (of a cumulative 2.2% of 1994 GDP). Measured at constant prices, Japan's trade surplus has declined steadily since 1992. The adjustment in Japan's merchandise trade surplus in recent years is even more pronounced after correction for the desynchronised growth trends in Japan and its major trading partners. Adjusted for these cyclical factors, the real trade surplus has fallen even more (see Graph III.4).

... but substantial adjustment in real terms

Another major factor affecting Japanese trade has been direct investment abroad, which surged in the second half of the 1980s but slowed subsequently. The impact on trade of foreign direct investment is twofold. In the short term, flows of direct investment abroad give rise to accompanying home country exports of capital goods and intermediate inputs for use in the overseas transplants and subsidiaries. Over time, however, this positive impact on exports wears off as overseas production matures. At that stage, home country exports tend to be displaced by overseas production. Not infrequently, foreign operations even start supplying home country markets. Recent developments in the car industry (as well as in the consumer electronics sector) illustrate the twin effects of foreign investment. With Japanese car companies increasing capacity in their overseas plants and subsidiaries, motor vehicle exports from Japan dropped by about 10% in volume terms last year; but exports of car parts, including to assembly plants overseas, rose by 10%. As many assembly-type operations have been located in South-East Asia, the supply of capital and intermediate goods has been a key factor in the fourfold increase in Japanese exports to this region since the mid-1980s.

Role of foreign direct investment

Western Europe

Western Europe's external balance improved further last year, although the exact size of the surplus is difficult to measure because of the continued problems with the recording of intra-European Union trade. In 1993, the last year for which comprehensive data are available, recorded intra-EU imports fell some 6 percentage points more than recorded intra-EU exports. Preliminary calculations suggest that the discrepancy was carried over into last year's figures, implying a significant overstatement of EU trade surpluses.

The improvement in Europe's external position was widespread. Most countries' exports rose: the volume of exports increased by almost 10% after near-stagnation in 1993. As domestic demand began to recover in the wake of stronger exports, there was also a sharp rise in imports (of over 7%), after the sizable drop registered the preceding year: a reversal of the earlier depletion of inventories probably accentuated the swing in imports.

Strong recovery of trade in Europe in general ...

Following a decline of about 2% in 1993, the volume of German exports rose by over 10% last year. One important factor is that the investment intensity of the current upswing in the industrial world has benefited German exports, traditionally dominated by capital goods. In addition, the rather severe deterioration of German cost competitiveness in the early 1990s was arrested after 1992 as more modest wage growth combined with rising productivity growth in a context of a relatively stable effective Deutsche Mark exchange rate

... and in Germany in particular

Current account balances of the industrial countries

Countries and areas	Current account balance			of which					
				Trade balance			Balance on investment income		
	1992	1993	1994	1992	1993	1994	1992	1993	1994[1]
	in billions of US dollars								
Industrial countries	−44.8	15.4	− 13.9	23.6	77.0	77.0	−17.8	−14.1	−30.8
United States	−67.9	−103.9	−155.7	−96.1	−132.6	−166.4	4.5	3.9	−15.2
Japan	117.6	131.4	129.1	132.3	141.5	145.9	36.2	41.4	41.0
Western Europe	−61.0	23.0	46.6	−21.4	59.1	86.8	−29.1	−27.5	−20.3
France	3.9	9.1	9.9	2.8	8.6	10.0	− 7.4	− 8.2	− 9.5
Germany	−21.1	− 14.7	− 23.2	29.8	42.8	53.6	16.5	14.0	5.4
Italy	−27.9	11.0	15.6	3.0	32.9	35.5	−20.7	−16.2	−15.3
United Kingdom	−17.3	− 17.7	− 0.1	−23.0	− 20.1	− 16.4	7.5	2.4	17.3
BLEU[2]	6.5	11.3	12.7	1.4	3.7	4.3	1.1	3.0	3.4
Netherlands	5.1	10.0	6.9	7.7	11.3	7.7	0.1	0.8	1.9
Sweden	− 8.8	− 4.1	0.9	5.9	6.9	8.9	− 9.8	− 9.0	− 5.9
Switzerland	15.1	18.3	18.1	− 0.6	1.9	2.0	14.9	14.4	14.2
Austria	− 0.2	− 0.7	− 2.1	− 9.7	− 8.4	− 10.4	− 1.2	− 1.0	− 0.9
Denmark	4.3	4.7	3.4	7.2	7.8	7.5	− 5.7	− 4.8	− 4.3
Finland	− 4.9	− 0.8	1.1	2.8	5.4	6.4	− 5.4	− 4.7	− 4.2
Greece	− 2.1	− 0.7	− 0.1	−13.9	− 12.5	− 13.5	− 2.0	− 1.5	− 1.6
Iceland	− 0.2	0.0	0.1	0.0	0.2	0.4	− 0.2	− 0.2	− 0.2
Ireland	2.5	3.6	3.6	5.7	7.1	8.2	− 5.7	− 5.7	− 6.2
Norway	3.0	2.2	3.6	7.6	7.5	7.7	− 3.4	− 3.0	− 3.3
Portugal	0.0	1.0	− 2.6	− 9.4	− 6.9	− 6.2	0.6	0.0	− 0.1
Spain	−17.8	− 2.8	− 3.8	−30.4	− 14.9	− 14.6	− 6.7	− 6.1	− 9.0
Turkey	− 1.0	− 6.4	2.6	− 8.2	− 14.2	− 4.2	− 1.6	− 1.5	− 1.9
Other industrial countries	−33.5	− 35.2	− 34.0	8.7	9.0	10.6	−29.5	−32.0	−36.3
Australia	−10.5	− 10.4	− 14.8	1.6	− 0.1	− 3.3	−10.4	− 8.8	− 9.7
Canada	−22.1	− 23.9	− 18.2	5.5	7.4	12.5	−16.8	−20.7	−23.4
New Zealand	− 0.9	− 0.9	− 1.0	1.7	1.7	1.4	− 2.2	− 2.5	− 3.2

[1] Partly estimated. [2] Belgium-Luxembourg Economic Union. Table III.3

(at least until late 1994). Although more buoyant export activity also stimulated import demand, the trade surplus widened further to about $54 billion. However, a growing deficit on services, largely reflecting increased net spending on foreign travel, offset a sizable part of the merchandise trade surplus. Moreover, the marked shrinking of the surplus on net investment income in the early 1990s continued last year.

Competitiveness and trade performance

Although cyclical conditions in most other continental European countries have been similar over the last two years, differences in their relative trade performance, in particular with respect to exports, have been significant. The large intra-European exchange rate changes between September 1992 and the summer of 1993 have been at the heart of these differences, splitting the European economies into two groups. As Graph III.6 shows, the large depreciations of the currencies of Italy, Spain, Sweden and the United Kingdom

more than offset the earlier real appreciations, leaving them with a more competitive position by mid-1993 than in 1987, the start of a long period of intra-European nominal exchange rate stability. Since then, their competitive position has improved further – in quite a major way in the case of Italy, more modestly in the case of the others. Nevertheless, higher import prices may now begin to contribute to an upward drift in inflation in some countries as activity strengthens. In the other group of countries, shown in the left-hand panel of the graph, success in maintaining exchange rate stability vis-à-vis the Deutsche Mark, the currency of their most important trading partner, has left their competitiveness broadly unchanged, albeit with some real appreciation during 1994 and early 1995.

Depreciation stimulates exports ...

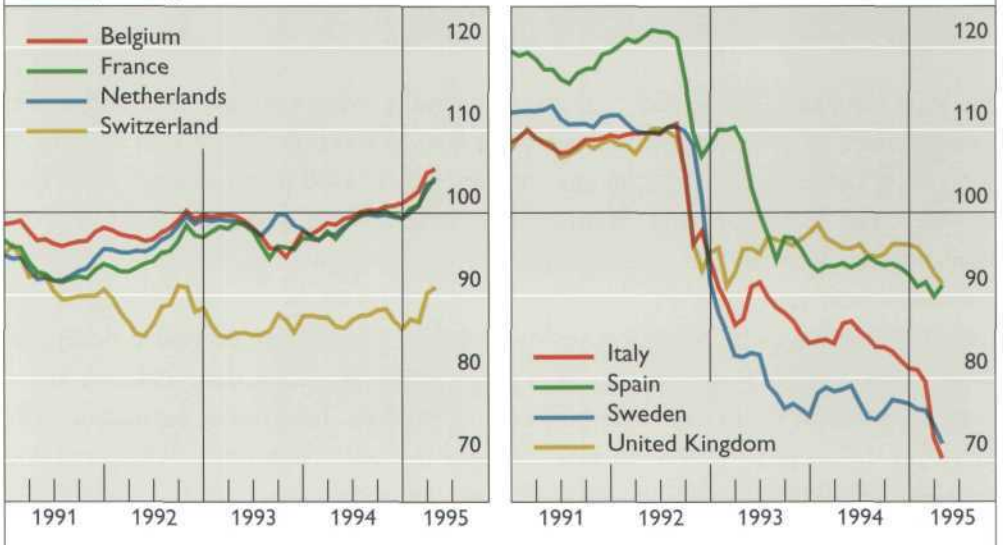
The impact of changes in competitiveness on export performance in these two groups of countries has been rapid and significant (see Table III.4). In 1993 exports of the countries whose currencies depreciated were able to overcome very sluggish demand conditions in Europe and take advantage of rapidly expanding export markets in North America and South-East Asia. Their combined export volumes rose by 7½%, while exports from the group of stable currency countries stagnated. As real exchange rates in Europe stabilised somewhat after mid-1993, the divergences in export performance in 1994 were smaller, though still visible: the volume of exports of the group of stable currency countries grew by 6½%, compared with 12% for the depreciating currency group.

... and improves external positions

Rapid export growth helped bring about a sizable improvement in the external balances of many of the countries with depreciating currencies. By 1992, the combined current account deficit of Italy, Spain, Sweden and the United Kingdom had reached $72 billion; last year it was turned into a surplus of over $12 billion. In 1993, the largest adjustments had been made by Italy, Sweden and Spain; it was only in 1994 that UK exporters used the decline in their relative

Real effective exchange rates in selected European countries*

Monthly averages, 1987 = 100



* Based on relative unit labour costs in manufacturing.

Graph III.6

Trade volume growth of selected European countries

	Exports			Imports			*Change in competitiveness*[1]
	1992	1993	1994	1992	1993	1994	*Aug. 1992 to Aug. 1994*
	in percentages						
Depreciating currency countries[2]	3.9	7.5	12.2	5.2	−2.6	9.6	*18.3*
Germany	0.2	−1.9	10.5	0.7	−6.2	6.4	*−5.1*
Stable currency countries[3]	3.1	0.2	6.5	0.9	−1.3	8.2	−2.7

Note: Group averages are weighted according to individual countries' 1990 trade shares.

[1] As measured by relative unit labour costs. An increase indicates an improvement. [2] Countries whose currencies depreciated vis-à-vis the Deutsche Mark in 1992–94: Finland, Ireland, Italy, Portugal, Spain, Sweden and the United Kingdom. [3] Countries whose Deutsche Mark exchange rate remained relatively stable in 1992–94: Austria, Belgium, Denmark, France, the Netherlands and Switzerland.

Table III.4

labour costs to increase export volumes rather than to restore profit margins, as they appear to have done in 1993. With a strong increase in the surplus on net investment income, reflecting in part the higher profitability of UK companies' overseas operations, the UK current account deficit was virtually eliminated in 1994.

A final notable feature was that the trade balance of Turkey was also helped by a large depreciation of the exchange rate in early 1994 and by a tightening of policy. Exports boomed while imports fell, reducing the trade deficit by $10 billion in 1994.

Other industrial countries

Continuing strong export growth in Canada

Canadian exports have been stimulated by a 25% fall in the real effective exchange rate since 1992, rapid export market growth and the progressive liberalisation of trade with the United States and Mexico. Following average annual increases of 9½% in 1992 and 1993, exports expanded in volume terms by nearly 16% last year. Excluding trade in automotive products with the United States, export growth was even stronger. Exports of machinery and equipment rose particularly sharply as strong US growth quickly absorbed excess production capacity there. Buoyant domestic demand in Canada, including fixed capital spending, also boosted import growth, with volumes rising by 13%. As the terms of trade hardly changed, the trend in trade volumes was reflected in a substantial widening of Canada's trade surplus. A weak exchange rate may also have contributed to a reduction in net spending on foreign travel, the main element of the country's traditional deficit on non-factor services: while receipts from foreign visitors rose significantly, expenditures dropped quite sharply. For the first time for many years, Canada ran a surplus on trade and services. Nevertheless, the sizable net investment income payments, reflecting the country's large external debt, led to a current account deficit of over 3% of GDP.

Australia and New Zealand

Strong economic growth in Australia and New Zealand pushed up import growth to over 15% in volume terms in both countries last year. Although

supported by rapidly expanding markets, in particular in the South-East Asian region, export growth did not keep up, resulting in deteriorating trade balances. Australia's current account deficit, running at 5½% of GDP, is adding to what is already a high level of external debt.

Countries in transition

Aggregate trade deficit shrinks

The continued strong expansion in exports from eastern Europe contributed to a return to growth in 1994 – after three years of sizable decline in GDP. Since 1990, the dollar value of exports has risen by 27%. Among the larger countries, Poland has seen the biggest increase in exports (over 50%) and Hungary the smallest (about 10%). The aggregate trade deficit of eastern Europe fell to $5 billion, about 7½% of the value of merchandise exports, compared with 15% in 1993.

Hungary

However, *Hungary* did not share in this general improvement. A larger than average trade deficit was again recorded – $3½ billion, the equivalent of one-third of merchandise exports. This deficit, accompanied by a large fiscal shortfall and coming on top of relatively high external debt levels, has weighed heavily on the exchange rate for some time. After significant real appreciation during 1992 and early 1993, exchange rate policy has aimed in recent months at enhancing international competitiveness. The forint was devalued against its currency basket by a cumulative 17% in 1994. The producer price based measure of the real effective exchange rate declined significantly. In March 1995, the Government devalued the forint by a further 9%, and announced its intention of allowing the currency to depreciate by up to 27% during 1995 as a whole.

Poland

In *Poland*, in contrast, an improved trade performance permitted some hardening of exchange rate policy. The country's convertible currency deficit fell to below $1 billion as exports grew vigorously. Since exports are probably

Eastern European trade[1]

Countries and areas	Exports			Imports			Trade balance		
	1992	1993	1994[2]	1992	1993	1994[2]	1992	1993	1994[2]
	in billions of US dollars								
Eastern Europe	52.2	55.9	65.8	54.7	64.4	70.7	−2.5	−8.5	−4.9
Bulgaria	3.9	3.7	4.4	4.4	4.6	4.0	−0.5	−0.9	0.4
Czech Republic[3]	8.8	13.2	14.3	10.4	12.9	14.7	−1.6	0.3	−0.4
Hungary	10.7	8.9	10.7	10.9	12.3	14.3	−0.2	−3.4	−3.6
Poland[4]	14.0	13.6	17.0	13.5	15.9	17.8	0.5	−2.3	−0.8
Romania	4.4	4.9	5.9	5.8	6.0	6.3	−1.4	−1.1	−0.4
Slovak Republic[3]	3.7	5.5	6.7	3.8	6.4	6.6	−0.1	−0.9	0.1
Slovenia	6.7	6.1	6.8	5.9	6.3	7.0	0.8	−0.2	−0.2
Memorandum item:									
CIS[5]	26.7	29.3	37.7	24.7	26.0	28.5	2.0	3.3	9.3

[1] Based on customs data (f.o.b./f.o.b.). [2] Partly estimated. [3] For 1992, excluding bilateral trade between the Czech and Slovak Republics. [4] Convertible currencies only, on a balance-of-payments basis. [5] Based on OECD countries' trade data. Trade with Finland is excluded. Table III.5

subject to some under-recording, the true trade position may be even stronger. The rate of crawling peg depreciation has been reduced in steps from 1.8% a month (before August 1993) to 1.2% since February 1995. With inflation running significantly higher, the real effective exchange rate has appreciated.

Czech Republic

After a marked depreciation at the beginning of the decade, the *Czech Republic* has succeeded in maintaining a fixed nominal exchange rate since December 1990. Since then, a significant real appreciation has been absorbed without upsetting the broad balance in its trade account. However, the rate of expansion of exports – very rapid in the early 1990s – slowed last year and imports rose in the wake of the recovery in economic activity after three years of steep decline.

Commonwealth of Independent States (CIS)

Oil production in the *former Soviet Union* fell again last year, though by less than in the preceding years. The disruption of production in the 1990s has been such that the former Soviet Union now accounts for only 11% of world production, compared with 20% as recently as 1988. However, domestic consumption has borne the brunt of this decline; the volume of oil exports again changed little last year. Nevertheless, the dollar value of total exports from the CIS to the industrial world increased. According to OECD countries' trade data, the trade surplus with the industrial countries rose to over $9 billion. Most of this surplus was generated by Russia, the principal oil exporter. With the main exception of Turkmenistan – also energy-rich – most of the other CIS states have continued to run large deficits.

The developing world

Large deficits in Latin America ...

The aggregate current account deficit of the developing world remained large in 1994 for the fourth successive year, bringing the cumulative deficit since 1991 to over $300 billion (see Table III.6). Measured in relation to exports, deficits have been especially large in Latin America; a dominant element has been Mexico's deficit, which widened to the equivalent of almost 70% of exports last year. The

... but not in Asia

deficits of Africa and the Middle East also increased. In contrast, Asian countries, when not in surplus, have run deficits proportionately much smaller than those in Latin America. Indeed, China's deficit was virtually eliminated in 1994 as the volume of exports rose by more than a quarter. The rest of Asia ran a small deficit (after virtual balance in 1993) as the deficits of Korea and the more recently industrialising countries (notably Indonesia, Malaysia and Thailand) increased.

Greater trade orientation of much of the developing world

Developing country imports again grew rapidly last year. By broad area, growth was fastest in Asia, where imports rose by over 15% in real terms, partly because of stronger economic activity in the region, but partly too because of greater import penetration. As a result of trade liberalisation, and under the particular influence of increased foreign direct investment (see page 68 below), Asian economies have become more trade-oriented in recent years. Leaving aside China, exports already amounted to one-quarter of total demand at the end of the 1980s (see Table III.7); over 30% of the rise in demand since then has come from exports. In contrast, the legacy of earlier import substitution policies had left much of Latin America relatively closed. Even so, most countries have

Current account balances of developing countries

Areas and countries	1991	1992	1993	1994[1]	1991	1992	1993	1994[1]
	in billions of US dollars				as a percentage of exports of goods and non-factor services			
Developing countries	–75.8	–66.8	–75.2	–84.3	– 7.9	– 6.3	– 6.5	– 6.5
Africa	– 4.3	– 9.3	– 8.5	–12.4	– 4.5	– 9.8	– 9.1	–12.8
China	13.3	6.4	–11.6	– 0.5	20.2	8.1	–13.4	– 0.4
Other Asia	– 8.4	– 5.6	1.5	– 7.7	– 1.6	– 1.0	0.2	– 1.0
of which: Hong Kong[2]	*5.7*	*5.4*	*7.9*	*2.4*	*4.8*	*3.7*	*4.9*	*1.3*
Korea	*– 8.7*	*– 4.5*	*0.4*	*– 4.8*	*–10.7*	*– 5.2*	*0.4*	*– 4.3*
Singapore	*4.0*	*3.7*	*5.2*	*12.0*	*5.4*	*4.6*	*5.4*	*10.0*
Taiwan	*12.0*	*8.2*	*6.7*	*6.0*	*14.3*	*9.0*	*6.9*	*5.7*
India[3]	*– 1.2*	*– 3.5*	*– 0.3*	*– 0.9*	*– 5.3*	*–15.2*	*– 1.1*	*– 2.9*
Indonesia	*– 4.3*	*– 2.8*	*– 2.0*	*– 3.2*	*–13.1*	*– 7.5*	*– 5.7*	*– 7.1*
Malaysia	*– 4.2*	*– 1.8*	*– 2.5*	*– 4.4*	*–11.1*	*– 4.1*	*– 4.8*	*– 7.1*
Thailand	*– 7.6*	*– 6.4*	*– 6.9*	*– 8.5*	*–21.3*	*–15.6*	*–14.9*	*–15.5*
Middle East	–59.4	–23.8	–12.3	–15.4	–51.2	–18.8	– 9.4	–12.0
Latin America	–14.8	–31.0	–40.9	–44.4	–10.9	–21.6	–26.9	–26.7
of which: Argentina	*– 0.6*	*– 6.5*	*– 7.5*	*–10.5*	*– 4.5*	*–44.2*	*–47.3*	*–57.1*
Brazil	*– 1.4*	*6.1*	*– 0.6*	*– 1.5*	*– 4.1*	*15.7*	*– 1.5*	*– 3.0*
Chile	*0.0*	*– 0.7*	*– 2.1*	*– 0.8*	*0.1*	*– 6.0*	*–17.7*	*– 5.2*
Mexico	*–14.9*	*–24.8*	*–23.4*	*–28.9*	*–37.5*	*–59.8*	*–52.2*	*–67.1*

[1] Partly estimated. [2] Net exports of goods and non-factor services. [3] Financial year starting in April.

Table III.6

become more trade-oriented in recent years, with exports accounting for 21% of the increase in demand: nowhere has this change been more marked than in Brazil. Moreover, the structure of Latin American exports has changed significantly with manufactured goods now accounting for more than half of total exports, compared with less than one-fifth in 1980. An important policy consequence of this shift is that it has made Latin American trade more sensitive to changes in international competitiveness, and less dependent on commodity prices.

China

Exchange rate reforms and competitiveness

China's trade continued to expand strongly in 1994, the first year under a new unified exchange rate regime. Under the old multiple exchange rate system, more market-responsive "swap rates" coexisted with an official exchange rate that was applied both for the conversion of 20% of enterprises' foreign earnings and for the purchase of "plan" imports, mainly by state-owned enterprises. As most foreign exchange earnings could be sold at the more favourable swap rate, this system served to encourage exports. In addition, this mechanism of keeping 20% of export earnings out of the swap markets tended to depress swap rates. Indeed, the marked deterioration in China's current account position in 1992 and 1993 put particularly sharp downward pressure on the swap exchange rate (see Graph III.7). When the official exchange rate was scrapped in January 1994 – leaving a single managed and administered floating rate – the currency settled at the rate that had prevailed in the swap markets before the change, leaving China with a heavily depreciated real effective exchange rate.

External trade of the developing world

	Export volume growth[1]			Import volume growth[1]			Export share of demand	
	1990–92	1993	1994	1990–92	1993	1994	Average[2]	Marginal[3]
Industrial world	4.1	1.5	8.6	3.7	1.5	10.5	12.5	26.3
Developing world	6.4	7.9	10.5	10.6	9.8	8.9	18.2	23.4
China	10.4	12.0	26.0	9.5	28.0	16.0	10.9	15.2
Other Asia	7.5	9.7	12.9	12.2	10.5	13.8	25.3	31.2
NIEs[4]	*6.2*	*7.6*	*12.2*	*11.1*	*9.1*	*11.2*	*34.9*	*32.2*
Other[5]	*10.1*	*13.9*	*14.1*	*14.3*	*13.4*	*18.8*	*14.5*	*26.0*
Latin America	7.5	6.0	8.9	17.4	11.9	11.8	10.4	20.9
Brazil	*4.1*	*9.5*	*5.8*	*4.6*	*28.8*	*21.7*	*7.0*	*27.7*
Mexico	*6.6*	*2.6*	*8.3*	*21.5*	*–3.1*	*16.0*	*10.0*	*13.9*
Other	*9.7*	*6.3*	*11.2*	*21.6*	*11.7*	*2.6*	*17.2*	*27.2*

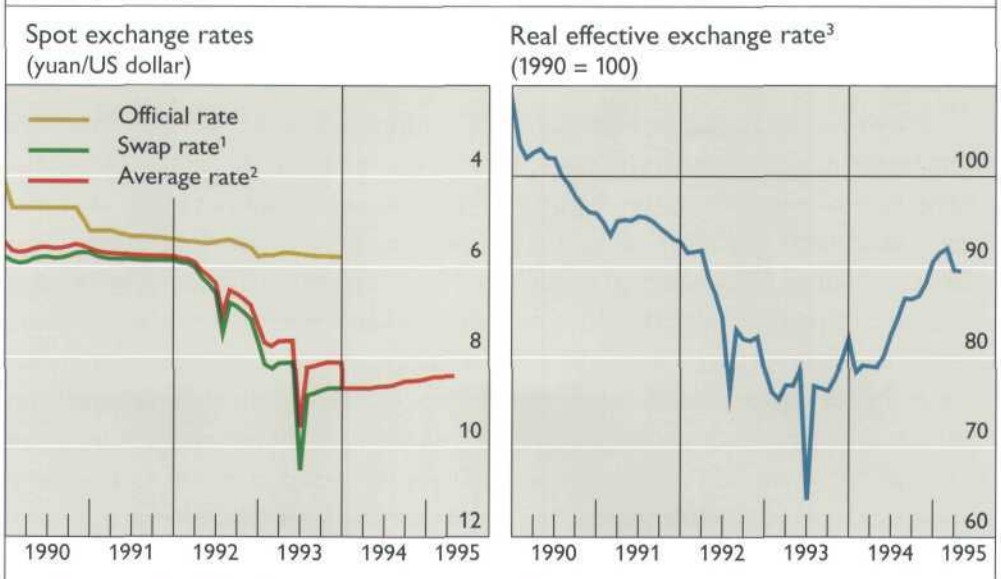
[1] Average annual rate. Countries weighted by the dollar value of 1990 merchandise trade. [2] Exports as a percentage of total demand (GDP plus imports) in 1989. [3] Change in exports as a percentage of the change in total demand (from 1989 to 1994; at constant prices). [4] For Hong Kong, domestic exports and retained imports only. [5] India, Indonesia, Malaysia, the Philippines and Thailand.

Table III.7

This real depreciation contributed to a sharp increase in China's trade surplus in 1994 and the first quarter of 1995 as the volume of exports rose even faster than that of imports. With foreign direct investment inflows also expanding strongly and the nominal exchange rate being held broadly constant against the dollar, the foreign exchange reserves rose from $21 billion at the end of 1993 to $58 billion by the end of March 1995. With inflation accelerating, the real effective exchange rate appreciated by about 15% over this period.

China's exchange rates

Monthly averages



[1] Shanghai swap centre rate. [2] Prior to 1994, a weighted average (for exporters) of the official and swap rates; unified rate thereafter. [3] Based on the average rate and consumer prices. Graph III.7

Hong Kong

Demand in Hong Kong also grew rapidly, leading to a 14% rise in retained imports, the largest for some years. Exports of domestically produced goods fell by 2%, although the strong yen led to increased exports to Japan. Re-exports also rose sharply, reflecting Hong Kong's well-established position as the intermediary for much of Chinese trade. Taiwan's links with China also deepened further. According to GATT figures, the combined exports of China, Hong Kong and Taiwan now equal those of France, the world's fourth-largest exporter. Moreover, exports of commercial services of both Hong Kong and Taiwan have risen steeply in recent years.

Taiwan

Korea and Singapore

The strengthening of the yen also stimulated the exports of both Korea and Singapore. Exports from Singapore increased by 28% in volume terms; a sizable current account surplus facilitated the steady appreciation of the currency against the US dollar. Korean exports expanded by 13%, significantly faster than in earlier years; but imports rose by close to 20% in real terms, partly reflecting imported capital and intermediate goods from Japan.

Elsewhere in Asia

The long-lasting boom in the rest of Asia continued last year, with both imports and exports rising by much more than GDP. Export growth has accounted for 24% of the increase in demand so far this decade. With imports growing still more rapidly, current account deficits have tended to widen; Indonesia, Malaysia and Thailand registered significant deficits. But quite unlike the deficits seen in Latin America, these deficits reflected a further increase in already high rates of domestic investment rather than consumption (see panel A of Graph VII.1 on page 145). Heavy foreign direct investment has also played an important role.

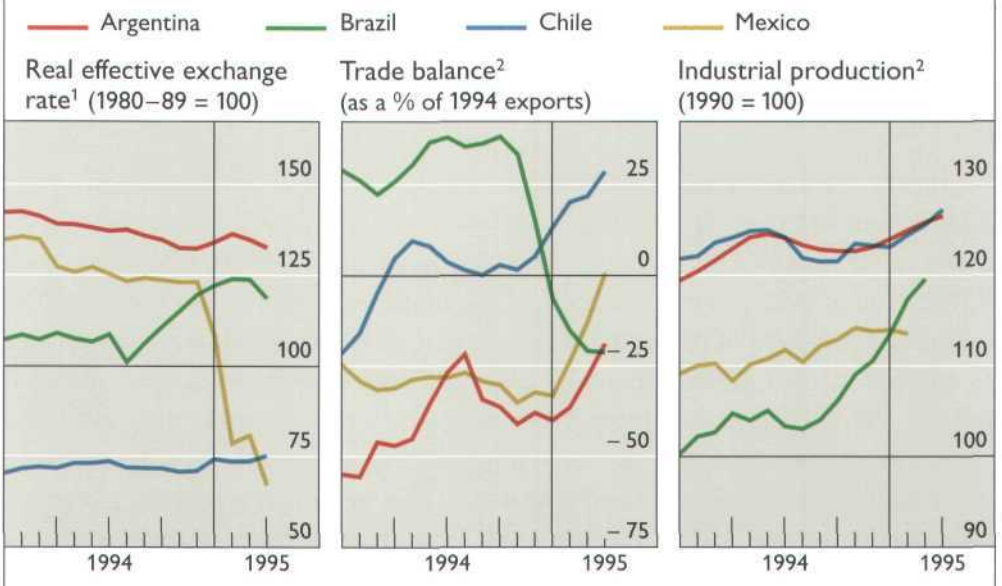
Latin America

Latin America's current account position worsened sharply in the early 1990s, moving from virtual balance in 1990 to a deficit of over $40 billion in 1993 and 1994, equivalent to about one-quarter of total exports of goods and services. This aggregate, however, masks quite contrasting developments in different countries.

Brazil

A number of countries have followed – often different – policies that have contained current account deficits. The current account deficit of *Brazil*, the largest economy in the region, had remained relatively small until very recently. One explanation for this is that a highly competitive exchange rate was maintained during the period of major trade liberalisation. Attempting to reverse the effects of years of import substitution (which had left Brazil's trade/GDP ratio one of the lowest in the world), the Government embarked on a major programme of import liberalisation. Tariffs were drastically reduced, especially on capital and intermediate goods; as a result, the volume of imports rose by more than one-half in the last two years, providing a significant stimulus to the trade of neighbouring countries. Up to the middle of last year, the official exchange rate policy was to offset the impact on competitiveness of very high inflation by equally rapid exchange rate depreciation, a policy facilitated partly by restrictions on capital account transactions. It was only after the strong exchange rate

Exchange rates, trade and output in Latin America



[1] In terms of relative consumer prices. [2] Three-month moving averages. Graph III.8

appreciation that followed the currency stabilisation plan in July 1994 (see Graph III.8) that the current account deficit began to widen sharply.

Chile

Chile's current account deficit has been limited by stabilising macroeconomic policies and a sustained orientation to economic reform. Although the real exchange rate was allowed to strengthen as underlying conditions improved, the authorities sought to prevent any premature or excessive appreciation that would later have to be reversed.

Venezuela

The sizable current account surplus of *Venezuela* last year reflected the effects of a major crisis. After a loss of confidence in the bolivar had led to a large depreciation and to the reinstatement of exchange controls, the volume of imports declined by more than 30% last year.

Mexico

The size of *Mexico's* current account deficit – which rose to the equivalent of 8% of GDP in 1994 from 6.4% in 1993 – set it apart from other Latin American countries. Moreover, it did not reflect cyclical factors: Mexican growth has remained rather moderate and growth in the United States, the key export market, picked up strongly last year. Indeed, output in Mexico has risen more slowly than in much of Latin America: by the beginning of 1994, industrial production was less than 10% higher than in 1990 (although growth did pick up during 1994 – see Graph III.8).

New trade patterns emerge in recent months

Exchange rate and other developments that followed the onset of the Mexican crisis had a major impact, not only on the configuration of real exchange rates, but also on the pattern of trade balances emerging in the early months of 1995. The real appreciation of the Mexican peso during the early 1990s was more than completely reversed by early 1995. With interest rates held very high, and domestic demand weak, a contraction in imports combined with a surge in exports led to a sharp improvement in the trade balance (see Graph III.8). Despite a modest nominal depreciation of the Brazilian cruzeiro real in March 1995, a large real appreciation has persisted. Combined with a surge in consumer and

import demand in the immediate aftermath of the currency stabilisation, this contributed to the sizable trade deficit in the early months of 1995, a deficit that prompted the authorities to increase import tariffs on consumer goods sharply.

Foreign direct investment

Record outflows

Aggregate foreign direct investment (FDI) outflows amounted to over $230 billion last year. The United States was once again the major investor with outflows of almost $60 billion in 1994, followed by the United Kingdom with $30 billion. In both cases, about half of the flows were reinvested earnings. The US and UK practice of recording the non-repatriated profits of overseas affiliates as current account earnings (with an offsetting direct investment capital outflow) follows IMF guidelines. But most other countries do not yet do this, and many statistical reporting systems cannot in any case fully capture the profits of "their" companies abroad when not remitted home. This asymmetric reporting practice thus overstates the US and UK shares of global foreign direct investment.

According to balance-of-payments statistics (which do not include reinvested earnings), Japanese investment picked up to $18 billion, though this was still well below the high rates seen in the late 1980s when Japanese entities had invested heavily in the United States. The redirection of Japanese investment to China and other Asian countries continued last year, and for the first time investment in Asia exceeded that in Europe. Investment by continental European countries also recovered.

Global pattern of direct investment

	1976–80	1981–85	1986–90	1991	1992	1993	1994[1]
	in billions of US dollars, annual averages						
Total outflows	39.7	43.2	167.7	187.1	179.4	199.0	233.5
Industrial countries	39.0	41.4	158.6	177.7	161.4	168.4	197.8
of which: United States	*16.9*	*7.6*	*25.3*	*31.3*	*41.0*	*57.9*	*58.4*
Japan	*2.3*	*5.1*	*32.1*	*30.7*	*17.2*	*13.7*	*17.9*
United Kingdom	*7.8*	*9.2*	*28.1*	*16.4*	*19.4*	*25.7*	*30.0*
Other Europe	*10.0*	*15.1*	*63.9*	*91.3*	*80.2*	*63.2*	*80.1*
Developing countries[2]	0.8	1.8	9.1	9.5	18.0	30.5	35.7
of which: Asia	*0.1*	*1.1*	*7.8*	*7.2*	*15.3*	*26.4*	*30.2*
Latin America	*0.2*	*0.2*	*0.6*	*1.3*	*0.8*	*2.2*	*2.9*
Total inflows	31.8	55.3	152.4	152.0	153.2	177.4	239.7
Industrial countries	25.3	36.2	126.8	108.7	94.8	96.8	135.1
of which: United States	*9.0*	*18.6*	*53.4*	*26.1*	*9.9*	*21.4*	*60.1*
Japan	*0.1*	*0.3*	*0.3*	*1.4*	*2.7*	*0.1*	*0.9*
United Kingdom	*5.6*	*4.3*	*21.7*	*16.1*	*16.5*	*14.6*	*10.9*
Other Europe	*8.7*	*9.9*	*38.8*	*57.5*	*55.7*	*52.4*	*51.5*
Developing countries[2]	6.4	19.1	25.6	43.3	58.4	80.6	104.6
of which: China	..	*1.0*[3]	*3.1*	*4.4*	*11.2*	*25.8*	*33.8*
Other Asia	*2.1*	*4.6*	*12.1*	*20.5*	*26.2*	*25.5*	*33.3*
Latin America	*3.6*	*5.6*	*6.6*	*11.2*	*12.6*	*16.1*	*25.9*

[1] Preliminary. [2] Including eastern Europe. [3] 1982–85. Table III.8

Rising shares flowing to developing countries ...

The developing world again attracted an increased share of direct investment last year, with inflows reaching a record $104 billion, over 40% of global flows. Part of this represented increased investment by the developing countries themselves, with intra-Asian flows becoming particularly important. The largest single destination in the developing world was China, with total inflows of almost $34 billion; as in earlier years, investment by enterprises based in Hong Kong accounted for much of this total. By the middle of this year, the stock of foreign direct investment in China is expected to reach $100 billion, with almost half coming from or through Hong Kong.

... in particular to China and other Asian countries

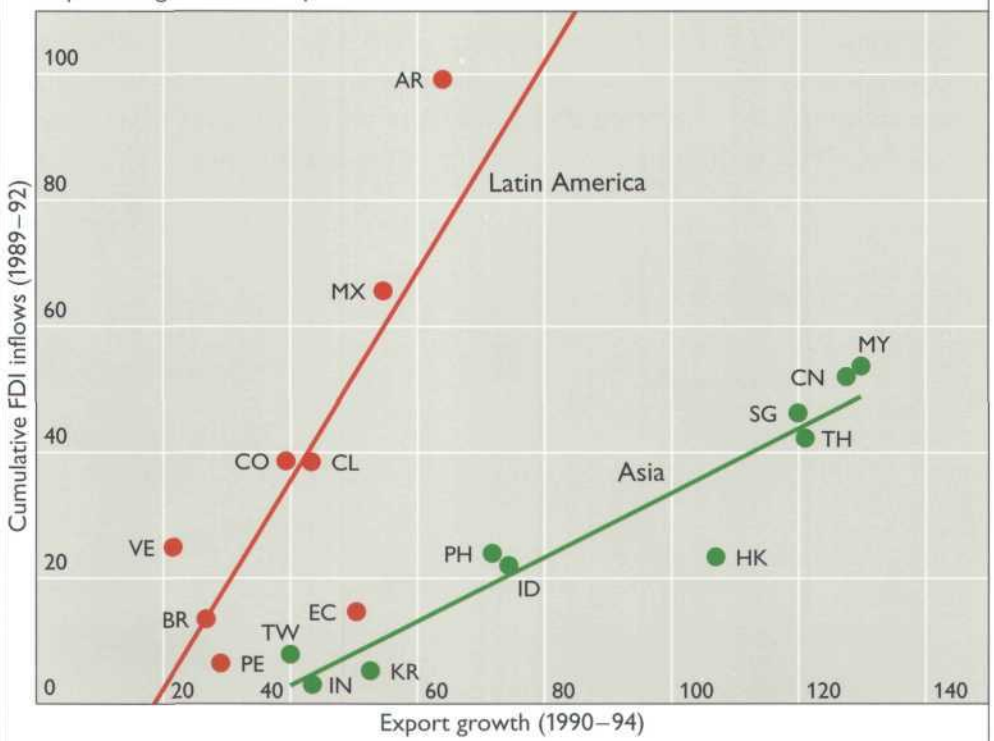
This trend has been helped by generous fiscal or other benefits reserved for foreign investors; such incentives may also have encouraged the "round-tripping" of Chinese capital through Hong Kong, inflating the measured flows. But in March 1995 the Chinese authorities announced plans to phase out certain preferential tax provisions and laid down new guidelines specifying which investments were to be encouraged. Chinese entities are also becoming significant investors in Hong Kong, with the stock of investment estimated at $25 billion last year. Investment by the higher-income Asian countries (Korea, Taiwan and Singapore) in lower-income countries in the region continued to expand. Total foreign direct investment in Asia amounted to $67 billion; Asian investment totalled $30 billion.

Latin America

Foreign direct investment in Latin America, although increasing sharply last year, remains well below that in Asia. Indeed, an important feature of capital

Foreign direct investment and exports

As percentages of 1989 exports



AR = Argentina; BR = Brazil; CL = Chile; CO = Colombia; EC = Ecuador; MX = Mexico; PE = Peru; VE = Venezuela; CN = China; HK = Hong Kong; IN = India; ID = Indonesia; KR = Korea; MY = Malaysia; PH = Philippines; SG = Singapore; TW = Taiwan; TH = Thailand. Graph III.9

inflows into Latin America has been the much heavier reliance on portfolio rather than direct investment flows (see Chapter VII). In addition, much FDI in Latin America has reflected the purchase of shares in newly privatised state enterprises, and not new or greenfield investment.

Impact on external adjustment ...

The concentration of foreign direct investment in much of the developing world on the tradables, rather than non-tradables, sector has significant implications for the international adjustment process. When FDI inflows are associated with increased imports of capital goods and intermediate products, the corresponding deterioration in the current account alleviates the upward pressure on the exchange rate from the capital inflows. Equally, any such current account deterioration contains the seeds of its own correction as exports rise when new production comes on stream. In the light of this, the much greater export orientation of direct investment in Asia than in Latin America assumes some significance.

... differs between the regions

The relationship between recent FDI inflows and the expansion in exports recorded in the 1990s by the larger economies in Asia and Latin America is shown in Graph III.9. Two differences between the regions stand out. The first is that the relationship between direct investment and the growth of exports is closer across the Asian countries than across the Latin American countries. The second is that foreign direct investment in Asia is more export-intensive (i.e. the regression line shown is flatter) than that in Latin America. This difference is confirmed by a comprehensive survey of the activities of majority-owned foreign affiliates of US non-bank companies. While US firms in Asia export more than one-half of their output, those in Latin America export only about one-quarter of their production, a concentration on domestic sales that presumably reflects the earlier import substitution policies pursued in Latin America. A second piece of evidence comes from Chinese statistics which suggest that the exports of foreign-funded enterprises – joint ventures and wholly foreign-owned enterprises – have accounted for an average of about 60% of the increase in China's exports during the 1990s, with this percentage rising in the last few years.

IV. Monetary policy in industrial countries

Highlights

As the economic upswing gained momentum last year, monetary policy in a number of industrial countries was tightened with the aim of pre-empting an upsurge in inflation. The tightening which began in the United States in February 1994 continued through the year and similar moves towards restraint were made in the United Kingdom, Italy, Sweden, Canada, Australia and Finland. However, central bank interest rates remained unchanged in 1994 in Japan and were lowered further in Germany. In early 1995, in a context of exchange market tensions, monetary policy was also tightened in some countries participating in the European exchange rate mechanism (ERM) but was eased in Japan and Germany.

The move towards monetary restraint, beginning unusually far in advance of an acceleration of consumer price inflation, reflected the strengthening in recent years of the commitment of central banks to price stability. It also took place against a background of heightened financial market sensitivity to the outlook for inflation and to monetary policy decisions. In response monetary authorities have made efforts to increase transparency by providing more information about the considerations on which policy changes are based.

A key question now is whether policy will prove more effective in containing inflation than in previous economic recoveries. On the one hand, it is possible that early policy responses and increased flexibility in the goods or labour markets have made some economies less inflation-prone. On the other hand, achieving a sustainable non-inflationary economic expansion will depend crucially on expectations of inflation staying very low. Experience shows that policy credibility has to be earned by performance, and the commitment of the central bank to price stability may not in itself be a sufficient condition. Indicators of inflation expectations suggest that in some countries credibility has been weakened by large imbalances in the public finances or the risk that currency depreciation will eventually be reflected in an acceleration of inflation.

Interest rate policy in the current economic recovery

Changes in interest rate policy last year ...

In the United States, the Federal Reserve raised its operating objective for the federal funds rate in steps from 3% in February 1994 to 6% by February 1995. Central bank interest rates in European countries generally continued to decline through the spring of 1994. However, as from August/September the interest rates most indicative of monetary policy were raised in the United Kingdom, Italy, Sweden and Australia. Following declines in the autumn, the range for the overnight rate in Canada was increased in November when the currency came

under pressure following a further tightening in the United States. Short-term interest rates were raised in December in Spain and Finland, and in early 1995 rates also rose in Ireland, France, Belgium and Denmark in a context of pressures on ERM exchange rate relationships. Except in these ERM countries, the increases were primarily a response to strengthening economic activity and signs of a quickening of the pass-through to domestic prices of currency depreciation.

In late March 1995, against a background of moderate monetary expansion and a strong appreciation of the Deutsche Mark, policy rates were lowered further in Germany. Official rates were lowered in the Netherlands and Austria at the same time and in Belgium shortly afterwards. In April the Bank of Japan reduced its discount rate from 1¾% to 1%.

The timing and calibration of interest rate changes

... more timely than in the past

Conscious of past shortcomings of policy in preventing a build-up of inflation, some central banks have recently sought to take more account of the lags in the transmission process of monetary policy. Accordingly, interest rates have been increased further in advance of a strengthening of inflationary pressures than in the past. Other central banks have displayed considerable caution in easing policy, even though the economic recovery remained weak.

United States

In the United States, the first tightening of monetary policy in 1994 took place further in advance of the upturn in inflation than in most previous cycles (see Graph IV.1). However, in the present cycle the Federal Reserve had kept the federal funds rate at an unusually low level in real terms for an extended period. In view of concerns that financial market participants had assumed substantial risk in their portfolios through leveraging operations aimed at raising returns in conditions of monetary ease, the tightening of policy was moderate at first. Its pace subsequently quickened as the risk of a build-up in inflation expectations increased and concerns about risk exposure diminished. Although the federal funds rate eventually moved to a higher level in relation to current

Official interest rates[1]

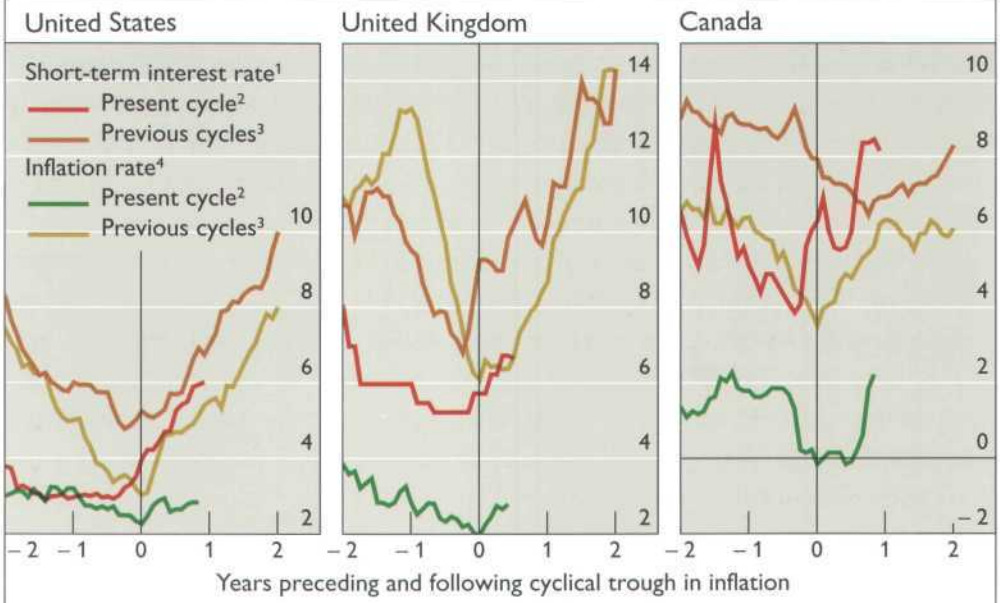
At end of month, in percentages per annum

	US	JP	GB	CA	AU	IT	ES	SE	FI
March 1994	3.50	2.22	5.25	5.64	4.75	8.40	8.00	6.95[2]	4.96
September 1994	4.75	2.19	5.75	5.54	5.50	8.20	7.35	7.20	5.12
March 1995	6.00	1.98	6.75	8.47	7.50	10.35	8.50	8.20	5.75
	DE	FR	BE	NL	AT	DK	NO	IE	PT
March 1994	5.76	6.00	6.15	5.50	5.50	6.00	6.75	6.75	10.00
September 1994	4.85	5.00	4.85	4.80	4.70	5.50	6.75	6.25	9.25
March 1995	4.50	5.00	5.85	4.50	4.45	7.00	6.75	7.25	10.11

US = United States; JP = Japan; GB = United Kingdom; CA = Canada; AU = Australia; IT = Italy; ES = Spain; SE = Sweden; FI = Finland; DE = Germany; FR = France; BE = Belgium; NL = Netherlands; AT = Austria; DK = Denmark; NO = Norway; IE = Ireland; PT = Portugal.

[1] For the United States and Australia, overnight market rate objective; for Japan, one-week call-money market rate; for the United Kingdom, base rate; for Canada, official discount rate; for other countries, central bank rate (for Denmark, CD rate; for Norway, overnight lending rate; for Ireland, short-term facility rate; for Portugal, occasional liquidity provision rate; for other countries, marginal rate in periodic tenders for supplying bank reserves). [2] 1st June 1994 (new instrument). Table IV.1

Interest rates and cycles in consumer price inflation



[1] Policy rate: for the United States, federal funds; for the United Kingdom, base rate; for Canada, discount rate. [2] Trough in the increase in consumer prices set at May 1994 for the United States and Canada and October 1994 for the United Kingdom. [3] Average of three cycles with troughs in 1971 or 1972, 1976 or 1978 and 1983 or 1986. [4] Twelve-month percentage change in consumer prices (for the United Kingdom, retail prices excluding mortgage interest payments).

Source: National data. Graph IV.1

consumer price inflation than had been usual at similar stages of previous cycles, economic activity continued to expand strongly in 1994. However, by the first quarter of 1995, the expansion appeared to be slowing down.

Canada

In Canada, where core consumer price inflation adjusted for indirect taxes has remained within a 1–2% range since early 1992, the inflation trough is difficult to date. Influenced by pressure on the exchange rate, three-month rates moved up rapidly in late 1994. In responding by raising overnight rates, the Bank of Canada acted well in advance of any acceleration in consumer price inflation which might have been expected to result from currency depreciation or the narrowing of the margin of spare resources in the economy.

United Kingdom

In the United Kingdom the initial tightening of monetary policy last year also clearly preceded an upturn in consumer price inflation. It was largely a reaction to signs of increasing price pressures at the early stages of the production/distribution chain and emerging capacity constraints. Although policy has been tightened in advance of an acceleration in consumer price inflation in some previous cycles, on this occasion real interest rates were already higher and the inflation rate lower than in the past.

Because of changes in the operating objectives of policy, comparisons with previous inflation cycles are more difficult to make in other countries where short-term interest rates were raised last year. In Italy, Spain and Sweden inflation rates were still relatively low by past standards when policy was tightened last year, but underlying demand and cost pressures stemming from currency depreciation had been building up for some time.

Japan

Although currency appreciation contributed to a very low rate of inflation, and at times seemed to threaten the continuation of recovery, monetary policy in Japan remained cautious last year. Past experience suggested that, if an upswing in asset prices got under way, it could be difficult to control. While keeping its discount rate unchanged, the Bank of Japan encouraged a firming of money market interest rates in the summer of 1994. However, in early 1995, when upward pressures on the yen increased sharply, the Bank of Japan fostered a decline in short-term interest rates and then reduced its discount rate.

Germany

In Germany, with the economy still in the early stages of recovery, the steady short-term interest rate policy followed in late 1994 was designed to encourage further declines in consumer price inflation, which had remained unusually high in the recession. The Bundesbank's decision to lower its discount and tender rates in March 1995 took into account the effect of the appreciation of the Deutsche Mark in helping to counterbalance the impact of potential increases in domestic costs on the inflation rate.

Increased transparency of decisions about policy instruments

In recent years, virtually all central banks have come to agree that policy-induced movements in short-term rates are the instrument through which other objectives are pursued. In seeking to explain the need for timely changes in interest rates, several central banks have recently made their ultimate objectives more transparent. In addition, they have sought to achieve greater transparency with respect to their operating procedures and policy decisions relating to instrument settings. By attempting to reduce uncertainty about operating objectives, they have sought to reduce the risk of volatile market reactions while ensuring that policy remains flexible in response to changing circumstances.

Increased transparency of interest rate decisions

Influence of the monetary policy framework

When policy is guided by intermediate objectives which serve as anchors for inflation expectations, it may not be necessary to explain further the need for change in policy instruments. This is fortunate since a high degree of interest rate flexibility is useful where objectives for monetary aggregates play a role in policy, and even more flexibility is required when policy is geared to influencing exchange rates. Intermediate objectives also lead central banks to favour operating arrangements that facilitate flexible adjustments in short-term market interest rates. In the 1980s, official influence generally came to be exerted less through pre-announced interest rate pegs established, for example, by official discount rates, and more through market operations which could be adjusted more readily.

In recent years, however, monetary policy in many countries has been based less on intermediate targets and more on discretionary central bank decisions as to the interest rate levels needed to meet the ultimate objectives of policy. Without an intermediate indicator to guide them, there is a risk that markets may react very sensitively to sudden changes in expectations about official interest rate strategies and their likely effectiveness. In view of this risk, central banks in a number of the larger economies have generally tried to adjust policy rates only gradually in response to indicators that inflationary pressures are building up or easing. Following a steady course was thought likely to facilitate adjustments in the economy and in the financial markets, while avoiding disruptive

consequences for market expectations and for other countries. However, this has not always proved possible. The course of monetary policy has often had to be adapted quickly in the light of unexpected developments in asset, credit, labour and goods markets. Sudden changes in instruments, which increase uncertainty about current interest rate policy settings or prospective changes, are especially likely to give rise to counterproductive responses in the financial and exchange markets. In such circumstances, many central bankers have concluded that explicit statements about their actions and intentions may once again have advantages.

United States

Since February 1994 all decisions to increase the federal funds rate in the United States have been publicly announced, generally with explanations. Moreover, in February 1995 the Federal Open Market Committee adopted a formal procedure for announcing changes in policy instruments on the day they are made. Since 1990, when earlier objectives framed partly in terms of borrowed bank reserves were replaced by more specific objectives for the federal funds rate, the latter had generally become clear to the market as they were implemented. However, changes in the norm for the federal funds rate are now as widely publicised as movements in Federal Reserve discount rates.

United Kingdom

Interest rate decisions in the United Kingdom since early 1994 have been taken at regular monthly meetings between the Chancellor of the Exchequer and the Governor of the Bank of England. They are implemented in the course of the following month at a time chosen by the Bank. Minutes giving a detailed account of the views expressed in the meetings are published two weeks after the subsequent meeting. When interest rates are changed, press releases providing explanations are issued. Throwing more light on the decision-making process is intended to focus public debate more closely on inflation as an objective of policy and to demonstrate that decisions are taken solely on monetary policy grounds.

Canada and Australia

Since the second quarter of 1994 the Bank of Canada has set explicit operational target bands for the overnight rate. Special purchase and resale agreements are used to keep the rate within the band and to make the range clear to the market. The Reserve Bank of Australia has in recent years announced in advance all changes in its peg for the cash (overnight) rate.

Germany

As from July 1994, against a background of unusual volatility in the bond and foreign exchange markets, the Bundesbank generally used fixed interest rate tenders for supplying bank reserves, frequently announcing that the prevailing rate would also be applied at tenders in coming weeks. However, when policy was eased in March 1995 the Bundesbank announced that it would revert to using variable interest rate tenders. Because of the transparent policy signal they provide, fixed interest rate tenders were employed to guide money market rates upwards in Sweden and Finland last year.

Interest rate policy and market expectations

In seeking to pre-empt rises in inflation expectations, monetary authorities have attempted to gauge market expectations from opinion surveys, long-term bond yields and the behaviour of exchange rates. This is discussed below. The information content of term money market rates is different. These rates

primarily reflect market expectations of developments in the even shorter-term rates which are most directly influenced by monetary policy. Such expectations take into account developments in the economy, in fiscal policy or in the exchange market to which monetary policy may respond.

The information content of money market interest rates

On the one hand, term money rates may provide useful information about market judgements of the interest rate policy likely to be appropriate for achieving the central bank's medium-term objectives. This suggests that policy-makers should pay attention to developments in these rates. On the other hand, market expectations of near-term developments may be strongly influenced by policy announcements. There would then be some risk of circularity and instability in instrument settings if markets assumed that monetary policy decisions were significantly affected by expectations expressed in the money markets.

Relationship between market expectations and interest rate policy changes

Market expectations about near-term developments in interest rate policy may be gauged from developments in one-month rates in the well-arbitraged Euro-currency markets and, more particularly, in their relationship with the one-month forward interest rates implied in two-month rates (see Graph IV.2). These seem to indicate that market participants envisaged the possibility of some tightening of monetary policy in the United States in late 1993, although the timing of the first Federal Reserve tightening move in early February 1994 was not fully anticipated. The implied forward rate suggests that the market expected a larger tightening than actually took place in the spring of 1994. However, with the substantial increase in the federal funds rate in November, policy seems to have caught up with market expectations implied in the yield curve.

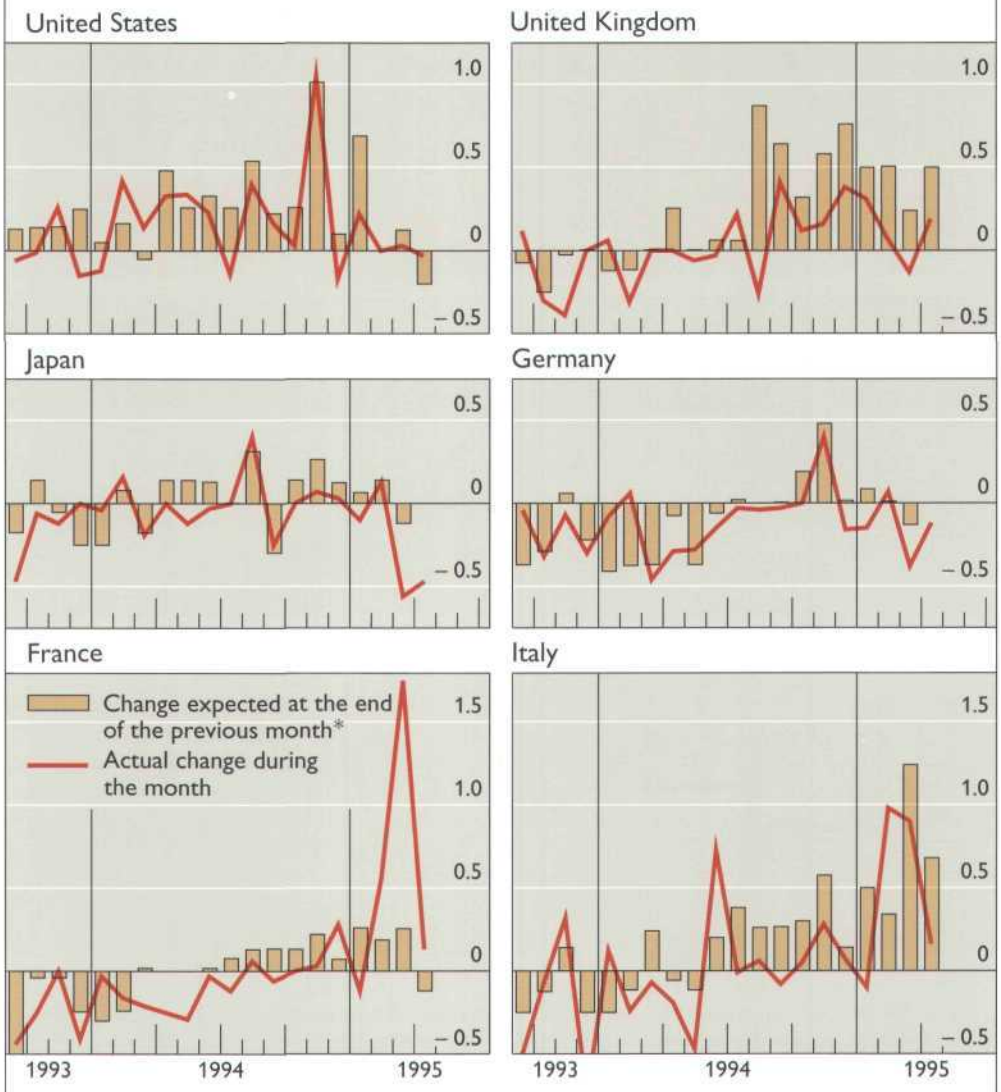
Differentials between one-month and implied one-month forward rates seem to suggest that markets at times envisaged a tightening of monetary policy in both Italy and the United Kingdom before it began. They subsequently expected larger moves towards further restraint than were actually implemented. Money markets evidently anticipated some policy tightening in Japan in the spring of 1994 and again as from September, by which time a tightening seems also to have been expected in Germany. Expectations of a tightening in response to exchange market pressures seem to have formed in Italy and France between June and November. They re-emerged in early 1995 before the central banks in these countries adapted their procedures to allow short-term market rates to rise well above official tender rates.

Unusual relationships between overnight and term money rates

Market expectations were also clearly reflected in the unusual relationships which emerged last year between overnight rates, which are typically strongly influenced by policy, and longer-term money rates in domestic markets (see Graph IV.3). In all the countries where monetary policy was tightened in 1994 three-month rates moved up well in advance of overnight rates, suggesting a market view that central banks would tighten policy further in order to contain inflationary pressures. Unusually large and persistent differentials between these rates were established in 1994. In early 1995 the gap narrowed in the United States, the United Kingdom, Canada, Spain and Sweden but widened further in Italy. In most ERM countries and Norway three-month rates rose well above unchanged overnight or key policy rates in the autumn when the market apparently anticipated a rise in rates in Germany. In early 1995 the differential

Expected and actual changes in one-month Euro-currency rates

In percentage points



* Implied one-month forward rate minus actual one-month rate.

Source: National data.

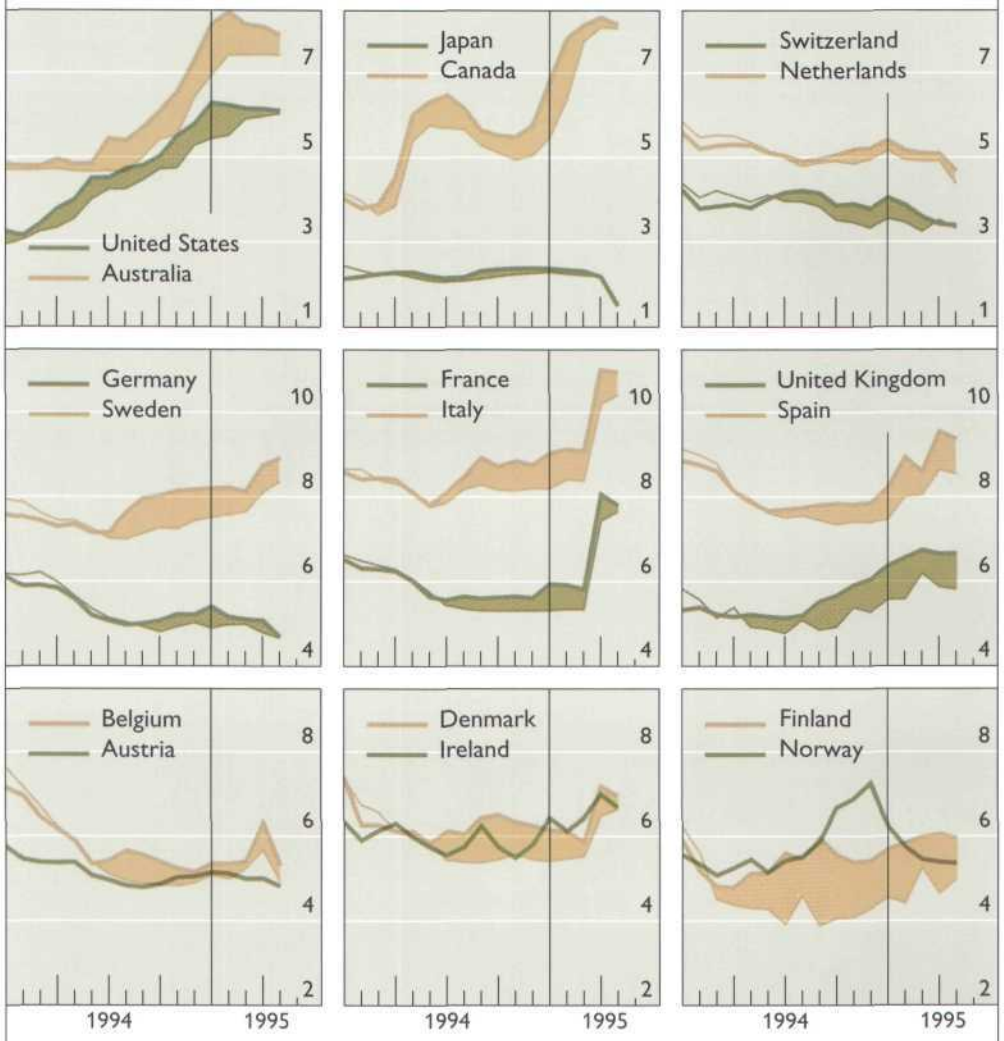
Graph IV.2

narrowed sharply in Germany and Switzerland but widened in countries whose Deutsche Mark exchange rates came under downward pressure.

Implications for the conduct and impact of monetary policy

While central banks monitored indications of market expectations, interest rate policy decisions in most countries continued to be based mainly on judgements by the authorities of the inflation risks in the economy. In this context the fact that short-term rates respond, to some degree, to market forces can be considered either helpful or unhelpful. On the one hand, short-term policy-influenced rates typically affect economic developments indirectly via interest rates applied by financial institutions and the responses of longer-term money market rates. In many countries where the economic recovery proved stronger than expected, the upward drift of term rates last year could be viewed as helping to reinforce the restrictive thrust of policy. On the other hand, where increases

Interbank interest rates



Note: The thin line represents the overnight rate and the thicker line the three-month interbank rate (for Australia, bank accepted bills; for Canada, prime corporate paper; for the United States, certificates of deposit).

Source: National data. Graph IV.3

in term money rates in relation to policy rates were associated with downward pressures on the currency or compounded budgetary financing problems they complicated the conduct of monetary policy.

Possible implications of rises in bond yields

The unusual behaviour of long-term interest rates last year may also have affected the impact of monetary policy, though various interpretations are again possible. Increases in bond yields which reflected the influence on real rates of unexpectedly strong aggregate demand could be viewed as making a useful contribution, along with rises in longer-term money market rates, to monetary restraint. Of course, if high long-term rates partly reflected expectations of rising inflation, the immediate effect on economic activity might be limited. In contrast, in countries where the increase in long rates chiefly reflected fiscal imbalances or risk premia, the medium-term prospects for a sustainable recovery may actually have deteriorated in consequence.

Monetary policy guides and monetary conditions

Use of intermediate objectives in monetary policy

Some central banks in industrial countries continue to rely heavily on a commitment to intermediate targets in attempting to meet the ultimate objectives of monetary policy. Objectives for monetary aggregates are still published in a number of countries and continue to play a central role in the design and presentation of policy in Germany in particular. Exchange rates retain a key position in the conduct of monetary policy in ERM countries. Elsewhere, policy is steered by a range of indicators, although developments in money, credit and exchange rates typically still occupy an important place among them.

Monetary and credit aggregates

Many central banks continue to find particular monetary aggregates useful as advance indicators of developments in economic activity and prices. Some also use monetary targets as an expression of the appropriate medium-term orientation of policy. Monetary targeting continues to form the cornerstone of the monetary policy strategy in Germany, though it has been pursued in a flexible way. In France, Switzerland and Spain, central bank targets now express medium-term norms for monetary expansion. This reflects the belief that, while the demand for money has undergone shifts in recent years, the targeted variable remains useful as a guide to the inflationary impact of policy over longer periods. However, developments in monetary aggregates have recently played only a limited role as guides for the setting of short-term interest rates.

Developments in money and credit in the United States ...

In the United States, the "headwinds" associated with the restructuring of financial and non-financial sector balance sheets, which had previously retarded economic recovery, gave way last year to "tailwinds". Banks displayed a greater willingness to lend and eased their lending terms significantly. Bank business loans expanded by 11%, the first annual rise in several years, and consumer credit rose strongly. In conjunction with a shift towards household borrowing in the form of adjustable rate mortgages, credit from savings institutions also increased for the first time in several years. However, as banks reduced their holdings of government securities, the expansion of total bank assets was modest. Also reflecting increased recourse by banks to non-deposit funds, the growth rates of the broad monetary aggregates remained low, while the growth rates of M1 and the monetary base declined.

... Japan ...

The monetary aggregates in Japan have for some years been distorted by financial innovation, asset price swings and the impact of loan losses on bank behaviour. They accordingly remain difficult to interpret. The pick-up in the expansion of M1 and M2 last year may indicate an easing of previous financial constraints on economic recovery. Still, bank lending remained very weak. Banks have experienced difficulties in building up the reserves needed to write off non-performing loans, and these problems were exacerbated by the impact on measured capital of renewed declines in share prices in 1994 and early 1995.

... Germany ...

In Germany, M3 moved well above the upper limit of the Bundesbank's target path in early 1994 under the influence of special factors, including tax changes. However, mainly reflecting shifts from bank deposits to capital market investments with higher yields, the growth of M3 weakened after the Bundesbank

Published objectives for monetary aggregates

Fourth quarter to fourth quarter changes, in percentages[1]

		United States			Japan	Germany	France
		M2	M3	TDNS	M2+CDs	M3	M3
1994	Objective[2]	1–5	0–4	4–8	2–3	4–6	5
	Outcome	1.0	1.4	5.2	2.7	5.7	1.1
1995	Objective[2]	1–5	0–4	3–7	3–4[3]	4–6	5
		United Kingdom		Italy	Spain	Switzerland	Greece
		M0	M4	M2	ALP	CBM	M3
1994	Objective[2]	0–4	3–9	5–7	3–7	1.6	8–11
	Outcome	7.0	5.5	2.9	8.2	0.6	8.3
1995	Objective[2]	0–4	3–9	5	< 8	1	7–9

Note: TDNS = total domestic credit market debt of non-financial sectors; M0 = wide monetary base; ALP = liquid assets held by the public; CBM = central bank money stock.

[1] For Spain and Greece, December to December; for the outcome in the United Kingdom, twelve-month periods ending in March of the following year. [2] For the United Kingdom and the United States (TDNS), monitoring ranges; for Japan and, for 1994, Switzerland, projection only. The figures shown for 1995 for France, Spain and Switzerland are medium-term norms. [3] Second quarter to second quarter.

Table IV.2

lowered short-term interest rates further in May and re-entered the target range by the end of 1994. Another influence was domestic investment in money market funds, not included in M3, which were first authorised in Germany in September 1994 and benefited from privileged tax treatment as from January 1995. However, a new extended M3 aggregate, which includes non-bank residents' holdings of domestic and foreign Deutsche Mark money funds, together with their claims on foreign affiliates of German banks, expanded by only 5½% between the fourth quarters of 1993 and 1994.

The persistent tendency, over the past three years, for M3 growth to move above the Bundesbank's target bands could be interpreted as indicating a need for caution in lowering interest rates. M3 targeting clearly had an important influence on interest rate policy decisions in the Central Bank Council, as reflected in the Bundesbank's public statements about monetary expansion. The Bundesbank has reaffirmed its commitment to an M3 targeting strategy for 1995, but it will also monitor developments in the extended M3 monetary aggregate.

Slow rates of growth of credit and broad money were recorded in many European countries last year, notwithstanding the economic expansion and, in some cases, a strengthening of inflationary pressures. In economic recoveries that were mainly export-based, the self-financing capacity of enterprises helped to moderate the demand for bank credit, and banks in some countries competed less actively for non-bank deposits. In Italy slow growth of M2 can largely be explained by higher interest rates on Treasury bills and bonds in relation to interest rates on bank deposits. Financial innovation or tax changes contributed to very slow growth of targeted monetary aggregates in France and Switzerland. In the United Kingdom, the broad money stock grew only moderately last year. Rapid expansion of M0 could be cited as one factor which might support the

... Italy ...

... France, Switzerland and the United Kingdom

need for a tightening of policy, but the Bank of England pointed out that it may have been influenced by the impact of lower inflation on the demand for currency.

Although the Bank of Canada has no targets for monetary aggregates, M2+, which continued to grow slowly last year, is viewed as a good advance indicator of inflation. As in Australia, credit expansion was boosted by a strong rise in household debt, despite a sharp slowdown in the growth of mortgage lending in response to rises in interest rates during the year.

Exchange rates

Use of exchange rate objectives

Exchange rate relationships with the Deutsche Mark continued to serve as the principal guides for monetary policy in Austria, the Netherlands, Belgium, Denmark, Ireland and, together with objectives for monetary aggregates and inflation, France. The widening of the permitted ERM exchange rate fluctuation bands to ± 15% in 1993 was viewed in most of the countries as providing essentially a means of coping with short-lived speculative pressures on ERM exchange rates. However, when tensions arose in the system in connection with upward pressures on the Deutsche Mark in early 1995, the Bank of Spain continued to gear its interest rate policy mainly to the prospects for domestic inflation. In March the central rate of the Spanish peseta in the ERM was reduced by 7%. At the same time, the central rate of the Portuguese escudo was adjusted downwards by 3.5%. Notwithstanding periodic strong downward pressure on the lira, interest rate policy in Italy also aimed at following a course primarily oriented to developments in inflation. In the absence of a published exchange rate commitment, stabilisation of the effective exchange rate in the medium term remained an important monetary policy goal in Norway.

Monetary conditions

In nearly all countries exchange rates play an important role, along with interest rates, in influencing monetary conditions. Exchange rates have a direct impact on cost and price levels and their movements must be taken into account in considering the impact of monetary policy on aggregate demand. For the latter purpose it can be useful to consider movements in exchange rates in real terms in conjunction with developments in real interest rates.

Developments in real interest rates

In the absence of a sharp acceleration of consumer price inflation, increases in three-month interest rates experienced last year in the United States, the United Kingdom, Canada, Australia and Italy clearly represented increases in real terms. In early 1995 short-term interest rates seemed quite high in real terms in Canada, Australia, Sweden and Italy. In most ERM countries real short rates fell in 1994 but moved up again in early 1995 when exchange market tensions emerged. Real short rates remained comparatively low in Japan, Germany and Switzerland.

The impact of changes in real exchange rates on monetary conditions

By early 1994 monetary conditions in Italy, Sweden, Spain, Canada and, to a lesser extent, the United Kingdom had been eased by substantial currency depreciation since 1992, which continued to be reflected in the real exchange rate relationships. As is reported in Chapter VI, the currencies of these countries and Australia depreciated further in real effective terms last year. Typically, in combination with rises in real interest rates, this contributed to marked

Real interest rates and real exchange rates

Countries	Real short-term interest rate[1]				Real exchange rate[2]		
	level[3]		change[4]		change[3]		level[5]
	March		twelve months ending in March				March
	1994	1995	1994	1995	1994	1995	1995
Australia	3.6	4.2	−0.6	0.6	− 2.8	− 3.0	88.6
Belgium	3.9	4.6	−1.6	0.7	− 1.4	4.9	107.3
Canada	4.4	6.3	0.8	1.9	−11.3	− 5.8	78.4
Denmark	4.4	4.7	−9.0	0.3	− 4.4	4.0	105.0
Finland	4.4	4.4	−1.8	−0.1	7.0	11.9	95.0
France	4.8	6.2	−4.4	1.5	− 2.6	3.0	105.3
Germany	2.7	2.8	−1.1	0.1	− 1.1	8.1	114.4
Ireland	4.6	4.5	−3.0	−0.1	− 3.2	1.2	94.4
Italy	4.2	6.1	−2.9	1.8	− 1.5	−11.5	70.0
Japan	1.0	2.5	−1.1	1.6	10.9	6.0	131.7
Netherlands	2.4	2.8	−2.8	0.4	− 0.8	6.1	109.6
Norway	4.2	2.7	−2.0	−1.5	− 5.2	4.5	97.8
Portugal	3.8	6.2	−4.1	2.4	− 6.9	6.4	103.5
Spain	3.2	4.5	−7.5	1.3	−12.0	− 0.8	81.6
Sweden	5.6	6.1	0.7	0.5	− 2.2	− 3.5	77.8
Switzerland	2.6	1.9	1.1	−0.7	6.3	7.5	116.2
United Kingdom	2.7	3.9	0.2	1.2	3.2	− 3.3	85.0
United States	1.3	3.3	1.3	2.0	0.5	− 3.4	100.0

[1] Three-month rate deflated by the change in consumer prices over the previous twelve months (for the United Kingdom, retail prices excluding mortgage interest payments; for Canada, consumer prices excluding food and energy). [2] Effective rates calculated on the basis of relative consumer prices. [3] In percentages. [4] In percentage points. [5] Index, first quarter 1992 = 100.

Sources: National data and BIS. Table IV.3

differences in the strength of demand pressures in the foreign trading and sheltered sectors of the economy (see Chapter II), which complicate assessments of the likely impact of monetary policy on inflation. Notwithstanding real currency appreciation, which continued in 1994 in spite of interest rate reductions, an export-led economic recovery developed in Germany, France, Belgium and the Netherlands. The impact of the further appreciation of the Deutsche Mark and the Swiss franc in early 1995 remains to be seen. The much larger real appreciation of the Japanese yen in recent years has undoubtedly been a strong force counteracting the potential contribution of relatively low real interest rates to a recovery of domestic demand.

The inflation outlook

To a considerable extent, changes in interest rate policy last year were conditioned by a desire to prevent inflation from rising. In France, Germany, Belgium and the Netherlands, the easing of policy in early 1994 took place in the absence of any signs that the upswing might be associated with increasing inflation. The tightening of policy in the United States was aimed at pre-empting a strengthening of inflationary pressures. Monetary restraint in a number of smaller countries that had experienced depreciating currencies was designed to prevent

increased import prices from being passed through to consumer prices and from triggering increases in wage demands.

Inflationary pressures

Consumer price inflation remains low in many countries ...

As Graph IV.4 illustrates, headline measures of inflation rates based on consumer price indices remained low in the spring of 1995 in many countries. In Canada, a fall to zero in the first quarter of 1994 was influenced by tax changes, but the underlying annual increase had been within a 1–2% range since early 1992. In early 1995 the rise in consumer prices remained extremely modest in Japan and was close to the 2% level in France, Belgium, the Netherlands, Denmark and Austria. It remained around 3% for a third year in the United States. In Germany, monetary policy continued to make headway in reducing consumer price inflation.

... but in others there are signs that it is increasing

By early 1995 there were, however, signs in some countries that inflationary pressures were building up. In Spain and Italy, consumer price inflation had risen to around 5%. In the United Kingdom the inflation rate had begun to edge up according to some measures. Also in Sweden there was evidence that inflationary pressures were gradually strengthening. Since consumer prices are lagging indicators of price pressures, in order to better assess inflation prospects in the near term it can be useful to consider the behaviour of producer prices, which sometimes reflect rises in inflationary pressures more promptly.

Producer price inflation shows clearer signs of increasing

Producer price inflation remained low in most countries in early 1995, although in some countries it was increasing gradually, largely because of the worldwide upswing in commodity prices. Producer prices in the United States had been accelerating since mid-1994, and in the United Kingdom they showed moderate increases. In Belgium and Germany producer prices had stopped falling in late 1993 and early 1994, and were rising at a rate of about 2% in the spring of 1995. In the early months of 1995 producer price inflation was in a range of about 5–6% in Italy and Spain and approached 9% in Sweden. It had also quickened in Finland, although from a lower rate. An exception was Japan, where producer prices continued to fall. The picture that emerges from movements in producer prices is that inflationary pressures may be stronger than the behaviour of consumer prices implies.

Exchange rates and inflation

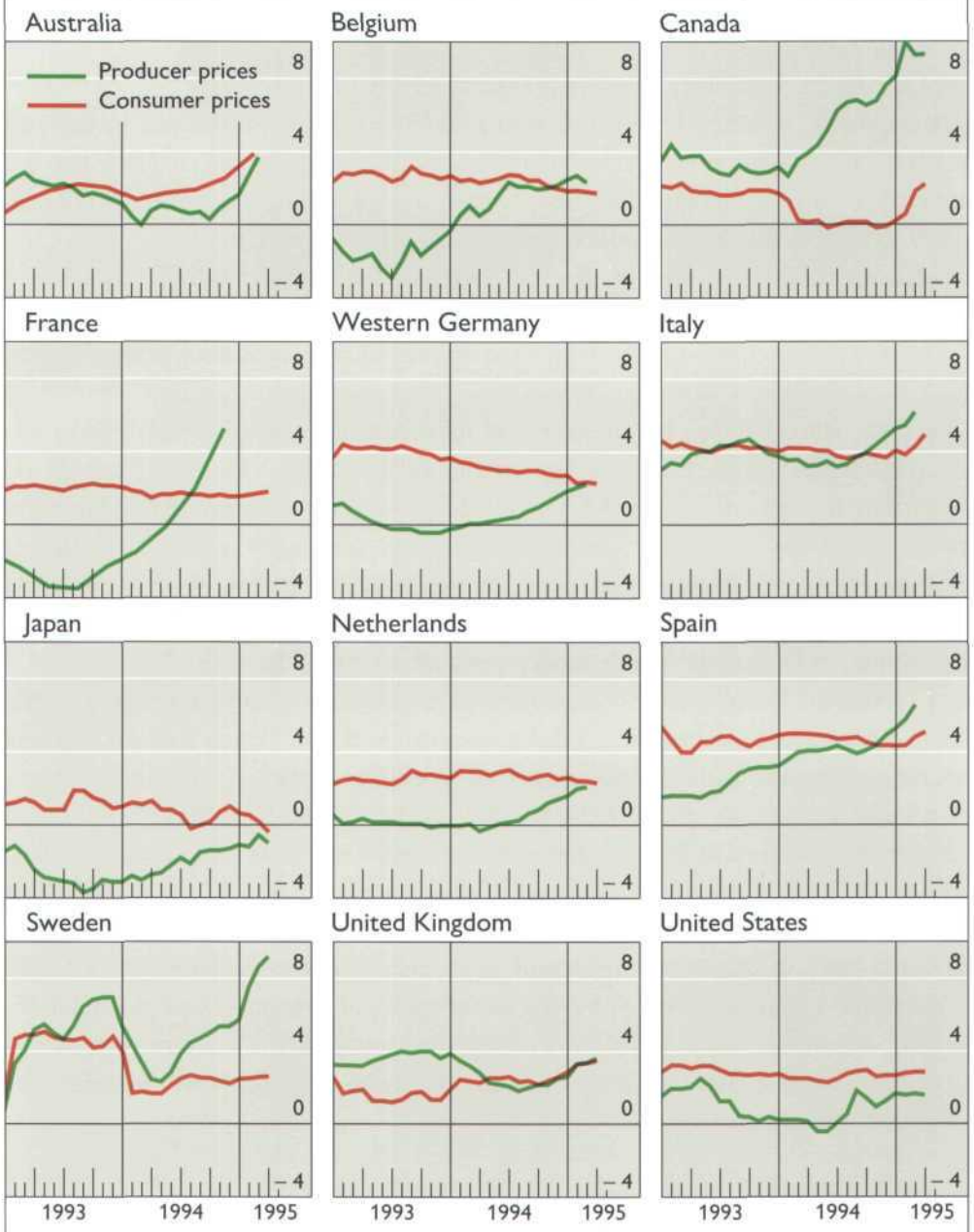
Incomplete exchange rate pass-through in Italy, Spain, Sweden and the United Kingdom ...

Increases in headline measures of inflation have remained limited even in the European countries which have experienced currency depreciation. Graph IV.5 indicates that in Italy, Spain, Sweden and the United Kingdom cumulative changes in import, consumer and producer prices between 1992 and early 1995 were on average smaller than the cumulative depreciation of the currency. In part, this may reflect structural changes in the retail sector that have influenced recorded rates of inflation. Moreover, changes in exchange rates that occur in a disequilibrium setting need not be fully passed through to prices. However, to the extent that margins have been reduced by weak domestic demand, there is some risk that the pass-through of currency depreciation may become more complete, particularly for more open economies, as domestic demand pushes output closer to potential.

... but some potential for more pass-through remains

Inflation in major industrial countries

Changes over twelve months, in percentages



Source: National data.

Graph IV.4

In Finland, Ireland, Norway and Portugal the pass-through appears completed

In contrast, in Finland, Ireland, Norway and Portugal, which have also experienced currency depreciation since 1992, the response of domestic prices appears to have already largely taken place. While the effective depreciation of the Finnish markka was similar to those of the Swedish krona and the Italian lira in 1992 and 1993, the markka strengthened considerably in the course of 1994, reducing the cumulative depreciation since August 1992 to about 6–8%. This is of the same order of magnitude as the cumulative changes in import, producer and retail prices. Ireland, too, experienced an appreciation of the currency in 1994 which offset about half of the 10% depreciation in the first eight months

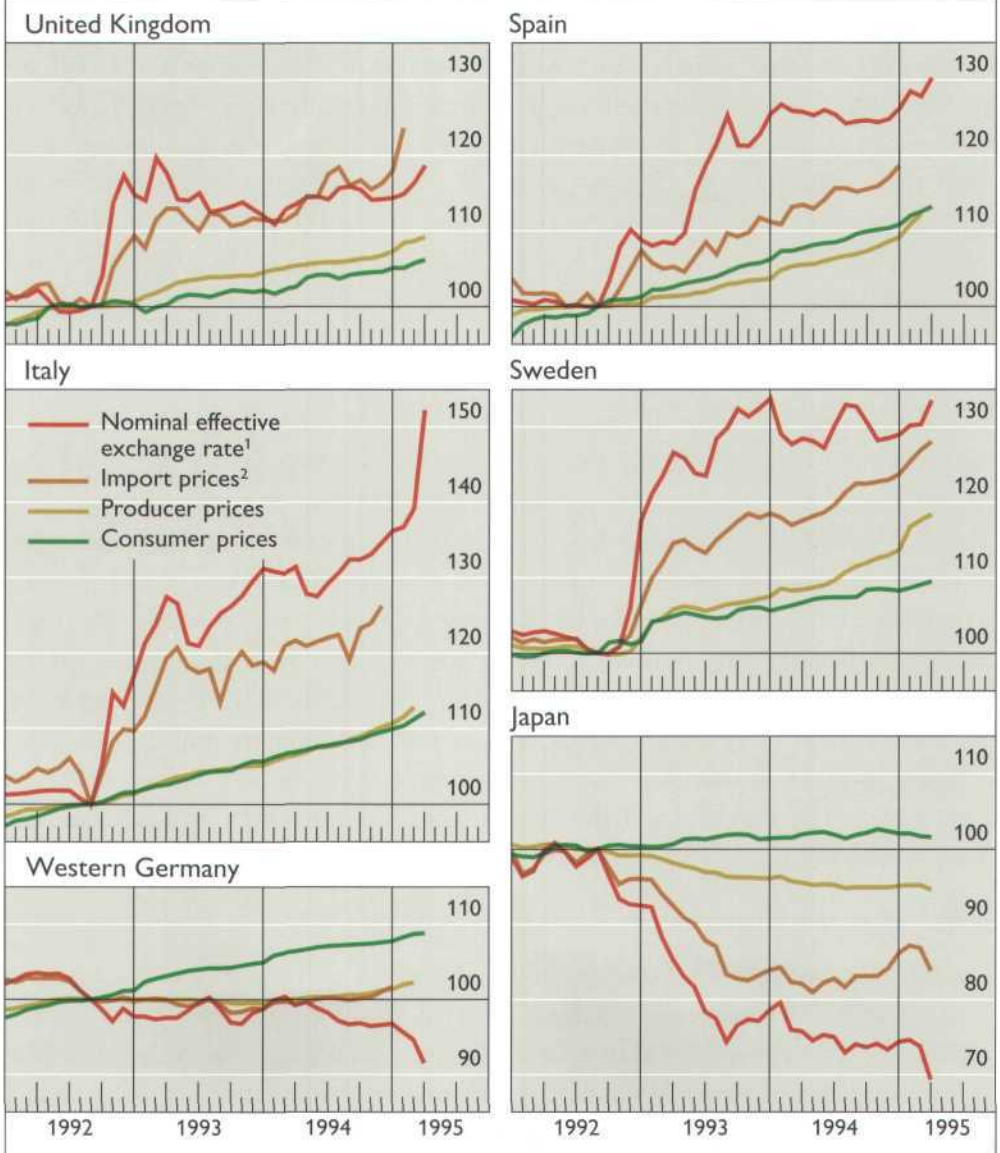
of 1993. The pass-through to import prices and producer prices seems to have already occurred. In Portugal and Norway, where the initial depreciations were rather limited, a complete adjustment of prices has also taken place.

Exchange rate appreciation dampens inflation in Japan ...

Exchange rate movements help to explain the reduction in consumer price inflation in Japan. The sharp appreciation of the yen in the first half of 1993 led to declines in import and producer prices. Graph IV.5 indicates that between mid-1992 and mid-1994, when the effective exchange rate of the yen appreciated by 25%, import prices fell by almost 20% and producer prices by 5%. When the appreciation of the yen slowed in the latter half of 1994, the fall in producer prices stopped and import prices actually started to rise, reflecting worldwide increases in the price of raw materials (see Chapter III). By moderating increases

The exchange rate and prices in selected countries

August 1992 = 100



[1] Based on units of domestic currency per unit of foreign currency. [2] For the United Kingdom, Spain and Italy, import unit values.

Graph IV.5

in import prices the appreciation of the Deutsche Mark also contributed to the improved inflation performance in Germany. However, given that a large part of the cumulative appreciation has occurred only recently, it is difficult to assess the full impact with any precision.

... and in Germany

Private sector inflation forecasts

Recent movements in producer prices and, in some cases, exchange rates suggest that in most countries inflation rates are likely to remain at present levels or rise moderately in 1995 when the upswing that is currently under way starts to hit capacity constraints.

Since firms' price-setting behaviour and unions' wage demands are critically influenced by their price expectations, private sector forecasts of future inflation may provide policy-makers with useful information about likely changes in firms' mark-ups and in wage pressures. Graph IV.6 illustrates that private forecasters expect inflation rates to rise, or remain constant at best, in 1995. The forecasts, made in the spring, point to an increase in inflation in the United Kingdom, towards the upper end of the Government's 1–4% target range, and in Sweden, where the predictions imply that the central bank's 1–3% inflation target will be exceeded. In Spain the forecast suggests that the inflation rate in 1995 will be higher than that in 1994. A modest acceleration in inflation is also predicted in the United States and in Canada, where the forecasts point to a return to an inflation rate of close to 2%. In contrast, there are some cases in which inflation rates are expected to remain at current levels or decrease. In Belgium, France and the Netherlands, inflation rates anticipated for 1995 are similar to those for 1994. Moreover, the forecasts indicate that inflation is expected to fall towards the 2% level in Germany and to remain below 1% in Japan.

Private sector forecasters expect inflation to rise a little in 1995 ...

While private sector forecasts for 1995 predict that inflation will remain modest in most countries, they generally point to a worsening of inflation in 1996. Inflation rates are expected to increase to about 4% in the United States, the United Kingdom, Australia and Sweden and to rise above 5% in Italy and Spain. Increases in inflation are also anticipated in Canada, to 2.5%, and in Japan, to around 1%. However, in a number of countries the predicted increases are small, and inflation rates are not expected to exceed 3% in 1996. Private sector forecasts in Germany reflect the view that any rise in inflation towards the rates observed in the early 1990s would be resisted by monetary policy measures. Inflation rates in France are forecast to continue to remain below those in Germany, and in Belgium and the Netherlands inflation rates are expected to change little between 1995 and 1996.

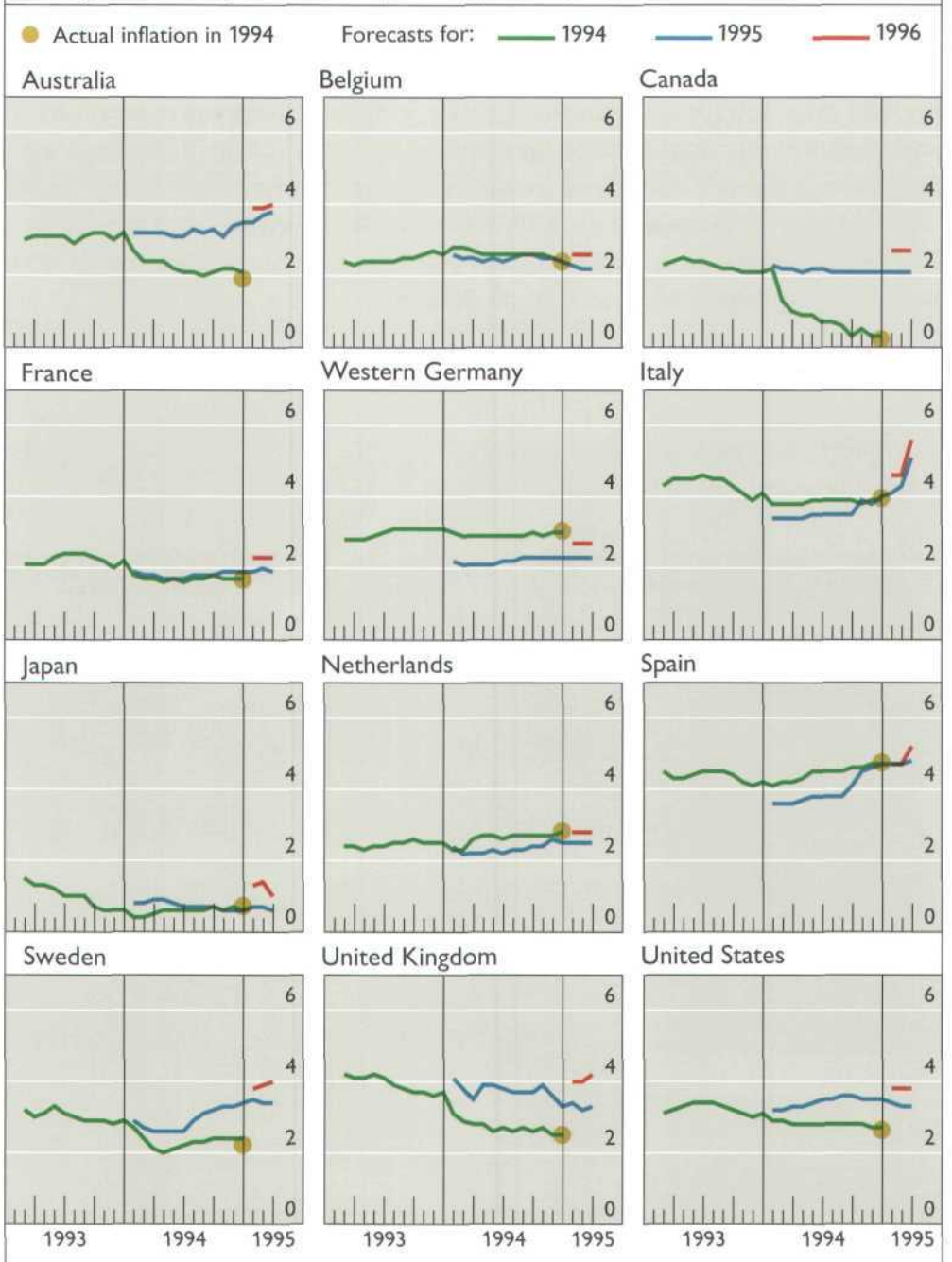
... and to increase further in 1996

Interest rates and inflation expectations

Given the lag with which monetary policy affects the price level, the implications of current policy need to be judged over horizons longer than those of the inflation forecasts reviewed above. Several central banks have recently started to use forward interest rates as indicators of longer-term inflation expectations in financial markets. Graph IV.7 presents plots of the term structure of one-year forward interest rates for four dates: January and February 1994, before and after the first tightening of monetary policy in the United States; September 1994,

Market participants' inflation forecasts*

Average annual changes in consumer prices, in percentages



* Based on a survey of major banks and securities houses; shown at the month prior to publication.

Sources: © The Economist, London (various issues), and national data. Graph IV.6

when the upward shift in bond yields in the United States came to an end; and March 1995.

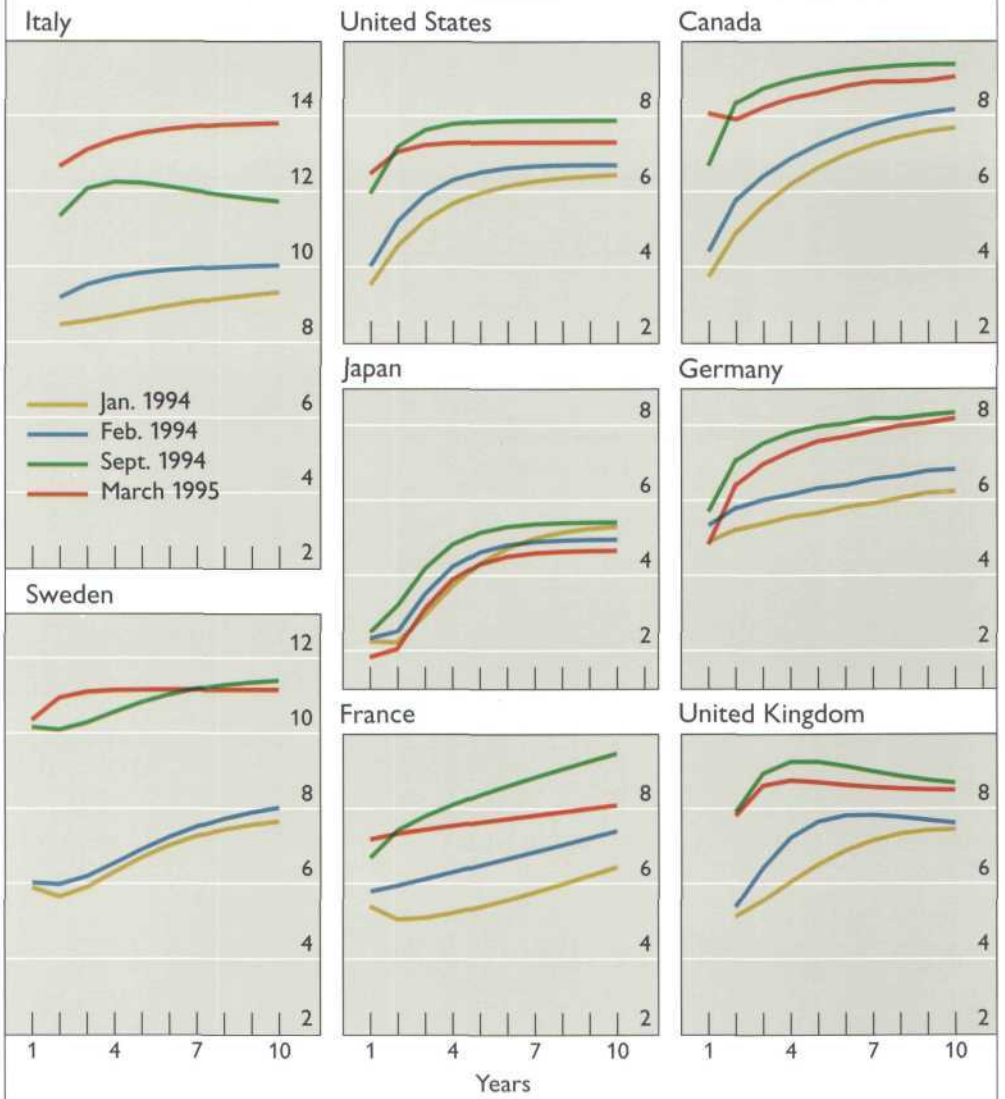
Rises in forward interest rates in many countries during the year ...

The graph shows that forward interest rates rose during the fifteen-month period ending in March 1995, but also that there were considerable differences between countries. In Canada, the United Kingdom and the United States, near-term forward rates, which are likely to be influenced by the upswing in economic activity and a tightening of monetary policy, increased more than longer-term

forward rates. In Japan, most of the rise in forward rates appears at a four to five-year horizon, with very little change in longer-term forward interest rates. In Sweden the term structure of forward interest rates moved up in parallel between January and September 1994, and near-term forward rates subsequently rose further. In Germany short-term forward interest rates rose little, while forward rates at a three to ten-year horizon increased roughly proportionally. In Italy, near-term forward interest rates shifted more than longer-term rates until September 1994; subsequently there has been an increase in longer-term forward interest rates. In France the rise in 1994 was initially somewhat more pronounced for forward rates at a three to four-year horizon. Since September 1994, however, longer-term forward rates have fallen.

Implied one-year forward rates*

At end of month, in percentage points



* Calculated from yield curves for government bonds in the months shown. Methods of calculating underlying yield curves differ from country to country.

Sources: National data and BIS estimates. Graph IV.7

In order to interpret what the observed movements in forward interest rates imply for inflation expectations, it is necessary to take into account the possibility that expected real returns may have changed. For instance, the yields to maturity on long-term index-linked bonds rose by about 1% in the United Kingdom last year and by somewhat more in Canada. To the extent that these increases are indicative of changes in expected real rates of return elsewhere, it appears that between one-half and three-quarters of the changes in forward interest rates at the four-year horizon may be due to inflation expectations. The exception is Japan, where changes in expected real interest rates may explain the entire shift in the term structure of forward interest rates. Assuming time paths of future real interest rates and risk premia, the level of forward interest rates can be used to gauge inflation expectations. For instance, even if the sum of expected real one-year interest rates and risk premia is assumed to be as high as 4% per annum, the graph suggests that in many countries longer-term inflation expectations are in the order of 4% per year or more.

... suggest increases in long-run inflation expectations

Monetary policy and credibility

Credibility increasingly important ...

The possibility of inflationary pressures emerging as recoveries proceed suggests that the credibility of monetary policy will be of increasing significance. A lack of credibility implies inflation expectations which can easily be revised upwards, leading to higher wage demands and raising the unemployment cost of maintaining low inflation. A lack of credibility will similarly imply high realised real interest rates if monetary authorities act resolutely, which in turn can have a large impact on the government's budget balance, particularly in countries with high debt/GDP ratios. To view the issue more positively, enhancing credibility is important because central banks that do have credibility can temporarily adapt monetary policy to support economic activity without provoking doubt about their commitment to price stability. Where credibility is limited, efforts to support activity may be interpreted by the public as signalling a weakening commitment to the price stability goal.

Enhancing credibility

... but can be difficult to achieve given inflation records ...

The two most important factors currently undermining the credibility of some central banks are past inflation records and large public deficits. A history of inflation is commonly interpreted by financial markets as evidence that the monetary authorities are, for political or operational reasons, unable or insufficiently resolved to achieve low inflation. Announcements by the central bank that monetary policy aims at securing low inflation may in these circumstances be discounted by the public, with inflation expectations remaining high. Large budget deficits and high debt/GDP ratios may be seen by the markets as inconsistent with the inflation objectives of monetary policy, further eroding credibility. Graph IV.8 indicates close relationships of the size of the increase in long-term interest rates last year to both average inflation in the 1984–93 period and government budget deficits. This suggests that financial markets may be concerned that current low inflation rates may give way to inflation rates closer

... and current fiscal deficits

to historical averages and that it is difficult to persuade the markets that low inflation is sustainable in the presence of large budget deficits.

Credibility can be enhanced by clarifying the central bank's mandate ...

While the sources of weak credibility are frequently beyond the immediate control of the central bank, there are several ways in which an improvement in credibility can be hastened. A clear legislative mandate regarding the primary objective of monetary policy, or a policy arrangement with the government, may be helpful in establishing credibility, particularly if the central bank does not enjoy full independence. The adoption of formal inflation control targets, which provide the public with a means of monitoring the central bank's performance, can contribute to policy credibility, as can the use of such intermediate indicators as monetary and exchange rate targets.

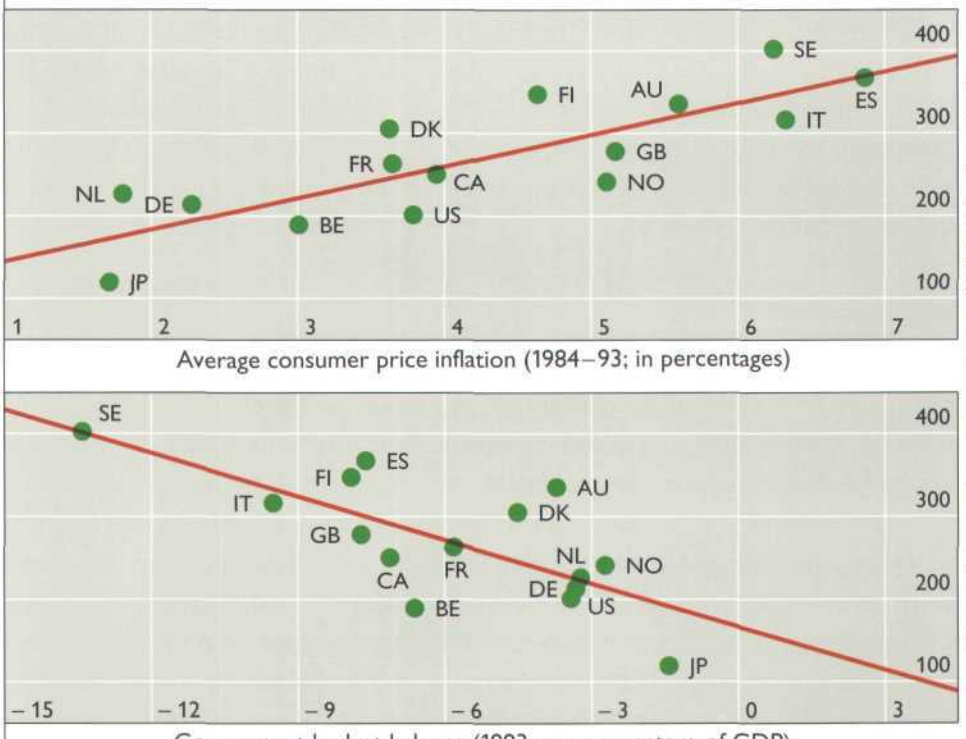
... strengthening the central bank's independence ...

Since political factors play an important role in determining the credibility of monetary policy, a strengthening of the central bank's power to set its instruments independently may also be very helpful. Central bank independence has recently been legislated in a number of countries, including France and Spain, and central bank autonomy has been enhanced in other countries, including the United Kingdom and Canada.

... clarifying the framework of monetary policy ...

An appropriate framework for conducting monetary policy is also a prerequisite for credibility. To avoid any confusion about the ultimate aims of policy, intermediate and final targets of policy must be mutually consistent, particularly if more than one intermediate or final target has been adopted. Efforts should also be made to explain the link between the instruments controlled by

Bond yield increases, historical inflation and budget balances



Note: For an explanation of the country abbreviations, see Table IV.1.

Sources: OECD and national data. Graph IV.8

the monetary authorities and the targets of policy in order to provide an understanding of the central bank's ability to achieve the target. Frequent changes in the policy framework may make it difficult to demonstrate how committed the authorities are to their policy objectives.

... and increasing transparency

Credibility may also be enhanced by ensuring that the public fully understands the monetary authorities' objectives, and their commitment to them. Transparency is therefore important for the establishment and maintenance of credibility. Many central banks have found it useful to make available a variety of statistical information used in the design of policy. The public release of policy deliberations and conclusions provides a means by which the central bank can explain how it assesses economic conditions, why particular policy actions are taken, and how they affect the central bank's ability to reach its announced goals. Transparency also makes it possible for the public and the legislature to evaluate the performance of the central bank.

Explicit inflation control targets

The remarkable decline in inflation rates in industrial countries in recent years has gone hand in hand with a strengthening of the commitment of monetary policy to controlling inflation. This commitment results from a growing consensus regarding what monetary policy can be expected to achieve in the medium term and greater recognition of the long-run costs of inflation. In an increasing number of cases the commitment has been expressed through the announcement of quantitative inflation control targets. The publication of quantified targets reflects the view that transparency and the resulting accountability can contribute to strengthening the credibility of policy.

Some countries have announced explicit inflation control objectives

Following the publication in the early 1990s in Canada and New Zealand of ranges committing monetary policy to a progressive reduction in inflation, medium-term inflation objectives were adopted in the United Kingdom, Sweden and Finland in 1992, in France in 1993 and in Spain last year. In Italy published inflation objectives have played an enhanced role in broader macroeconomic policy, particularly wage policy, since 1992. In Australia the objective indicates only an aim for average inflation rates over a period of years chosen in the light of inflation objectives in trading-partner countries with below-average inflation rates.

Others have not

Some large countries have not published explicit inflation control targets. In Germany, the Bundesbank's continued adherence to monetary targeting is based on the conviction that inflation can best be contained in a lasting way by keeping monetary growth within limits. A medium-term commitment to price stability is implicitly quantified in the setting of the monetary targets and the use of an intermediate target is seen to have many advantages. Direct targeting of price inflation without intermediate targets, as is done in some countries where the demand for money has proved less stable than in Germany, is considered a less attractive alternative. In the United States, the Federal Reserve is committed by legislation to promoting the three goals of maximum employment, stable prices and moderate long-term interest rates. However, its Chairman has frequently pointed out in testimony to Congress that achieving price stability is a

Published inflation objectives

Countries	Target[1]	Period[2]	Set by[3]	Target variable[4]	Monitoring variable[4]	Intermediate variable[5]
United Kingdom	1–4	1–2½% by 1997	G	RPIX	RPIY	M0, M3
Canada	1–3	until 1998	CB/G	CPI	CPIXF	no
France	< 2	as from 1995	CB	CPI		M3, ERM
Italy	2	by 1996	G	PCD	CPI	M2
Spain	< 3	by late 1997	CB	CPI		ALP, ERM
Sweden	2±1	as from 1995	CB	CPI	CPU1/2	no
Finland	2	as from 1995	CB	CPIY		no
Australia	2–3	medium term	CB		CPXI	no
New Zealand	0–2	as from 1993	G/CB	CPIX		no

[1] Annual rates, in percentages. For Italy, the objective for 1995 is 2.5%. For Spain, there is an objective of 3.5 – 4% for early 1996. [2] For the United Kingdom, end of the present Parliament (May 1997 at the latest); for Canada, a target consistent with price stability will be set for 1998 onwards; for Australia, average inflation rate over the cycle. [3] G = Government; CB = central bank; for Canada and New Zealand, agreement between central bank Governor and Finance Minister. [4] RPIX = twelve-month change in retail prices excluding mortgage interest payments; RPIY = RPIX excluding indirect taxes; CPI = twelve-month change in consumer prices; CPIXF = CPI excluding certain foods, energy and changes in indirect taxation; PCD = personal consumption deflator, annual average change; CPU1 = CPI excluding indirect taxes and subsidies, indirect costs for owner-occupied housing and the effects of krona depreciation; CPU2 = CPU1 excluding heating oil and propellants; CPIY = CPI adjusted for indirect taxes, subsidies and housing capital costs; CPXI = CPI underlying inflation (adjusted for interest rates and various other items); CPIX = CPI excluding housing interest costs. [5] M0 = wide monetary base; ERM = exchange rate objective within the ERM; ALP = liquid assets held by the public.

Table IV.4

precondition for attaining the other two objectives. Proposals for revising the System's mandate so as to place more emphasis on price stability have recently been made in Congress but the issue remains controversial.

Possible disadvantages in publishing specific goals for ultimate objectives

A general problem entailed in the publication of specific goals for the ultimate objective has to do with the difficulty of assessing the impact of monetary policy on inflation, and the influence of other factors on price indices in the short run. Accordingly, it is by no means certain that central banks will always succeed in keeping inflation within the narrow ranges implied by the published targets. There is some risk, in consequence, that failure to do so will damage credibility. In countries where an inflation target set by the central bank has been assented to by the government, the independence of monetary policy might be called into question in the event of a change of government policy. Without taking a position on these fundamental issues, some of the practical questions raised by inflation control targeting – a recent development – are discussed below.

The specification of the objectives

Price index used

In most of the countries using explicit inflation targets, the medium-term objective is to achieve a low rate of inflation defined in terms of consumer prices. The consumer price index is available on a timely basis, seldom revised and widely used as a measure of inflation, particularly in wage negotiations. Consumer price indices are arguably subject to varying degrees of upward bias as a result, inter alia, of the use of different products or alternative retail distribution systems

induced by changes in relative prices, and underestimation of quality changes and the benefits arising from the introduction of new goods. This can be taken into account by having a positive target. Efforts to improve the accuracy of widely used inflation gauges might reduce the need to make allowance for measurement bias in the targets.

Target horizon

Typically, the target horizons have been medium-term: long enough to take account of lags in the impact of monetary policy but short enough to encourage a downward adjustment of inflation expectations. While a single target figure might give a clearer focus for reducing inflation expectations, bands, although typically narrow in relation to the past variability of inflation, can make some allowance for transitory price movements and uncertainty in forecasting the impact of policy on inflation.

Use of measures of underlying inflation and contingent provisions

Calculating price increases over twelve months, as is generally provided for in the target specifications, smooths short-term price fluctuations to which policy clearly should not respond. Some central banks exclude from the target inflation measure the prices of volatile items or items subject to large periodic changes which may not reflect the current balance of aggregate supply and demand. Others use such corrected measures only for estimating underlying inflation trends. Mortgage interest charges, which rise in response to a tightening of monetary policy, are excluded in the United Kingdom, Australia and New Zealand, where they enter into the calculation of housing costs of owner-occupiers in the consumer price index. Many central banks make adjustments to price indices to remove the direct effects on the price level of changes in indirect taxation. However, the Bank of Canada has announced that it will strongly resist accommodating second-round effects on the underlying rate of inflation. In Canada and New Zealand, contingent provision has been made for permitting temporary deviations from the targets, and even for their revision or suspension, in the event of specified supply shocks such as large changes in the prices of oil or other raw materials.

Distinction between zero inflation and price stability

As inflation has declined to relatively low levels, academic and other economists have begun to focus on the distinction between zero inflation and price stability. A target for an accurate measure centred on zero inflation could imply base drift if one-time effects of tax changes and price shocks are accommodated in the targeting process. In the event, for instance, of systematically contractionary supply shocks there could be an appreciable difference between choosing a target for zero inflation and one for price stability. Some writers have contended that the major costs of inflation in modern economies stem from an erosion of the reliability of money as a unit of account, and have concluded that long-run stability of the price level should be the longer-term objective. A further argument is that under a credible price stability objective, the expectation that price changes due to a shock will be reversed subsequently could contribute to stabilising the economy and the price level itself. By way of counter-argument, it has been noted that choosing price stability as the objective of monetary policy would at times imply a need for decreases in the price level. This raises questions about the downward flexibility of prices, and about whether in the short run the variability of inflation and output might have to increase to achieve such an objective. As the establishment of either zero

inflation or price level stability implies a fundamental structural ("regime") change, past experience may not provide conclusive answers.

The implementation of inflation target strategies

Differences in the implementation of counter-inflationary strategies turn on the use of intermediate objectives in the conduct of monetary policy and raise the question of how targets can best be met in their absence. In France and Spain the inflation targets are underpinned by ERM exchange rate objectives. Medium-term norms for monetary aggregates are also used as guides to the implications of policy for inflation in the medium term. In New Zealand, developments in the exchange rate within a target or "comfort" zone serve as the main indicator of monetary conditions and inflationary pressures, in view of the importance of the direct effect on the domestic price level of the prices of tradable goods.

Procedures used for relating current interest rate policy settings to future inflation rates

Central banks in the United Kingdom, Canada, Sweden and Finland adjust short-term interest rates in order to meet the inflation target over the medium term through explicitly forward-looking processes using a range of indicators. However, there are considerable differences in the way these central banks use particular indicators. The Bank of Canada has focused closely on model-based estimates of the influence of excess demand and supply on the inflationary process but also uses monetary aggregates and the growth of total spending as complementary indicators of future rates of inflation. In the short run a "monetary conditions index", defined as a weighted average of short-term interest rates and the exchange rate, is used in both Canada and Sweden in gauging whether monetary policy is consistent with the objectives for aggregate demand. The Bank of England uses formal models and a variety of indicators including house prices, the exchange rate and direct measures of prices and costs to forecast the probability distribution of future inflation given current policy. The forecasts play an important role in the Bank's judgement of the setting of monetary policy to be recommended to the Chancellor of the Exchequer.

The publication of inflation reports

In the United Kingdom, as in Canada, New Zealand, Spain and Sweden, the range of uncertainty in forecasting is discussed in regular reports on monetary policy and inflation published by the central bank. Public understanding of the margin of uncertainty attaching to the central bank's ability to control the inflation rate is viewed as helpful in ensuring that unavoidable departures from the numerical objective do not cast doubt on the central bank's commitment to controlling inflation.

Consistency of other policies with inflation objectives

Cross-country differences in the responsibility for setting inflation targets raise issues regarding the impact of the central bank's mandate and independence on the credibility of monetary policy, and how a broader political consensus can be achieved so as to ensure consistent fiscal policies.

Commitment of governments to inflation targets

In France and Spain, legislation which made the central bank independent gave it a general mandate to pursue the objective of price stability. In New Zealand the central bank has been committed by legislation to achieving price stability, as expressed in contractual agreements concluded with the Minister of Finance. In the United Kingdom the inflation target has been set by the

Chancellor of the Exchequer, and in Canada the objectives have been established by the Bank of Canada in agreement with the Minister of Finance. In Finland the Government committed itself to the target set by the Bank of Finland in connection with the announcement of budget expenditure cuts. In Sweden the target was unanimously agreed by the central bank's Governing Board and reflects a broad political consensus, the Government and Parliament having subsequently expressed support for it. In Italy the targets were established by the Government at the time of the 1992 national labour cost agreement which abolished wage indexation, but have since been incorporated into the Bank of Italy's objectives for M2.

A general commitment to inflation targets on the part of the government has not resulted in the timely adoption of fiscal restraint in all cases. However, making prices and wages determined or influenced by the government consistent with the inflation target has in some cases contributed both to lowering the budget deficit and to minimising the output costs of controlling inflation.

Overall effects of formal inflation targeting strategies

In Canada, New Zealand, the United Kingdom, Sweden and Finland inflation abated more than had been anticipated after the announcement of the targets, but in the context of an unexpectedly slow economic recovery. The appropriate question now is whether credibility built up by recent performance can help to contain inflation expectations and thus to facilitate a sustainable non-inflationary economic recovery. It will be necessary to await inflation results over the whole cycle before it will be possible to judge the effects of formal targets in promoting greater price stability.

V. Turbulence in bond markets

Highlights

For bond and equity investors the period under review marked an abrupt reversal of fortunes. A series of events beginning in early 1994 shattered widespread expectations fostered by favourable market conditions in preceding years. Bond yields had been expected to continue to decline in Europe and to rise only modestly in the United States; instead, they surged almost everywhere following the monetary policy tightening by the Federal Reserve in early February. The increase resulted in some of the largest portfolio losses in the post-war period and checked or reversed the rise in equity markets. It had been hoped that low inflation and a more determined anti-inflation commitment on the part of the monetary authorities would deliver low volatility; in fact, volatility increased substantially along with the rise in bond yields. Moreover, some of the countries with the best inflation history and outlook were affected most severely. On the strength of structural adjustment policies and recent performance, emerging markets had been seen to offer excellent prospects; yet they proved to be among the poorest performers. They did not escape the bond market tremors in early 1994 and went through a particularly turbulent period in the wake of the Mexican crisis in late 1994 and early 1995.

While not unprecedented, the increase in bond yields was large by historical standards. To some extent it reflected a reaction to the changing economic outlook, most notably the unexpected vigour of the recovery. Countries with a track record of relatively high inflation and with weaker fiscal positions proved to be more vulnerable. Nevertheless, the scale and international configuration of the increase should also be seen as in part a correction from previous unsustainably low levels, especially in Europe. In addition, certain trading strategies and accounting practices appear to have played a role in precipitating and spreading the adjustment. Particularly prominent among these was the extensive use of leverage.

Short-term bond yield volatility reached heights not often seen since the early 1980s. The evidence indicates that it is not unusual for volatility to rise sharply following a shift to a protracted period of declining bond prices. However, compared with the previous analogous episode in the mid-1980s, the increase in volatility was remarkably persistent and its cross-country incidence harder to explain. Part of the explanation appears to lie in reduced market liquidity as a result of the large losses sustained by participants and the rapid withdrawal of non-residents from key markets, notably Germany. Leverage may have played a role too, by amplifying the losses in relation to capital and hence their impact on risk perceptions and market-making capacity.

The bond market turbulence in the period under review suggests that in the present financial environment the likelihood of extreme price swings may well be greater and their consequences further-reaching than in the past. Mutually reinforcing policies at the macro and micro levels are necessary in order to reap the benefits of financial liberalisation and innovation, while at the same time limiting the potential costs.

Equity markets

At the end of 1993 equity prices were high in relation to earnings ...

Following substantial increases in 1993, equity prices were high by historical standards at the beginning of last year. It is not unusual for equity prices to rise ahead of economic recovery, following downward trends in interest rates around cyclical troughs in business activity. Nonetheless, given the steepness of the rise, questions arose at the time regarding the extent to which observed valuations were consistent with future prospects for earnings and with yields on alternative assets.

Doubts about the robustness of valuations rested primarily on measures of the yield on equities compared with past performance. In particular, price/earnings ratios were at or near a peak in several industrial countries at the end of 1993 (see Table V.1), including the United States and the United Kingdom, where economic recovery was already well under way. The pattern was similar in emerging markets, especially those of South-East Asia.

... but not in relation to bond yields

The picture was quite different, however, when the yield on equities was compared with that on alternative assets. A useful indicator of relative valuation is the inflation-adjusted dividend yield gap, defined as the difference between an inflation-adjusted long-term interest rate and the dividend yield. On that basis, markets were well within historical experience (see Table V.2). In most cases the measure was actually below the average for the preceding decade.

With equity prices already high in relation to earnings but not out of line with long-term interest rates, the key to their future evolution appeared to lie

Price/earnings ratios[1]

Countries	Sept. 1987[2]	Peak 1983–93		Average 1983–93	Dec. 1993	Dec. 1994	March 1995
		level	date				
United States	23	26	Aug. 1992	16	23	17	16
Japan	70	74	June 1987	44	57	66	59
Germany	15	25	Dec. 1993	14	25	16	13
France	14	17	Dec. 1993	12	17	13	11
Italy	15	44	April 1986	17[3]	18	18	18
United Kingdom	18	21	Nov. 1993	14	20	18	17
Canada	20	104[4]	Dec. 1993	30	104[4]	22	16
Belgium	15	16	Dec. 1993	11	16	15	14
Netherlands	15	16	Nov. 1993	11	16	14	13
Switzerland	14	17	Dec. 1993	11	17	14	15

[1] Ratio of price to reported earnings per share. [2] Month preceding the global stock market crash. [3] February 1986–December 1993. [4] Exceptionally high owing to very low or negative earnings.

Source: Datastream. Table V.1

with bond markets. Equity prices had hardly been affected by the initial rise in bond yields in the United States in October 1993. But they faltered worldwide in February 1994, when bond yields rose sharply in the United States and elsewhere following the turning-point in US monetary policy. As yields rose further during the rest of the year, the performance of equity markets remained lacklustre (see Table V.3). By the first quarter of 1995, markets in industrial countries had generally softened somewhat relative to the beginning of the period. They would have fallen further had it not been for an improved outlook for earnings, associated with unexpectedly vigorous economic activity in the United States and, later, Europe.

Lacklustre performance as bond yields rise

The rise in bond yields took its toll on emerging equity markets too. Among the markets that suffered first and most severely were those that had benefited most in 1993 from investments by non-residents and where equity prices appeared comparatively high, including several markets in the South-East Asian region. Markets in Taiwan and Korea outperformed their counterparts in the region, probably reflecting in part a lower vulnerability to foreign sentiment because of restrictions on access by non-residents. Latin American equity markets generally weakened later, in particular following the Mexican crisis in late 1994 and early 1995.

Emerging markets also affected

Two industrial countries where equity prices appeared less sensitive to common international trends were Italy and Japan. In Italy equity prices waxed and waned in reaction to a rapidly evolving political scene. In Japan a series of specific developments seem to have guided price movements: uncertainty about the approval of a budget designed to stimulate the economy (early 1994); the breakdown of trade talks with the United States (mid-February and early March); the ending of restrictions on new equity issues (September); and the Kobe earthquake (January 1995). Over the period, it was primarily purchases by non-residents which appeared to sustain the market; demand from domestic institutional and retail investors remained subdued.

By March this year, price/earnings ratios had generally fallen somewhat from

Inflation-adjusted dividend yield gaps[1]

Countries	Sept. 1987[2]	Peak 1983–93		Average 1983–93	Dec. 1993	Dec. 1994	March 1995
		level	date				
United States	2.4	5.1	Aug. 1983	1.5	0.3	2.2	1.6
Japan	4.5	5.4	Aug. 1983	3.1[3]	1.2	3.2	3.1
Germany	4.5	5.6	Nov. 1986	2.7	0.4	3.0	3.3
France	5.1	5.1	Sept. 1987	2.1	1.0	3.5	2.5
Italy	3.6	4.5	Aug. 1987	2.4	0.5	3.8	4.3
United Kingdom	3.1	4.2	Sept. 1986	0.7	0.5	1.9	1.0
Canada	4.1	6.0	June 1984	2.5	2.5	6.4	3.9
Belgium	3.6	4.4	Dec. 1986	2.0	1.0	3.3	3.1
Netherlands	3.4	3.6	Oct. 1987	1.3	−0.4	1.5	1.4
Switzerland	0.8	2.3	Nov. 1986	−0.6	−0.1	3.3	1.7

[1] Long-term interest rate minus dividend yield minus twelve-month inflation rate. [2] Month preceding the global stock market crash. [3] August 1983–December 1993.

Sources: Datastream and national authorities. Table V.2

Stock market indices

Countries	Dec. 1992	January	March	June	Sept.	Dec.	March 1995
		1994					
	December 1993 = 100						
United States	93	103	96	95	99	99	107
Japan	91	113	109	116	110	108	91
Germany	68	96	94	89	89	93	85
France	82	103	92	83	83	83	82
Italy	73	107	116	112	111	103	98
United Kingdom	81	104	93	87	90	90	92
Canada	78	105	100	93	101	98	100
Australia	71	106	95	92	93	88	88
Belgium	77	104	99	96	93	94	87
Netherlands	68	104	96	92	96	101	96
Spain	67	111	99	93	92	88	83
Sweden	66	114	100	98	101	105	104
Switzerland	66	108	97	93	90	92	88
Argentina*	60	110	90	84	98	75	67
Brazil*	52	130	137	106	192	168	114
Chile*	77	121	102	115	137	141	132
Mexico	68	107	93	87	106	91	70
Venezuela	91	101	118	124	151	136	124
Hong Kong	46	97	76	74	80	69	72
Korea	78	109	100	108	121	119	108
Malaysia	51	87	75	79	89	76	77
Singapore	63	96	86	92	96	92	86
Taiwan	56	101	87	98	117	117	108
Thailand	53	89	74	76	88	81	72

* IFC Investable Indexes.

Sources: International Finance Corporation (IFC) and national data. Table V.3

their levels at the end of 1993; the main exception was Japan, where they had risen despite lower equity prices. On the other hand, dividend yield gaps had widened, in some cases considerably, as a result of the limited response of share prices to the large increases in bond yields.

Bond markets: trends in yields

Very large losses in bond markets ...

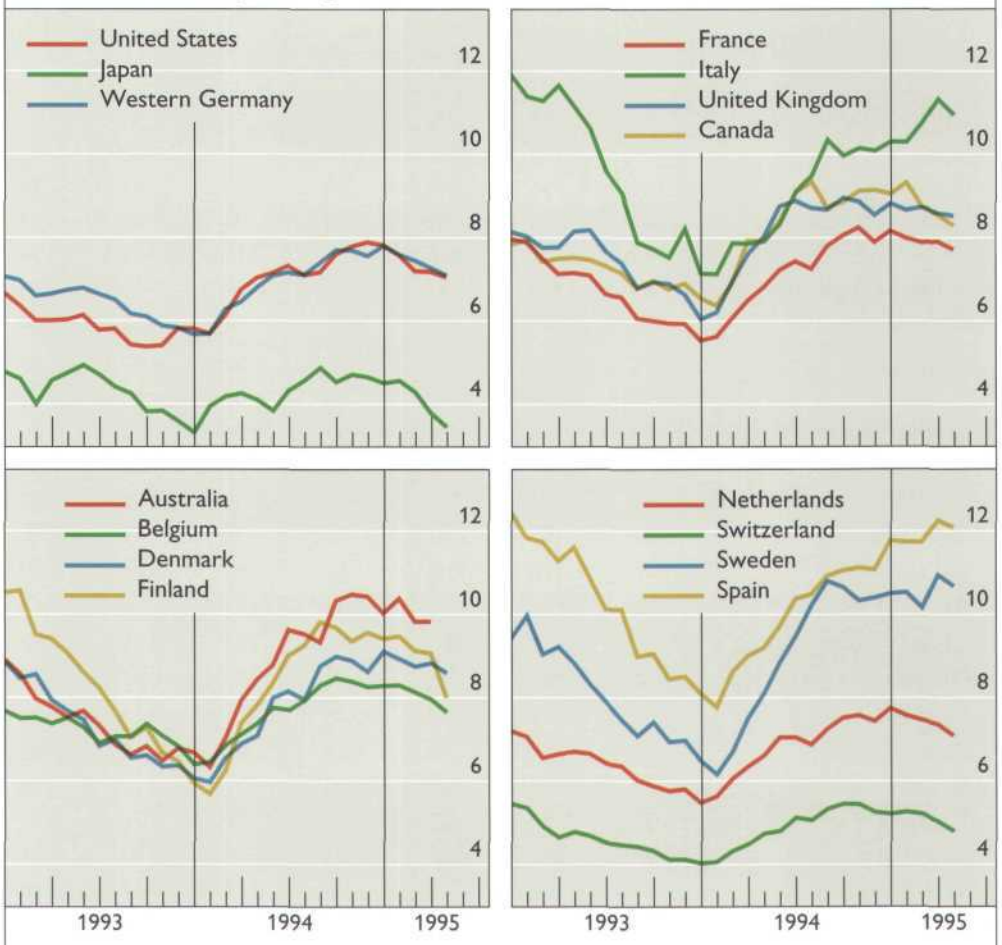
Last year was a particularly difficult one for bond investors. On some estimates, capital losses in world bond markets may have been in the region of $1.5 trillion, equivalent to almost 10% of OECD GDP. This was the largest annual loss in over a decade. Moreover, the loss signalled the end of a long period of rising prices, affected a broad range of investors, had an extraordinary geographical reach, and was incurred on relatively highly leveraged positions.

... as long-term rates surge

The movements in long-term bond yields that underlay the losses are shown in Graph V.1. Between the beginning and the end of 1994 long-term interest rates in industrial countries generally rose by some 200 to 300 basis points. At the two extremes of the range of variation were Japan and Switzerland, where the

Bond yields*

At end of month, in percentages



* In this and subsequent graphs and tables in this chapter, yields on ten-year government bonds or their closest equivalent.

Graph V.1

increase was only around 120 basis points, and Sweden, Italy and Spain, where it was between 300 and 400 basis points. Except in Italy and Sweden, where they continued to rise, yields remained broadly stable or declined somewhat in the first quarter of 1995. The size and geographical pattern of the movement, however, was not such as to change the overall basic picture. The exception was Japan, where by the end of the period yields had roughly returned to their initial level.

Long-term interest rates in the United States troughed as early as in October 1993, those in the United Kingdom and Japan in December of the same year. All other markets reached their trough in January 1994. February marked the beginning of a strong upward phase everywhere, heralded by a sharp increase in US rates. The rise in bond yields was not evenly distributed over the rest of the year. The largest part of the increase was concentrated in the three months to the end of April. By then, over half of the upward adjustment for the year as a whole had typically taken place. Rates peaked in early November in most countries.

The degree of synchronisation of yield movements between national markets was not constant during the period. It was highest in the initial phase

of the rise. Between early May and the beginning of September long-term rates declined somewhat in the United States; they continued to rise elsewhere, though mostly at a slower pace, and actually moved up more vigorously in Italy and Sweden. A temporary fall in Japan in the spring was not echoed in the other markets.

Though sizable, the scale of the rise was not unprecedented. Similar increases over a three-month period had occurred in the late 1970s and early 1980s. While the upward adjustment that took place over the year as a whole had fewer precedents, it was not entirely out of line with previous experience either. Nor were the co-movements across markets. At least on a monthly or weekly basis, the correlations between changes in US and other long-term rates in 1994 were not very different from those observed in the past.

Atypical features of the rise

Nevertheless, recent events were remarkable in several respects. First, the major rise in rates took place against a background of persistently low and falling inflation. In contrast, the large increases of the late 1970s and early 1980s had occurred in an inflationary environment. Second, the beginning of the bear market was much more synchronous across countries than in the past. Since the 1970s there has been only one occasion, around 1986–87, on which such a turning-point in bond yields has occurred on a global scale; but the dispersion of troughs was considerably higher then, despite a greater similarity in the cyclical positions of national economies (see Table V.4). Finally, last year was the first time that a bear market in so many different countries came in the wake of a tightening of US monetary policy (on 4th February). Moreover, the tightening was not immediately followed elsewhere, as central banks in Europe continued to ease

Two bear bond markets compared: international synchronisation

Countries	1986–87			1993–94		
	Yield trough	US market lead[1]	US policy rate lead[2, 3]	Yield trough	US market lead[1]	US policy rate lead[2]
	date	in months		date	in months	
United States	Aug. 1986	–	– 7	Oct. 1993	–	–3
Japan	May 1987	9	2	Dec. 1993	2	–1
Germany	April 1986	–4	–11	Jan. 1994	3	0
France	Aug. 1986	0	– 7	Jan. 1994	3	0
Italy	Jan. 1987	5	– 2	Jan. 1994	3	0
United Kingdom	April 1986	–4	–11	Dec. 1993	2	–1
Canada	Mar. 1987	7	0	Jan. 1994	3	0
Belgium	Aug. 1986	0	– 7	Jan. 1994	3	0
Denmark	April 1986	–4	–11	Jan. 1994	3	0
Finland	Mar. 1986	–5	–12	Jan. 1994	3	0
Netherlands	Aug. 1986	0	– 7	Jan. 1994	3	0
Spain	Oct. 1986	2	– 5	Jan. 1994	3	0
Sweden	Oct. 1986	2	– 5	Jan. 1994	3	0

[1] Number of months by which the trough in the US market leads the trough in the market shown. [2] Number of months by which the trough in the US policy rate leads the trough in the bond market shown. Based on the month before tightening (i.e. March 1987 and January 1994 respectively). [3] If September 1986 is taken as the relevant date, the lead should be increased by five months.

Table V.4

Change in bond yields following US monetary policy tightenings

Date	US	JP	DE	FR	GB	NL
	four-day change as a percentage of the change in the US policy rate[1]					
8th April 1987[2]	180	−24	20	24	72	16
30th March 1988	48	−84	8	−4	−56	−12
4th February 1994[2]	44	−28	84	44	100	64

Note: For an explanation of the country abbreviations, see Graph V.2.

[1] 25 basis point tightening in all three cases. [2] Turning-point in US monetary policy.

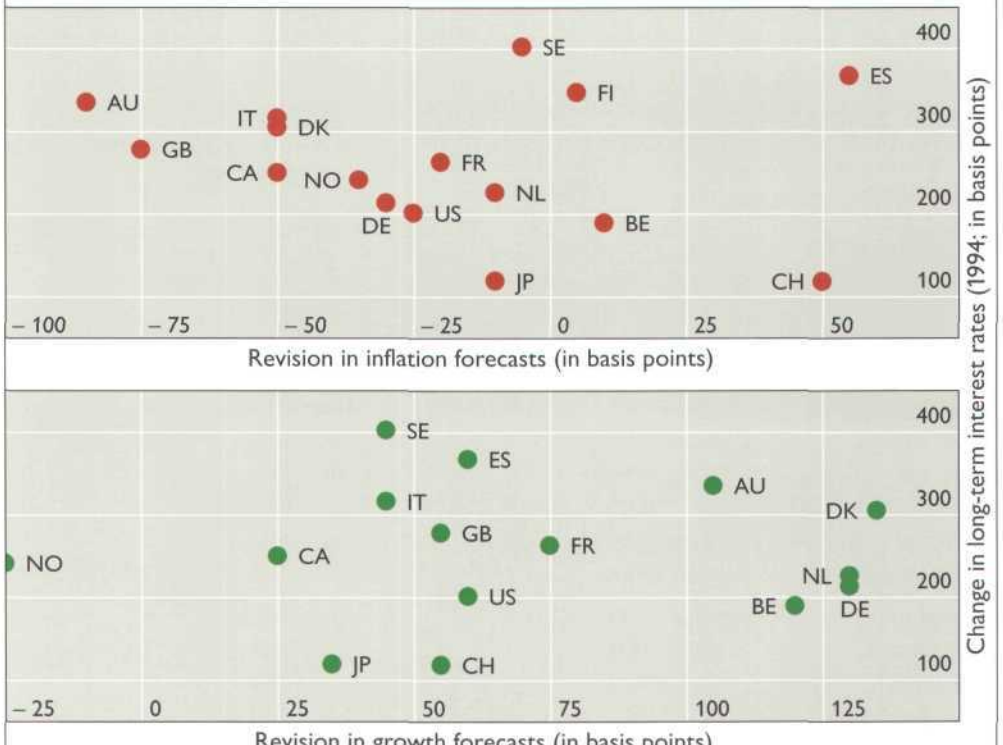
Sources: Datastream and national authorities. Table V.5

and policy remained broadly unchanged in Japan. Indeed, except in Japan, the intensity of the response of foreign long-term rates to the action of the Federal Reserve appeared to be uncharacteristically strong, and stronger than the response of US rates themselves (see Table V.5).

Three complementary explanations for the rise in bond yields:

Three complementary hypotheses have been advanced to explain developments last year. First, the rise in long-term rates may have reflected a well-founded market reaction to changing economic conditions ("fundamentals"), such as inflation, output growth and monetary policy. Second, it may have

Bond yield increases and revisions in inflation and growth expectations*



AU = Australia; BE = Belgium; CA = Canada; DK = Denmark; FI = Finland; FR = France; DE = Germany; IT = Italy; JP = Japan; NL = Netherlands; NO = Norway; ES = Spain; SE = Sweden; CH = Switzerland; GB = United Kingdom; US = United States.

* Measured by the revision in OECD forecasts for inflation and growth for 1994 and 1995 between end-1993 and end-1994.

Sources: OECD and national data. Graph V.2

represented a correction of previous speculative excesses which had driven rates to unsustainably low levels. Finally, it may have been precipitated by institutional factors, notably specific trading strategies, which put excessive pressure on market arrangements and amplified the sensitivity of price movements to the evolving economic environment.

changed fundamentals ...

A series of events during the year probably led investors to change their perceptions of justifiable levels of long-term rates – the first hypothesis. In Japan, prior to the US monetary policy tightening, an equity market rally raised doubts about a further easing of policy, while reports indicated that the Ministry of Finance Trust Fund would reverse its programme of acquiring government bonds. In the United States the monetary tightening was followed later in February and in March by reports suggesting that economic activity and, possibly, inflation were gathering pace faster than had been anticipated. Figures pointing to stronger than expected growth were also released in the United Kingdom around the same time. In Germany, the announcement in early March of rapid M3 growth came in the wake of an unexpectedly mild easing of monetary policy in mid-February. In the spring broader evidence began to emerge that the upturn in economic activity in Europe had started sooner and was sharper than originally thought. In the course of the year political and fiscal uncertainties clouded prospects for investors in a number of countries, notably Canada, Italy and Sweden.

The cross-country pattern of increases in bond yields is in principle consistent with the same hypothesis (see Graph IV.8 on page 88). There is a broad correspondence between the size of the increase and the presence of economic conditions which can heighten a country's vulnerability to a deterioration in investor sentiment. The scale of the rise in bond yields was comparatively large in those countries whose inflation rate had, on average, been higher during the preceding decade or where the state of public finances was weak. A historically relatively poor performance in fighting inflation is likely to be seen as a sign that the future course of price increases will be more sensitive to an acceleration in economic activity. In particular, it may undermine the

Two bear bond markets compared: revisions in expectations

Countries[1]	Revision in forecasts for				Countries[1]	Revision in forecasts for			
	growth		inflation			growth		inflation	
	1987[2]	1994	1987[2]	1994		1987[2]	1994	1987[2]	1994
	in percentage points					in percentage points			
US	−1.25	0.80	1.00	−0.40	AU	−1.00	1.20	0.75	−1.60
JP	2.25	0.50	−0.50	−0.10	BE	−0.25	1.40	1.00	−0.10
DE	−1.50	2.00	0.75	−0.60	DK	−3.25	2.20	2.75	−0.90
FR	−1.25	1.10	0.75	−0.60	FI	1.25	3.80	0.25	0.30
IT	−0.25	0.50	1.75	−1.00	NL	0.75	1.90	−1.25	−0.10
GB	1.00	0.60	1.00	−0.80	ES	1.25	0.90	−1.00	0.40
CA	1.00	0.40	1.75	−1.20	SE	0.75	0.80	0.50	0.00

Note: For an explanation of the country abbreviations, see Graph V.2.

[1] In Norway and Switzerland yields were stable or declined. [2] Based on OECD forecasts made at the time closest to the trough. For trough dates, see Table V.4.

Source: OECD. Table V.6

Two bear bond markets compared: relationship with inflation

Countries	Episode	Lead[1]	Nominal yields			Inflation-adjusted yields[2]			Initial level
			change after			change after			
			1 month	6 months	1 year	1 month	6 months	1 year	
		in months	in basis points						in % points
US	1980s	4	50	24	205	32	−29	−66	5.4
	1990s	7	40	162	238	47	201	252	2.7
JP	1980s	− 4	87	141	96	55	66	75	3.8
	1990s	7	63	101	119	44	149	157	2.3
DE	1980s	8	50	72	12	50	132	2	5.9
	1990s	>12	59	142	190	69	198	308	2.3
FR	1980s	0	24	127	228	−1	−15	78	5.6
	1990s	2	48	155	225	58	175	246	4.0
IT	1980s	5	6	112	51	37	121	5	5.3
	1990s	6	17	208	319	18	265	354	3.0
GB	1980s	4	33	234	24	53	235	− 3	5.3
	1990s	9	17	284	278	1	311	299	3.4
CA	1980s	− 2	116	266	137	76	234	135	4.1
	1990s	9	55	297	295	163	413	365	5.1

Note: For an explanation of the country abbreviations, see Graph V.2.

[1] Lead of the trough in the bond yield in relation to the trough in inflation. [2] Bond yields minus twelve-month consumer price inflation (for the United Kingdom, excluding mortgage interest payments). Table V.7

credibility of the monetary authorities in containing emerging inflationary pressures. By the same token, it may signal negative long-term prospects for the currency in question. In fact, a similar picture would emerge on the basis of the past exchange rate record. Similarly, fiscal imbalances may be viewed as a constraint on the longer-term ability of the monetary authorities to pursue a firm anti-inflation course; for ERM countries, in particular, they may also be regarded as a barometer of the timing or likelihood of membership of monetary union. In addition, where the risk of an unsustainable build-up of debt is higher, fiscal imbalances may give rise to market concerns about potential defaults.

Nonetheless, while different degrees of vulnerability to changing economic conditions may help to explain the *relative* size of the increase in yields across countries, it is not clear that the arrival of new information was sufficient to justify the *average* intensity of response. Indeed, many observers at the time were surprised by the scale of the increase, particularly in the initial phase, given the apparently stable economic outlook.

... such as expectations for near-term inflation ...

Revisions in *near-term* inflation expectations, over a two-year horizon, cannot be part of the explanation for the rise. There are strong indications that such expectations were generally revised downwards during 1994. This is what emerges from changes in OECD forecasts (see Graph V.2, top panel). The picture is not very different on the basis of market participants' views (see Chapter VI): the few upward revisions that took place occurred only towards the *end* of 1994. Graph V.2 also shows that there is, if anything, a perverse relationship between

the cross-country pattern of revisions in OECD inflation forecasts and the increase in bond yields.

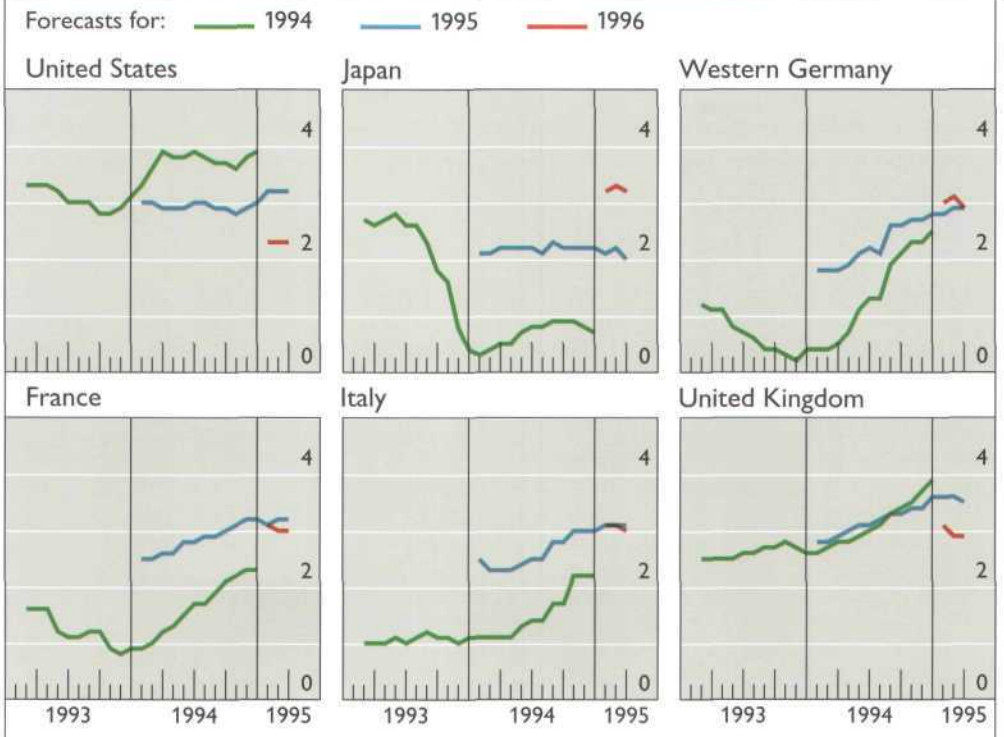
The anomaly of developments last year stands out even more clearly if the previous generalised bear market in the 1980s is taken as the benchmark for comparison. Then, revisions in near-term inflation forecasts were mostly upward (see Table V.6). Moreover, in stark contrast to the latest episode, yield increases tracked inflation more closely (see Table V.7). Specifically, the trough in bond yields generally led that in inflation by fewer quarters. And after one year the pick-up in inflation had largely or completely offset the rise in yields; after a similar interval, it fell well short in the recent period. Longer-term evidence for the United States indicates that the proximity of the troughs in bond yields and inflation is a recurrent feature of the onset of bear markets.

... and output growth ...

The evidence favouring revised perceptions of fundamentals is considerably stronger if the increase in yields is compared with the arrival of new information about output growth, a potential signal of inflation beyond the two-year horizon (see Chapter II) or of greater pressure on real resources and hence of higher real interest rates. Both OECD forecasts and market participants' expectations for cumulative growth in 1994 and 1995 were revised upwards in the course of 1994 (see Graph V.2, bottom panel and Graph V.3). In addition, the "news" compared favourably with that in the previous episode of 1986–87, when in several countries growth prospects had actually deteriorated (see Table V.6). At

Market participants' growth forecasts*

Annual average changes in real GDP, in percentages

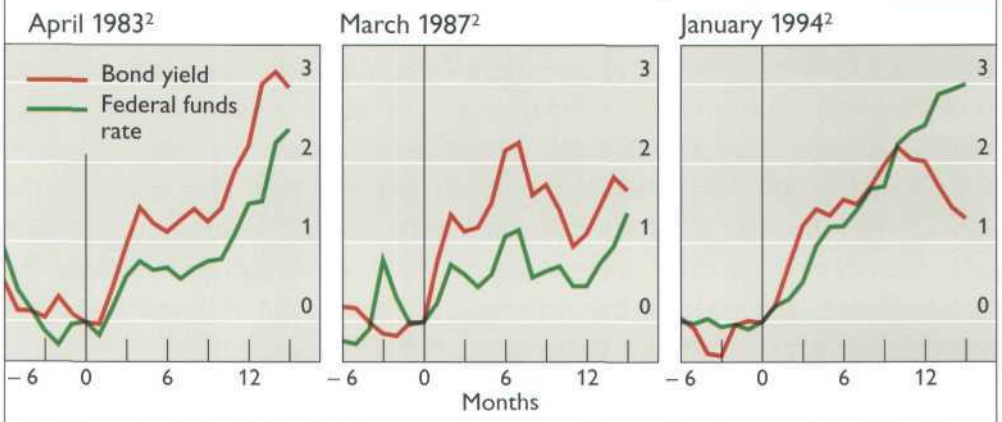


* Based on a survey of major banks and securities houses; shown at the time the forecast is made (approximately the month prior to publication).

Source: © The Economist, London (various issues). Graph V.3

US bear bond markets compared: relationship with the policy rate

In percentage points[1]



[1] Difference between the level of the interest rates in a given month and in month 0. [2] Month 0 is the month preceding the monetary tightening.

Graph V.4

the same time, certain puzzles remain. The cross-country pattern of revisions in growth forecasts does not help to explain the international constellation of yield increases (see Graph V.2). Moreover, in Europe, the initial sharp rise in rates generally occurred before the emergence of direct evidence of an unexpectedly strong upswing. And for the United States, the country where the worldwide rise began, market participants do not appear to have revised their expectations for growth in 1995 until very late in the year, and then only slightly.

... and monetary policy;

The evidence concerning the impact of changing monetary conditions is equally mixed. Though sizable, the increase in US bond yields was hardly atypical of previous turning-points in policy (see Graph V.4). The tightening was an unambiguous signal that in the future short-term rates would increase further. But it is unclear how surprised market participants could have been. There is evidence that a tightening had been anticipated for some time (see Chapter IV), while its scale was of a similar magnitude to that of previous turning-points.

Inflation-adjusted long-term interest rates[1]

Countries	Average 1983–92	Bond yield trough[2]	March 1995	Countries	Average 1983–92	Bond yield trough[2]	March 1995
	in percentages				in percentages		
US	5.3	2.7	4.3	AU	6.2	5.0	6.0
JP	4.2	2.3	4.1	AT	5.1	2.8	5.0
DE	5.2	2.0	5.0	BE	6.1	4.1	6.4
FR	5.6	3.7	6.1	DK	6.8	4.2	6.3
IT	5.5	3.0	6.4	NL	5.7	2.4	4.8
GB	4.4	3.4	5.8	ES	5.9	2.8	7.0
CA	5.8	5.1	6.3	SE	5.2[3]	4.6	8.1

Note: For an explanation of the country abbreviations, see Graph V.2.

[1] Bond yields minus twelve-month consumer price inflation (for the United Kingdom, excluding mortgage interest payments). [2] Trough in the nominal bond yield in late 1993–early 1994. [3] Since March 1984.

Table V.8

Above all, the intensity of the response of bond yields outside the United States is hard to explain, given the difference in the cyclical positions of the economies and domestic monetary conditions.

On balance, the foregoing analysis suggests that either bond yields were not solely responding to fundamentals or financial markets had become more forward-looking than in the past, responding to advance signals of developments further in the future.

previous overshooting ...

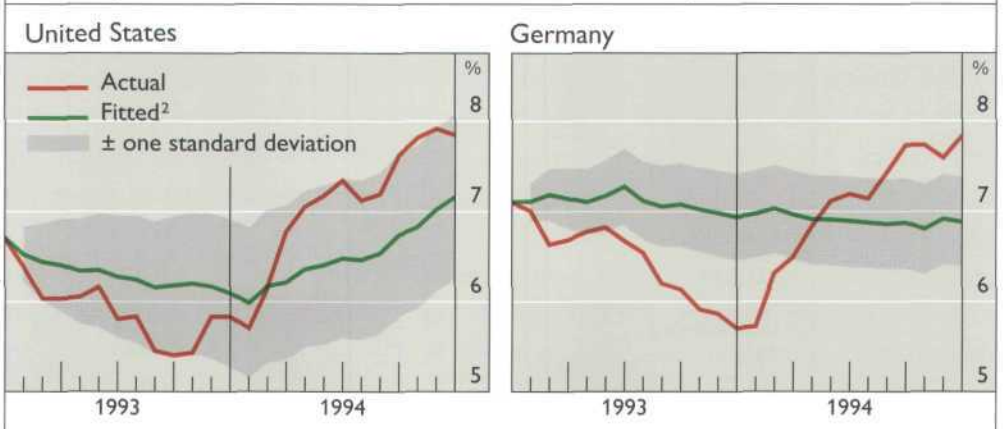
There are in fact grounds for believing that part of the explanation for developments in 1994 should be sought in 1993: a number of elements suggest that the global rise was to some extent a correction from unsustainably low levels – the second hypothesis. First, in several countries inflation-adjusted bond yields appeared low by the standards of the preceding decade (see Table V.8). Second, statistical analysis indicates that in certain countries bond yields were lower than would have been expected on the basis of their past relationships with key economic variables (see Graph V.5). Forecasts based on econometric equations that attempt to capture such regularities considerably overpredict in 1993 in the case of Germany, the benchmark market for Europe. The evidence is inconclusive in the case of the United States, as the picture is quite sensitive to the details of the specification. Third, the size of the decline in bond yields in 1993 helps to explain the cross-country pattern of increases in 1994 (see Graph V.6). Finally, excessively low yields are consistent with share valuations that were high in relation to earnings, but not to bond returns, around the end of 1993.

... caused by speculative excesses;

It is of course difficult to identify the forces that may have caused the unusually large decline in rates in 1993. Nevertheless, it is possible to point to a plausible set of incentives, to one important facilitating mechanism and to certain signs of greater risk tolerance.

Most probably, the original incentive was the lure of the particularly wide and persistent margin between the returns on bonds and those on short-term investments since the early 1990s. In the United States, this was supported by

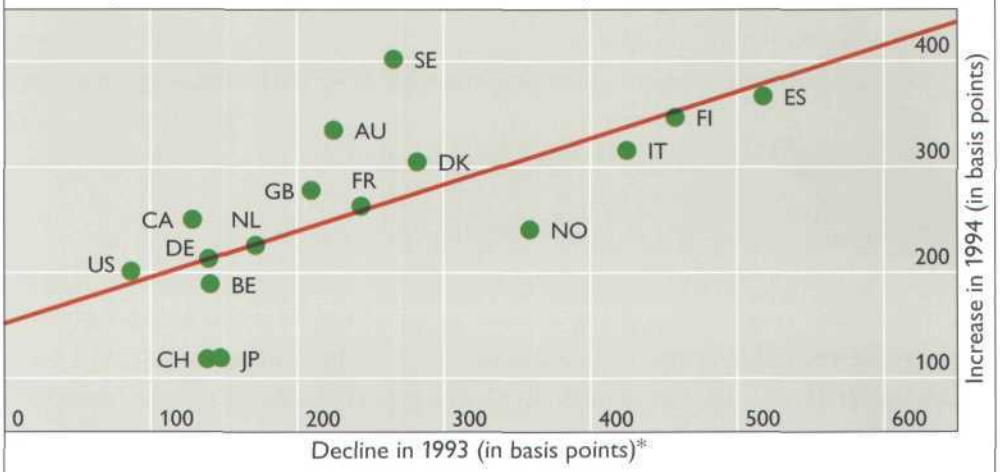
Bond yields: benchmark economic relationships[1]



[1] Based on econometric equations relating bond yields to money market and policy rates, exchange rates and current account balances. The specifications are not the same in the two countries. The estimation period is 1978–92. [2] Out-of-sample dynamic forecast.

Sources: National data and BIS calculations. Graph V.5

Bond yield declines and increases compared



Note: For an explanation of the country abbreviations, see Graph V.2.

* Absolute value of the decline during the year.

Graph V.6

an exceptionally steep term structure, associated with a federal funds rate kept at a very low level for an unusually long period. Between early 1991 and January 1994, the spread averaged some 300 basis points, the highest over any three-year period since the war. By the end of 1993 market participants may well have allowed themselves to be lulled into a false sense of security. They appeared to expect long rates to continue to decline in Europe and to be prevented from rising much in the United States by a combination of fiscal consolidation and vigilance on the part of the monetary authorities.

An important facilitating mechanism was the extensive use of leverage. Leverage allowed participants to take on large exposures with relatively little own capital, either through borrowing or by using derivatives (see Table V.9 and Chapter VIII). A very popular strategy since the early 1990s, especially in the United States, had been to finance long positions by borrowing short. Hedge funds were only one, albeit significant and highly conspicuous, leveraged player among many. Others included securities firms and banks. It is of course natural for banks to increase their bond purchases when loan demand is weak, but the scale of their investments exceeded that in past cycles. As bond rates declined in the United States, market participants increasingly turned their attention to Canada and to European and Latin American markets in search of higher yields and capital gains. Very often exchange rate risk was hedged, typically by borrowing at short term in local markets. Repo markets were especially significant in this context.

Finally, an apparent sign of a heightened appetite for risk-taking was the extensive use of leverage itself. Another was the general narrowing of yield spreads across markets in 1993, notably in Europe and Latin America, an indication of less discriminating investment strategies (see Graph V.7).

In sum, just as with the "convergence play" that had preceded the ERM turbulence in the autumn of 1992, by late 1993 the global structure of portfolios was ill-suited to withstand the arrival of disappointing new information, regardless of its intrinsic significance.

and institutional features and market practices

Against this background, several institutional features and market practices may have amplified the correction of long-term rates, at least in the initial phase of the rise – the third hypothesis. Again, leverage was one of these factors. Just as leverage had raised rates of return on capital when yields were falling, it multiplied the losses when they started to rise. It thereby heightened risk perceptions and added to pressures to liquidate positions, in part to meet margin calls. A second factor was widespread risk management practices calling for automatic sales at specific trigger points in order to limit losses. Accounting procedures probably exacerbated this effect. As traders had generally reset their profit and loss balance to zero at year-end through marking to market, there was little cushion to absorb the losses incurred early in the year. A final factor relates to the dynamics of the US market for mortgage-backed securities, which, at some $1.4 trillion, is now about 30% larger than private holdings of up to ten-year government bonds. As long-term rates rose, the probability of early repayment of the underlying mortgages by households fell, lengthening the effective maturity ("duration") of the corresponding securities. Hedging such changes called for substantial sales of government bonds of a corresponding duration, thereby putting further downward pressure on prices. It has been estimated that from October 1993 to April 1994 hedging by dealers, portfolio managers and other investors was equivalent to the sale of over $300 billion of ten-year Treasury securities.

An important force linking yield movements across markets was the generalised retrenchment by non-resident, especially US, investors, who began to unwind the positions accumulated during the period of falling yields (see below

Selected indicators of leverage in international bond markets[1]

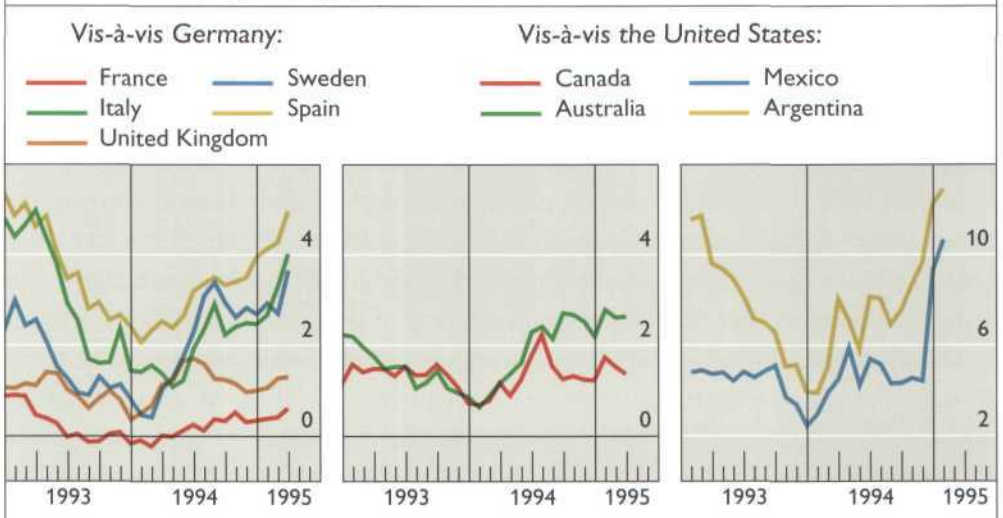
Bond purchases	1991	1992	1993	1994			
				Q I	Q II	Q III	Q IV
	in billions of US dollars						
United States	131	99	76	9	–26	–17	–22
Commercial banks[2]	111	105	73	17	– 6	–20	–18
Securities dealers[2]	20	–6	3	– 8	–20	3	– 4
United Kingdom	19	53	136	–43	–18	0	..
Banks:[3] gilts	–2	6	16	2	0	– 1	3
foreign bonds	15	24	52	– 5	– 1	7	19
GEMMs:[4] gilts	..	..	9	– 9	0	– 1	..
Securities dealers: foreign bonds	6	23	59	–31	–17	– 5	3
Total	150	152	212	–34	–44	–17	..
Memorandum items:							
Interbank financed[5]	*7*	*54*	*182*	*–54*	*–48*	*– 1*	*17*
Repo financed:[6] *Spain*	..	*8*	*24*	*– 8*	*– 8*	*– 4*	*– 2*
Sweden	..	..	*13*	*– 5*	*– 3*	*– 6*	*2*

[1] See Chapter VIII for information on the derivatives markets. [2] Treasury and agency securities for banks and corporate and foreign bonds for securities dealers. [3] Including building societies. [4] Gilt-edged market-makers. [5] 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. [6] Indicators of Treasury bond purchases by non-residents financed through repos.

Sources: National data and BIS. Table V.9

Bond yield spreads between markets

At end of month, in percentage points



Sources: J. P. Morgan and national data. Graph V.7

and Chapters VI and VIII). Trading strategies played a significant role in this context too. Stop-loss procedures of global market players typically cover a multiplicity of exposures. Reportedly, bond sales in Europe were triggered by the losses incurred on yen/dollar trades as the dollar depreciated following the breakdown of US-Japanese trade talks between mid-February and early March. More generally, selling pressure was concentrated on those markets and market segments perceived as more liquid. In early March turnover on bond futures markets in Europe reached record volumes (see Chapter VIII); in emerging markets, Brady bonds suffered more than less liquid segments.

Bond markets: yield volatility

Confounding expectations ...

The generally low inflation rates reached in 1993 had fostered the expectation that volatility in bond markets would remain subdued. The positive relationship between the volatility and the level of benchmark bond yields in a cross-section of European countries provides some justification for this view (see Graph V.8). Since yield spreads reflect to a considerable extent long-run expectations about inflation and the past inflation record, the relationship suggests that lower-inflation economies enjoy less volatile bond markets.

... volatility rose sharply in 1994

Events, however, turned out quite differently. The generalised rise in bond yields in 1994 was accompanied by a major increase in their volatility (see Graph V.9). Volatility generally began to rise in February, in the wake of the upward adjustment in bond yields. The main exception was Japan, where it surged in January. The scale and persistence of the rise were not uniform across countries. Measured by the standard deviation of daily percentage changes over a sliding three-month window, the increase was comparatively small in the United States. It was especially steep and persistent in core ERM countries, where by the end of the year volatility was still above its pre-1994 level. In Europe volatility typically peaked around mid-year, about one month and one quarter later than in the

United States and Japan respectively. The picture is similar on the basis of the volatility implicit in three-month over-the-counter option contracts on ten-year benchmark government bonds ("implied volatility"), an indicator of market expectations as to the variability of yields. The main difference is that the increase in the United States is even smaller. A comparison of historical with expected volatility indicates that participants originally failed to anticipate the turbulent conditions and subsequently overestimated their persistence. This pattern is uniform across countries. It suggests that market expectations are firmly anchored to the behaviour of volatility in the proximate past and are adjusted only slowly.

Seen in a longer-term perspective, the scale of the rise in short-term volatility and its unusual incidence across countries stand out still more clearly. Available evidence suggests that last year's increase in volatility was the third such major global episode since the beginning of the 1980s (see Graph V.10). The first two occurred, respectively, in the early 1980s and around the stock market crash of 1987. Last year volatility reached close to record proportions and persistence in some of the countries with the lowest interest rates and the better inflation history and outlook, such as Germany and the Netherlands. In Europe it was also generally higher than at the time of the ERM turbulence in 1992 and 1993.

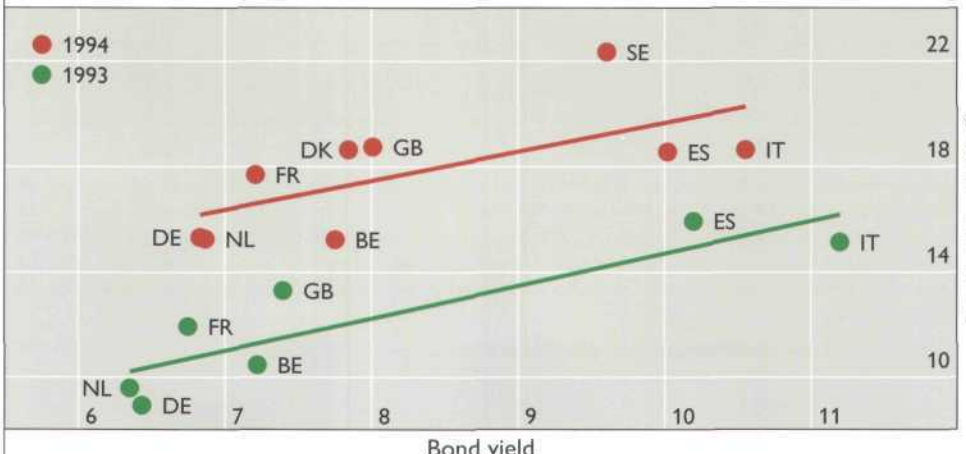
Four possible explanations for the increase in volatility:

At least four, in part complementary, hypotheses can be put forward to explain last year's developments. First, events may have reflected greater uncertainty about the economic environment, notably inflation, output growth and the course of monetary policy. Second, they may have originated in the United States and spilled over directly into other markets. Third, they may have resulted from the large generalised fall in bond prices itself. Finally, they might be seen as tremors caused by the rapid withdrawal of non-residents' investments in local markets.

There is little evidence that the rise in volatility reflected greater variability

Bond yield volatility and yields in European bond markets

Averages of weekly data, in percentages



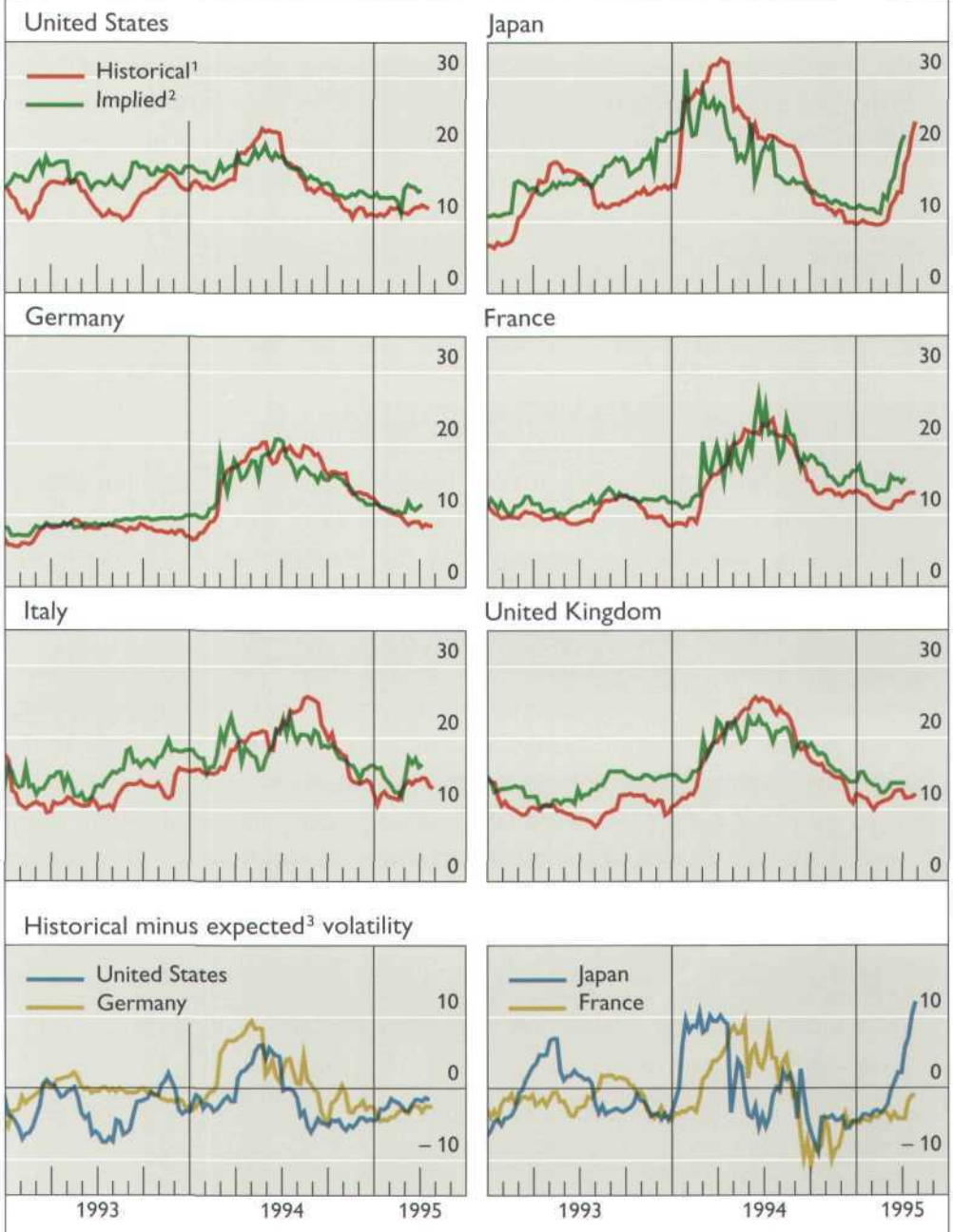
Note: For an explanation of the country abbreviations, see Graph V.2.

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

Sources: J. P. Morgan and national data. Graph V.8

Bond yield volatility since 1993

In percentages



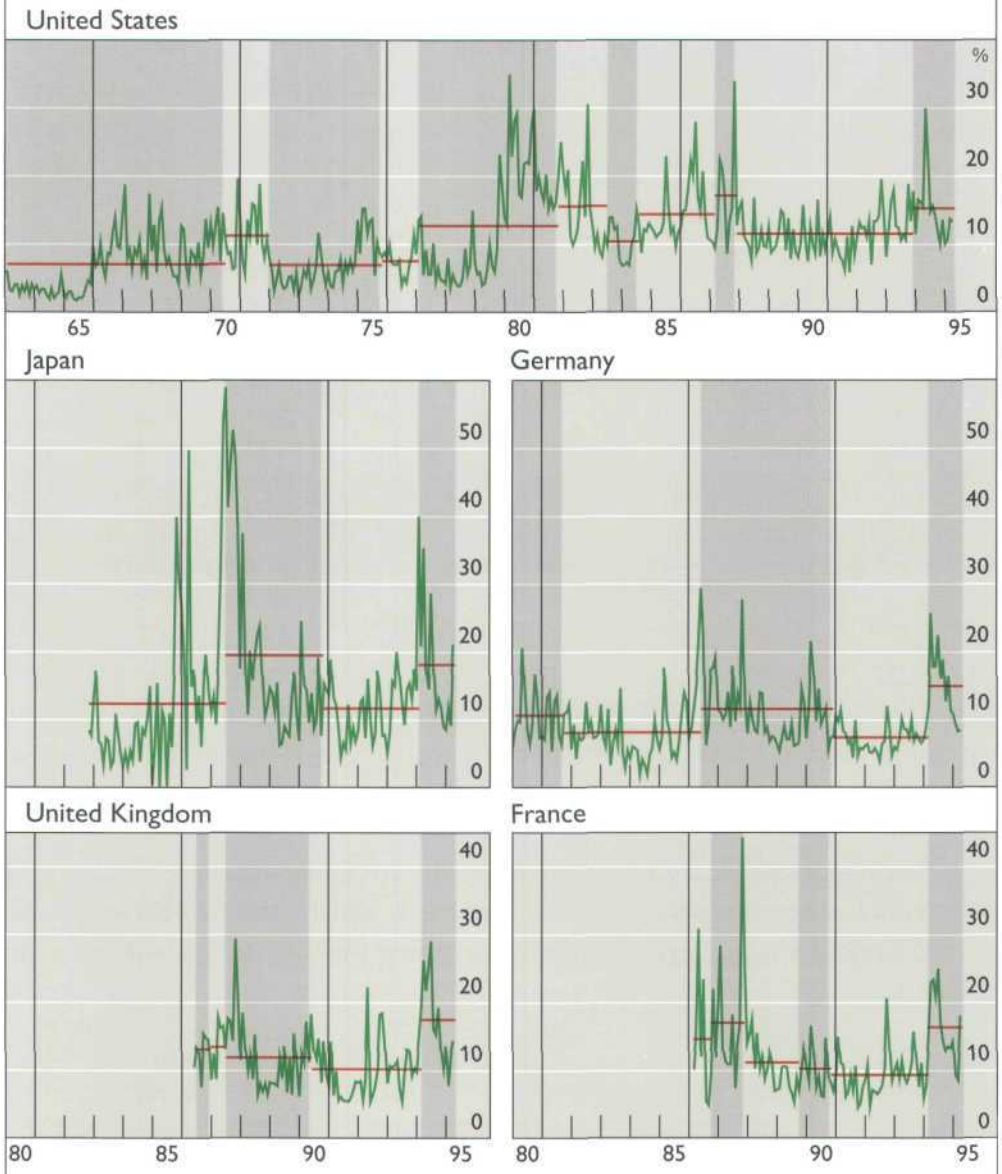
[1] Historical volatility is measured as the annualised standard deviation of daily percentage changes in bond yields calculated over the preceding ninety-one calendar days. [2] As defined in Graph V.8; plotted at the time the contract is struck. [3] Expected volatility is implied volatility plotted at the time the contract expires so as to be aligned with historical volatility (e.g. the point in December is equal to the difference between historical volatility as plotted in December and implied volatility as plotted in September).

Sources: Datastream, J. P. Morgan and national data. Graph V.9

uncertainty about the economic environment;

in expectations about either output or inflation. The standard deviation of an indicator of changes in market participants' output growth forecasts declined for most countries in 1994; the same indicator for inflation forecasts shows no clear tendency (see Table V.10). Similarly, there is no clear relationship across countries between the change in the volatility of bond yields and of these forecasts.

Bond yield volatility: a longer-term perspective



Note: Volatility is measured as the annualised standard deviation of daily percentage changes during calendar months in the yield on ten-year benchmark government bonds. The shaded (unshaded) areas represent bear (bull) markets and the horizontal lines the average volatility during these periods.

Sources: Datastream and national data. Graph V.10

The evidence concerning the role of uncertainty about monetary policy is more mixed. Beyond its longer-term effect on inflation, monetary policy can affect bond rate volatility through its influence on short-term rates. Witness to this link is the coexistence of record volatility in bond and money markets in the early 1980s during the period of non-borrowed reserves targeting in the United States. Further support is provided by the generally positive relationship between volatility in money and bond markets across countries (see Graph V.11). In 1994 volatility in the two markets did peak in the same month in several countries, notably in Germany and the United Kingdom. But on average money market volatility actually fell in 1994 in a majority of cases, including the United States,

Volatility of market participants' growth and inflation forecasts

Countries	Growth[1]			Inflation[1]		
	1993[2]	1994[2]	change	1993[2]	1994[2]	change
	in percentage points					
United States	0.11	0.10	−0.02	0.08	0.03	−0.05
Japan	0.25	0.07	−0.17	0.06	0.06	−0.01
Germany	0.17	0.17	0.00	0.04	0.05	0.01
France	0.16	0.06	−0.11	0.10	0.06	−0.04
Italy	0.09	0.14	0.05	0.10	0.06	−0.04
United Kingdom	0.06	0.05	−0.01	0.08	0.15	0.07
Canada	0.06	0.07	0.00	0.06	0.16	0.09
Australia	0.16	0.12	−0.04	0.09	0.10	0.01
Belgium	0.15	0.07	−0.08	0.07	0.06	−0.01
Netherlands	0.12	0.11	0.00	0.07	0.08	0.01
Spain	0.10	0.07	−0.03	0.12	0.08	−0.05
Sweden	0.10	0.10	0.00	0.08	0.13	0.05

[1] Standard deviation of the monthly changes in the forecast for average annual GDP growth and consumer price inflation respectively over two years. [2] Year in which forecasts are made.

Sources: © The Economist, London (various issues), and BIS calculations. Table V.10

Italy, Sweden and, apart from Germany, the ERM countries (see Table V.11). At the same time, the calmer money market conditions in these ERM countries compared with Germany may partly explain why their bond market volatility rose less.

More generally, the pattern of variability in country-specific indicators of uncertainty about the economic environment is simply too heterogeneous to explain the geographical breadth of the increase in yield volatility; some common factor seems to have been at work. This impression is reinforced by the

Bond yield volatility: relationship with money market volatility

Note: For an explanation of the country abbreviations, see Graph V.2.

[1] As defined in Graph V.8; average for 1994. [2] Annualised standard deviation of the daily percentage change in the yield on three-month LIBOR three months forward; monthly average for 1994. The measure avoids the direct influence of the authorities on spot short-term rates and is therefore a better indicator of market expectations.

Sources: J. P. Morgan, national authorities and BIS. Graph V.11

Bond and money market volatility in 1993 and 1994

Countries	Bond market[1]				Money market[2]				
	1993	1994	change	peak 1993–94	1993	1994	change	peak 1993–94	peak 1994
	in percentages			date	in percentages			date	
US	16.7	16.9	0.2	June 1994	28.2	26.7	– 1.5	May 1994	
JP	15.9	19.0	3.1	Mar. 1994	57.6	74.1	16.5	Jan. 1994	
DE	8.9	15.3	6.4	June 1994	16.1	18.5	2.4	June 1994	
FR	11.9	17.7	5.8	June 1994	43.0	30.6	–12.4	July 1993	March
IT	15.1	18.6	3.5	July 1994	32.3	30.8	– 1.5	Nov.1993	Sept.
GB	13.3	18.7	5.4	June 1994	29.1	32.7	3.6	June 1994	
CA	15.2	18.6	3.4	July 1994	52.8	69.3	16.5	Feb. 1994	
AU	–	21.0	–	April 1994	34.4	59.6	25.2	April 1994	
BE	10.4	15.2	4.8	July 1994	47.8	32.0	–15.8	July 1994	
NL	9.5	15.2	5.7	July 1994	15.8	12.9	– 2.9	July 1993	May
ES	15.9	18.5	2.6	July 1994	33.3	22.1	–11.2	July 1993	Aug.
SE	–	22.9	–	Sept. 1994[3]	55.1	46.1	– 9.0	Sept.1993	Aug.

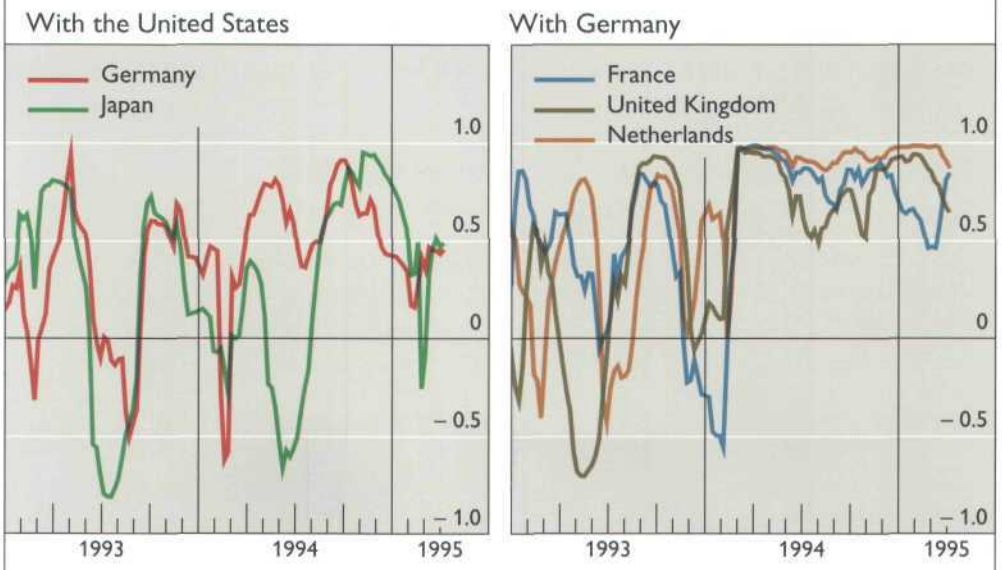
Note: For an explanation of the country abbreviations, see Graph V.2.

[1] Implied volatility (see Graph V.8 for details); averages of weekly data. [2] Money market volatility is measured by the annualised standard deviation of the daily percentage change in the yield on three-month LIBOR three months forward calculated over calendar months; averages of daily data. [3] Peak during February–December 1994.

Sources: J. P. Morgan, national authorities and BIS. Table V.11

pronounced rise in the international correlation of volatility as from mid-February, most notably in core ERM countries (see Graph V.12). Japan is one salient exception to this broad picture, indicating that idiosyncratic developments were probably the dominant force there.

International correlations of bond yield volatility*



* The correlation coefficient between weekly implied yield volatilities is calculated over a sixteen-week sliding window and is plotted at the point corresponding to the last observation.

Sources: J. P. Morgan and BIS calculations. Graph V.12

direct spillovers from the US market;

One possibility is that the rise in volatility in the US market directly spilled over to other markets – the second hypothesis. According to this view, when price changes in the world's leading market become large enough, they induce mimicking trading activity elsewhere, possibly overriding relevant country-specific information. This sort of contagion can result in a positive relationship between the level of volatility and its cross-country correlation of the kind observed last year.

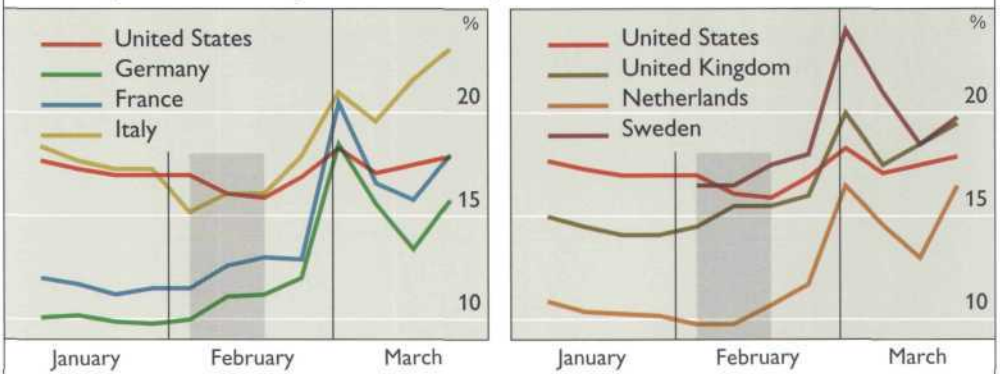
Although some evidence is consistent with the direct spillover hypothesis, a closer examination of events suggests that contagion can at best be only part of the overall story. Formal statistical analysis does confirm that, at least since March 1994, implied volatility in the United States led subsequent movements in implied volatility in Germany. These in turn appeared to spill over to other European markets. Nevertheless, both the scale and the persistence of the increase in volatility were considerably greater in Europe than in the United States; in fact, at least on the basis of implied volatilities, the rise in the United States was not particularly large. Moreover, in Europe implied volatility began to edge up in the week when the Federal Reserve tightened policy; in the United States it actually declined during the following fortnight (see Graph V.13).

the large fall in bond prices itself;

Probably a better candidate to account for last year's developments is the fall in bond markets itself – the third hypothesis. It is a widely held view among market participants that volatility in bond yields tends to be higher in bear markets, especially in their initial phase. This relationship could reflect several forces: a lower risk tolerance in adverse conditions; wealth effects on market-makers' capital and risk-taking; the withdrawal of participants from the market; and, close to the turning-point, the arrival of significant information about longer-term economic prospects. Graph V.10 appears to support this view. On average, volatility is somewhat higher in bear markets, especially in Germany. Moreover, a generalised, albeit somewhat smaller, peak is detectable around the turning-point of the previous bear market in 1986 and early 1987.

Seen in this light, the major rise in volatility last year is less puzzling. Compared with 1986–87, for instance, the speed and scale of the adjustment were larger, and so were the losses incurred by market participants. Moreover,

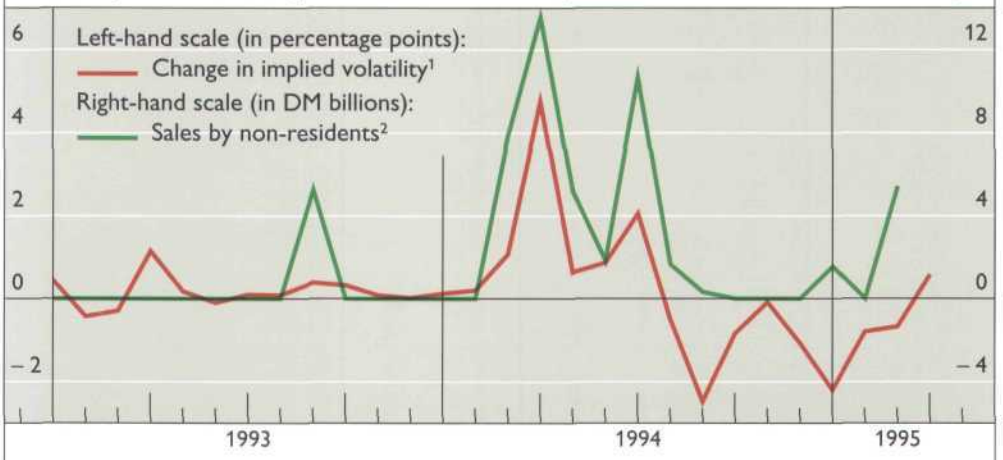
Bond yield volatility in the first quarter of 1994*



* Implied volatility as defined in Graph V.8. The shaded area represents the two weeks following the US monetary policy tightening.

Source: J. P. Morgan. Graph V.13

Bond yield volatility and bond sales by non-residents in Germany



[1] As defined in Graph V.8. [2] Public sector DM-denominated bonds; net sales are truncated at zero.
Sources: J. P. Morgan and Deutsche Bundesbank. Graph V.14

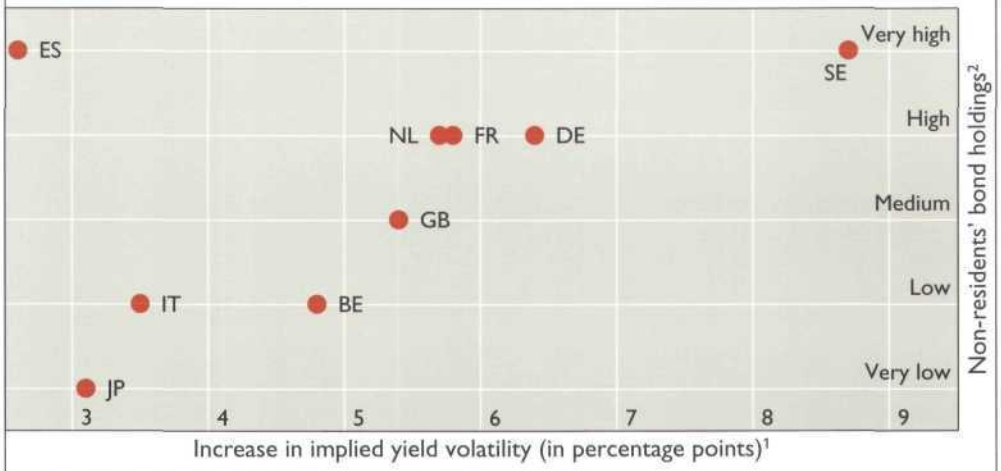
the extensive reliance on leverage is likely to have amplified the sensitivity of risk perceptions and market-making capacity to the fall in bond prices. Nevertheless, the hypothesis hardly helps to explain the international configuration of the increase in volatility. Across countries there is little relationship between the size of the increase in yields and in their volatility.

and tremors following the rapid withdrawal of non-residents

The answer to this remaining puzzle appears to lie in part in the aftershocks induced by the rapid withdrawal of non-residents from local markets – the final hypothesis. Over-represented in this group are leveraged investors constrained by mark-to-market accounting; as argued above, without a comfortable profit cushion they would have found it difficult not to sell as prices declined steeply. Moreover, in disorderly conditions they would concentrate sales on the reputedly more liquid markets. In the process, liquidity would be put under pressure. In addition, the withdrawal of these players would deprive the market of what would have been an important additional source of liquidity in the preceding period of rising bond prices, when their purchases would normally have helped to absorb a growing supply of securities.

Several pieces of evidence are consistent with this hypothesis. There is a strong correlation between sales by non-residents and volatility in the German market, the benchmark for the rest of Europe (see Graph V.14). Between February and July 1994, the unwinding of the large investments accumulated in 1993 amounted to over 3% of outstanding public sector bonds. In addition, implied volatility surged in Europe between mid-February and early March, reportedly the first period of heavy non-resident selling partly in response to liquidity and loss pressures (see Graph V.13). Finally, there are indications that in Europe the cross-country pattern of the rise in volatility correlates with non-residents' activity. Unfortunately, comparable data on flows are particularly difficult to obtain. However, the correlation appears to hold if the share of non-residents' holdings of domestic currency denominated debt, an indicator of vulnerability to foreign sales, is used as the basis for comparison (see Graph V.15). The exception is Spain, owing to the very high bond volatility experienced in 1993, which tempered the rise in 1994.

Bond yield volatility and non-residents' bond holdings



Note: For an explanation of the country abbreviations, see Graph V.2.

[1] As shown in Table V.11; for Sweden, estimated.. [2] Index based on estimates of the percentage share of fixed rate domestic currency government bonds held by non-residents towards the end of 1993 (x): very low (x<10); low (10≤x<20); medium (20≤x<30); high (30≤x<40); very high (x≥40).

Sources: J. P. Morgan, national data and BIS estimates. Graph V.15

Lessons

The turbulence in bond markets in the period under review was just the latest reminder that large price swings are inherent in the behaviour of asset markets. It is not so much very short-term volatility that gives cause for concern: fast and far-reaching price reactions are a natural consequence of the speed and breadth of the spread of information nowadays; unless extreme, they are relatively harmless. Rather, it is medium-term deviations from realistic views about sustainable levels ("fundamentals") that are more significant. Such misalignments have greater potential costs in terms of a misallocation of resources. They also heighten the risk of abrupt and disorderly corrections and hence of broader financial instability.

The likelihood of extreme asset price movements ...

In the financial landscape which has been emerging over the past two decades, the likelihood of extreme price movements may well be greater and their consequences in all probability further-reaching. It is now possible for market participants to trade larger amounts more frequently through more highly leveraged positions in a greater number of markets and across a larger set of national borders. This new environment is undoubtedly of great benefit. It allows a freer flow of capital towards the highest anticipated returns and makes for broader and deeper markets. On occasion, however, it can amplify the disruptive implications of collective misjudgements. The liquidity of a market is only in part determined by specific institutional arrangements and the number of participants. Ultimately, it rests on a diversity of perceptions of asset values.

... calls for a strengthening of safeguards at the macro ...

At the macro level, the new landscape puts a premium on policies conducive to financial discipline. Strategically, a firm longer-term focus on price stability is the best safeguard, one which can only be achieved with the support of fiscal discipline. Yet such a safeguard is by no means always effective. At times, the monetary authorities may therefore be called upon to judge whether and how

to respond to evidence that asset prices are moving significantly away from justifiable levels. Once in train, such deviations can give rise to a policy dilemma: the actions conducive to financial stability may not be consistent with macroeconomic stability. There might, for instance, be a temptation to delay or moderate a monetary tightening with a view to averting a sudden collapse in asset prices precisely at a time when the inflation outlook is deteriorating. Alternatively, a preventive tightening designed to contain the build-up of speculative pressures and hence broader financial instability could risk weakening the real economy. This kind of dilemma was most obvious in Japan in the late 1980s, when evident signs of misalignment in equity and property markets coexisted with low inflation.

... and micro levels

The potential conflict between policy objectives can be alleviated by appropriate action at the micro level. This means essentially measures designed to strengthen the resilience of the financial system. One line of defence is the prudential regulation and supervision of *individual* financial institutions. A second, no less important, one is *system-wide* safeguards, not least sound market infrastructures such as payment and settlement systems. Action in these areas is well under way, witness the recent initiatives in the field of derivatives (see Chapter VIII). Admittedly, such action cannot be expected to prevent extreme price movements and misalignments. It can, however, be trusted to mitigate them and to make the financial system more capable of withstanding unexpected shocks. By the same token, it can lighten the burden on the monetary authorities.

VI. Exchange rates and capital flows in the industrial world

Highlights

The most dramatic exchange market developments during the sixteen-month period to early May this year came towards its end, as diverging pressures on the US dollar on the one hand and the Japanese yen and the Deutsche Mark on the other reached major proportions. Reflecting these pressures, as well as other factors, tensions resurfaced in the European ERM. In a context of macroeconomic policies which remained largely focused on domestic objectives, early 1995 saw a sizable de facto adjustment in the bilateral relationships between the Deutsche Mark, the yen and the dollar. In the ERM the outcome was a further realignment.

In contrast to earlier expectations that it would rise in response to cyclical pressures, the dollar had already declined to some degree during 1994, despite rising US interest rates and intermittent intervention in its support. The financial markets focused increasingly on the size of the US current account deficit, the build-up of external debt and, in the background, the very low level of national savings. Following the Mexican crisis, pressures intensified sharply in early 1995. The yen was the most significant counterpart, Japan having an external surplus broadly matching the US deficit, and its value against the dollar rose by more than 40% between early 1994 and its peak in mid-April this year. The Swiss franc and the Deutsche Mark also rose strongly. Concerns about fiscal policies and political uncertainty in some other countries with floating exchange rates such as Italy, but also Sweden and Canada, put significant downward pressure on their currencies. Sterling also declined.

Within the ERM in early 1995, fiscal and political factors were also present in addition to the kind of pressures often seen in episodes of Deutsche Mark strength against the dollar. Spain was the main country affected, and the peseta, together with the Portuguese escudo, was devalued in a new realignment in early March. Pressures persisted on the French franc and, for a time, on some other ERM currencies, but interest rates were raised in their defence.

In Japan upward pressure on the yen led to a further easing of monetary policy in March and April 1995 and a new fiscal stimulus package was announced. German interest rates were also lowered further in March in the light of a decline in the monetary aggregate M3. However, no complementary macroeconomic action was taken at that time in the United States to support the dollar. The nature of the US political process does not allow rapid adjustment of the fiscal position, and, in any case, signs were becoming increasingly evident that the economy was slowing in response to earlier monetary tightening and retrenchment in the Mexican economy. Moreover, the weakness of the Canadian dollar against its US counterpart, in association with the large

depreciation of the Mexican peso, meant that the real effective depreciation of the US dollar had been limited to less than 8% during the period under review.

Coming only months after the fiftieth anniversary of the Bretton Woods agreement, these events served to revive the debate about how to bring more stability back into the international monetary system, and in particular to exchange rates. Intervention cannot be undertaken on anything like the scale required to match the volume of flows which the private sector can now generate when fundamental factors are perceived to be out of line. At the same time, a return to capital controls or the penalisation of foreign exchange transactions is neither desirable nor feasible in today's global financial system. The only lasting answer to exchange rate instability is for individual countries to set domestic policies in such a way as to establish fundamentals which the markets will judge sound and sustainable. While the desirability of all countries having low, and therefore comparable, inflation rates is now widely accepted, policy-makers apparently need to focus more than hitherto on fiscal and external imbalances, including the implications of sustained foreign debt and asset accumulation.

The dollar, the yen and the Deutsche Mark

The dollar is persistently weak and the yen appreciates substantially ...

The most significant exchange rate development during the period under review was the persistent weakness of the US dollar against the yen, which culminated in a very sharp and sudden decline to unprecedented lows in the spring of this year. The dollar's decline against the Deutsche Mark was less dramatic, but nonetheless appreciable.

... but the dollar's effective decline is more modest

Concerns about the competitiveness implications of the changing configuration of exchange rates were felt most acutely in Japan as, in contrast to the rather modest decline in the real effective rate of the dollar, that of the yen rose by 26% between end-1993 and April this year. The Deutsche Mark also moved only moderately, rising by 5½% in real effective terms over the same period, virtually all of it in early 1995.

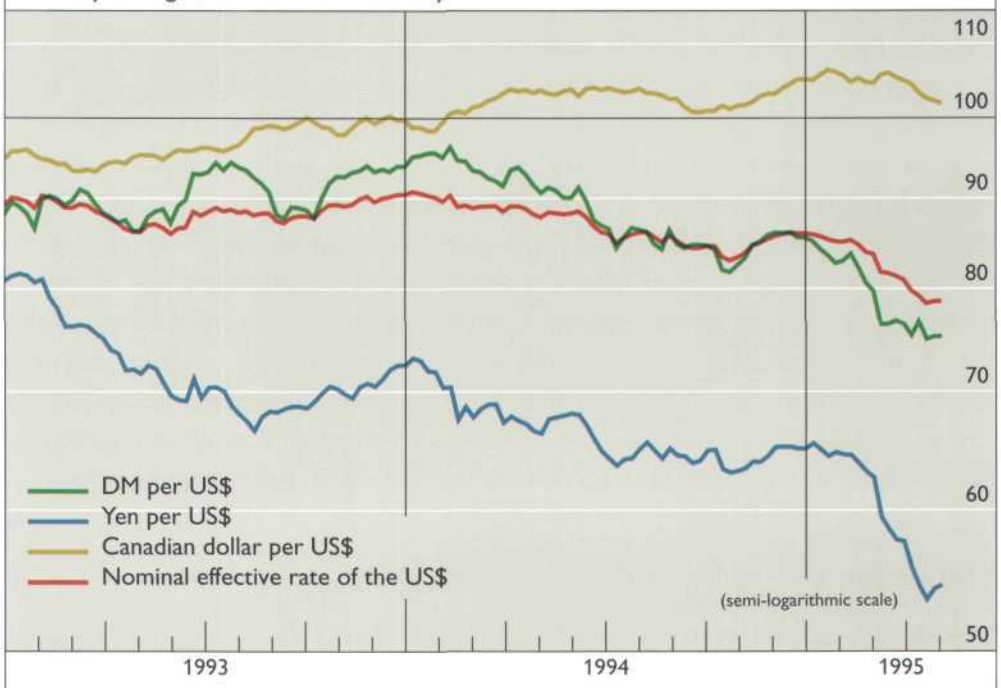
Sporadic episodes of intervention to stem the dollar's fall in 1994

Over the first ten months of 1994 the dollar declined fitfully, in spite of several episodes of intervention in its support. By early November it had fallen by 15% against both the yen and the Deutsche Mark, though by only about 6% in nominal effective terms. The dollar then recovered for a time after the US authorities intervened in the market quite forcefully on 2nd and 3rd November, in coordination with another central bank. A little later, on 15th November, official US interest rates were raised by 75 basis points, the largest such move since the process of monetary policy tightening had begun in February. However, the resulting recovery of the dollar was short-lived, in part because of the outbreak of the Mexican crisis in late December, in part also because interest rate expectations shifted in favour of other currencies. The US currency thus resumed its decline around the turn of the year, a decline which intensified in early March 1995 following the failure of the balanced budget constitutional amendment to pass through Congress and some indications that the tightening of monetary policy might have come to an end for this cycle. The US authorities intervened on 2nd March, and the following day were accompanied by a large number of other monetary authorities. Nevertheless, the dollar fell further and

The decline of the dollar and the rise of the yen accelerate in 1995

The US dollar against selected currencies and its nominal effective exchange rate

Weekly averages, third week of February 1987 = 100



Graph VI.1

dramatically, touching extreme lows in April of around ¥80 and DM 1.35, 17% and 10% respectively below the temporary troughs in November. A surprise cut in German interest rates in late March and the announcement of a new stimulatory policy package in Japan in April perhaps helped to stem the fall, but did not result in more than a very modest turnaround. At the same time the weakness of the Canadian dollar and, especially, the large devaluation of the Mexican peso meant that the decline in the dollar's effective rate was much less dramatic.

A wide array of explanatory factors ...

A wide array of factors can be cited to help explain these exchange rate developments, ranging from very short-term "triggers" or surprises – both political and economic – to more fundamental factors. In addition, exchange rates being relative prices, some comparatively independent forces seem to have been at work which were specific to either the yen or the Deutsche Mark. Any analysis is, however, bound to be limited by being based on assertions concerning unmeasurable expectations about the future as well as perceptions of policy-makers' attitudes and intentions.

Short-term shocks and "news"

... though little influence of short-term economic developments ...

With the recovery in the US economy having become an indisputable fact, shifting *perceptions* about its likely strength naturally played only a relatively minor role in influencing the course of the dollar in 1994. This was in some contrast to the experience of hesitancy earlier in the recovery, when the appearance of alternately strong and weak economic indicators led to mild swings up and down

in the currency's international value. In fact, at one point in October last year, signs of unexpected strength in the economy fuelled renewed inflation fears and were actually negative for the dollar for a short period as bond prices dropped sharply. On the whole, however, the sharp movements in bond prices at various times seemed to have little corresponding short-term effect on exchange markets.

... or of the earlier bond market turbulence

Difficulties in the trade negotiations

The dollar reacted from time to time to the vicissitudes of the US trade negotiations with Japan, for example in February 1994, when difficulties were taken to imply that in the absence of an agreement exchange rates would have to move instead to strengthen the US trade position. A similar phenomenon was experienced in June, when the resignation of the Government in Japan fuelled fears that further negotiations might be delayed.

The Mexican crisis leads to doubts about the US authorities' ability to defend the dollar;

More recently, the Mexican financial crisis and the floating of the peso in late December had an initial shock effect on the dollar. One concern was that the weakness of the Mexican peso might inhibit the US authorities from raising interest rates in line with the requirements of the domestic situation – especially as delays became apparent in the assembling of a Mexican support package. The announcement of such a package served to calm these fears to some degree, as did the further rise in the target federal funds rate on 1st February this year. However, the respite was somewhat blunted by concern that earmarking $20 billion of the resources of the US Treasury's Exchange Stabilisation Fund for potential support for Mexico would reduce the ability of the US authorities to intervene in support of the dollar. In testimony to the Senate Banking Committee, however, the Chairman of the Federal Reserve Board said that "[the US authorities'] ability to intervene, should we choose to do so, is not impaired".

and a worsened outlook for the US trade balance ...

A subsequent and more valid concern has been that the necessary and inevitable improvement in the Mexican current account would reduce the US trade surplus with Mexico. Such fears were accentuated by the publication in late March of trade data for January, showing a sharp increase in the US trade deficit and triggering a further weakening of the dollar. However, the balance-of-payments situation enters the picture more as one of the fundamentals at work.

... is followed by budgetary uncertainties

The same is true in principle of the fiscal position, but the failure of the balanced budget amendment was also seen as one of the proximate triggers of the dollar's more precipitate decline against the yen and the Deutsche Mark which began in early March this year. In addition, in April the further sharp rise of the yen was exacerbated by the consequences of Japanese exporters' earlier use of "knock-out" options as a cheap form of hedging, as these were automatically cancelled when the yen broke through "outstrikes" agreed between the option holders and dealers. The cancellation of these options triggered additional dollar spot and forward selling as exporters were forced to put in place new hedging programmes and dealers had to adjust existing hedge positions.

Technical factors add to the yen's final rise

Fundamental influences

The dollar does not strengthen as expected earlier ...

Changing relative cyclical positions and accompanying movements in international interest rate differentials had, as noted earlier, been expected to support the dollar during 1994. In the event, the US economy grew somewhat more rapidly

Interest rate differentials in Japan and Germany*

Monthly averages, in percentage points

* Vis-à-vis US three-month Treasury bills and ten-year Treasury bonds respectively. Graph VI.2

than expected, while in Japan growth was more or less as sluggish as had been anticipated. Moreover, the short-term US/Japanese interest rate differential did move strongly in favour of the dollar. Nevertheless the dollar declined against the yen, indicating that other factors were at work. The dollar also declined against the Deutsche Mark although, again, short-term interest differentials moved in its favour. One explanation is that growth in Germany turned out – at almost 4% per annum in the first half of the year – to be considerably faster than had been expected earlier. Combined with the overshooting of the Bundesbank's monetary target at that time, this no doubt led to some revision of expectations about the extent and timing of any further relaxation of German monetary policy.

... in part because growth in Germany is unexpectedly strong

It is not obvious that the outturn for the US balance of payments was significantly worse than had previously been expected. Nevertheless, it may be that investors began to focus more on longer-term considerations arising from developments in this area. For the first time since 1914, US net investment income from abroad was negative last year. This was a reflection of the large shift which has taken place in the US net external asset position since the early 1980s. The US current account has been in deficit continuously since 1982 on an annual basis and by the end of 1994 these deficits had accumulated to a total of more than $1¼ trillion.

More focus on longer-run balance-of-payments concerns ...

Another relevant aspect of the United States' external position is that two of the country's largest trading partners, Canada and Mexico, have also been running large current account deficits. One implication of the Mexican crisis was quickly seen to be that the counterpart of any significant improvement in the US current account position could not come from the other two NAFTA countries. Indeed, if anything, the US position vis-à-vis these countries was seen as likely to worsen, given the weakness of both the peso and the Canadian dollar, as well as the substantial moves towards further fiscal restraint in both countries. In this

... as well as implications of the Mexican situation and the weak Canadian dollar

context, it is perhaps not so surprising that the dollar's adjustment against some other currencies has now become quite sizable.

US monetary policy is tightened pre-emptively ...

Exchange rate adjustment is, however, only one of the mechanisms which can affect current account positions. Market participants are also acutely sensitive to the most basic of fundamentals, that is, macroeconomic policy, and the willingness or otherwise of policy-makers to adjust policy stances with a view to resisting inflation and stabilising exchange rates. In this connection, US monetary policy was certainly aimed at resisting inflation. Indeed, in contrast to most earlier occasions, policy was deliberately tightened in a pre-emptive manner beginning in early February 1994.

... but the budget deficit contributes to low US national savings

The fiscal situation, on the other hand, remained a matter of concern to markets, being perceived to be an important component of the low level of US national savings. Without correction, the resulting savings/investment imbalance seemed likely to make further external current account deficits inevitable. And the political possibilities for such a correction were perceived to be highly uncertain.

Market questions persist about official attitudes to exchange rates ...

Nor was the attitude of the US authorities to the exchange rate always felt to be clear, despite repeated bouts of intervention. The tone set earlier during the trade negotiations with Japan was difficult to dispel. Moreover, the outcome of the Group of Seven summit in Naples in July seemed to confirm this more generally, as no major concern was expressed about the level of the dollar, at least collectively, by heads of state or government and no relevant policy initiatives were announced.

... especially as the US economy begins to slow in early 1995

In early 1995 signs began to appear that the pace of US growth was slowing. With this news, the perception grew that the scope for interest rates to be increased further to protect the dollar was limited, because this might come into conflict with the requirements of the domestic economy. A similar conflict was perceived in Germany, where further reductions in interest rates had come to seem less appropriate in the light of both the recovery and the inflationary potential of some recent wage agreements. In Japan, too, the room for manoeuvre seemed to be small, given the already low level of interest rates and a determination to avoid the risk of provoking a new asset price bubble.

The effectiveness of intervention is limited

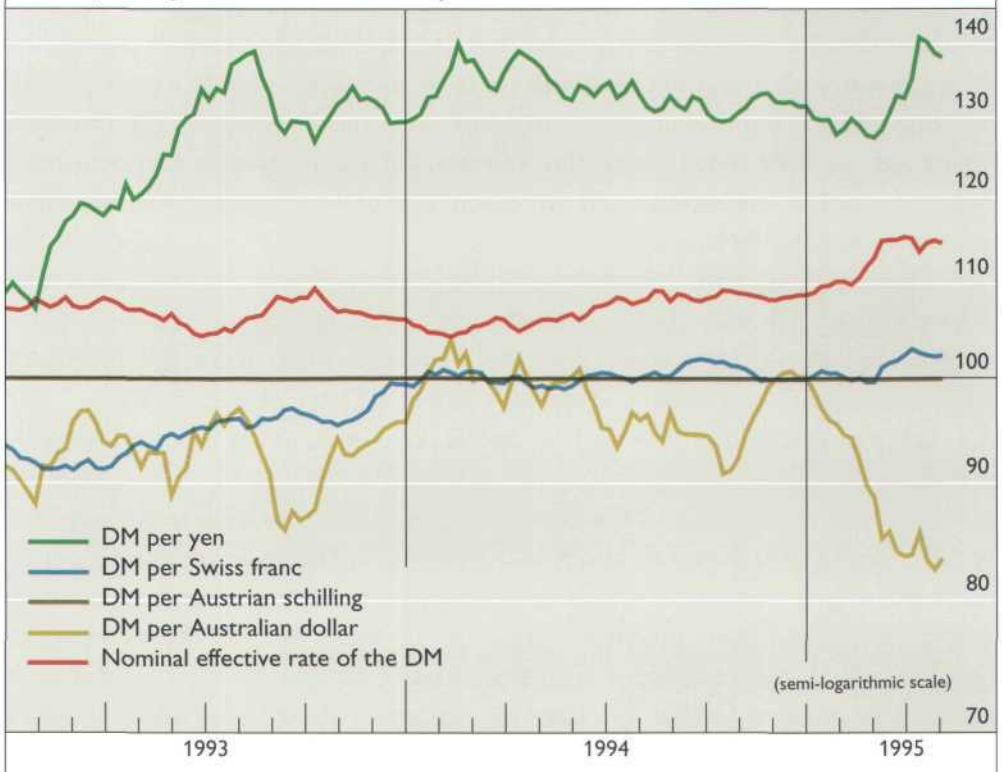
Thus, when intervention was undertaken again in early March this year, it was not viewed as a convincing signal that, if necessary, interest rates would be changed significantly in support of exchange rates. This situation may also have been compounded by one rather awkward implication of the move towards pre-emptive interest rate changes. If it is right to be "ahead of the curve" in the phase of policy tightening, then presumably it is right to be so in the easing phase. In that case, it would also be right for market participants to expect interest rates to stop rising, or begin to come down, earlier than in previous cycles, and to consider the possible consequences of that for exchange rates.

Fundamentals behind the yen and the Deutsche Mark ...

Turning to the strength of the yen and the Deutsche Mark, several relatively independent factors may be noted. In the first place, certain important fundamentals tended to be stronger in Japan and Germany than in the United States. For example, the basic fiscal situation in Japan seemed sounder, and of course the current account has been in large surplus, with inflation low or

Bilateral exchange rates against the Deutsche Mark and its nominal effective exchange rate

Weekly averages, third week of February 1987 = 100



Graph VI.3

non-existent. Against such a background it is perhaps not surprising that repeated intervention apparently did little more than slow the yen's rise.

In Germany, while the current account has recently been in moderate deficit, the net external asset position remains strong. Moreover, the budgetary effects of the country's reunification are apparently being brought under control more quickly than was once expected. While, as already noted, recent wage agreements in Germany give some grounds for concern, this seems to have exerted no downward influence on the Deutsche Mark – indeed possibly even the reverse. The credibility of monetary policy would seem to have been such that market participants saw the authorities as being willing to take whatever measures were necessary to achieve their price stability objectives. Indeed, with a further rise in the exchange rate, and with M3 declining, the Bundesbank felt able to reduce interest rates again at the end of March without prejudice to the anti-inflationary stance of policy. Although the Bundesbank's action was followed by some narrowing of the spread of ERM currencies within the band, there was no turnaround in the US dollar. Nor did the later announcement of a reduction in interest rates and a fiscal stimulus package in Japan do much more than halt the yen's rise, especially as very few specific details of the fiscal plans were given.

... and policy credibility ...

Both the Japanese and German currencies were also on occasion buoyed by so-called "flight to quality" factors which stemmed from two main sources. The first was related to perceptions of growing political and/or fiscal uncertainties

... make for enhanced "safe-haven" status as a "flight to quality" gathers pace

in a number of industrial countries. The anxieties thus generated may also have been exacerbated by the unexpected and general losses experienced in the world's bond markets in the first half of 1994. In turn this may have induced investors to reduce the risk of further loss by switching into traditional "safe-haven" currencies. However, the latter did not apparently include the dollar to any noticeable degree. The Mexican crisis seemed to trigger a second episode of flight to quality, in which the dollar itself came more clearly under pressure. Still more recently, there have been market reports that the cumulative effect of these developments has been to encourage some diversification of the foreign exchange reserves of certain countries.

The strength of the yen and the Deutsche Mark compared

Of the two main appreciating currencies, the yen strengthened against the Deutsche Mark in early 1994, but thereafter tended to decline gently until March this year. On the face of it, this suggests that for some time at least the German currency bore more of the flight to quality pressure than did the yen. However, the potential of the yen to appreciate must be seen in the context of two offsetting sets of influences. On the one hand, in 1992–93 the real effective exchange rate of the yen had already risen by about one-third, compared with less than one-tenth in the case of the Deutsche Mark. This may have led some to conclude that there was limited further upside potential (see Graph VI.10 on page 138). On the other hand, the very steepness of the yen's earlier rise had been one important cause of the losses suffered by Japanese investors in overseas markets. This experience led to greater reluctance to recycle the current account surplus via exports of private long-term capital, and to a desire to hedge more comprehensively the currency risks involved.

Balance-of-payments financing in the three major economies

The overall current account imbalance in the three major economies rose again in 1994, mainly because of a further rise in the US deficit to over $155 billion. The Japanese surplus remained high at around $130 billion, while the relatively small German deficit increased a little.

Balance-of-payments data indicate reduced official financing of the US current account deficit, but ...

Judging only from balance-of-payments data, the deterioration in the *United States'* current account was not apparently accompanied by a corresponding increase in net official monetary liabilities as might perhaps have been expected. Indeed, identified net official monetary inflows fell by about $27 billion. There was a decline from $72 billion to $39 billion in identified placements of foreign official assets, particularly those of non-OPEC developing countries (including a large drop in Mexico's reserves). In addition, given repeated episodes of intervention by the US authorities, there was, on a flow basis, a decline in US reserves in yen and Deutsche Mark equivalent to around $5 billion. However, as is explained more fully below, there appears to have been a large rise in indirect official financing of the US deficit last year, some of which will have contributed to changes in recorded private capital flows.

The latter indeed showed quite sharp increases or turnarounds in three major categories in 1994: foreign direct investment, portfolio investment and net banking flows. In total, there was a swing of some $138 billion. Direct investment inflows to the United States nearly tripled to $60 billion, in part perhaps because of the accelerating strength of the US recovery. At the same time, US portfolio

The external accounts of the United States, Japan and Germany

	1990	1991	1992	1993	1994	1994 QI	1994 QII	1994 QIII	1994 QIV
	in billions of US dollars								
United States									
Current account	−91.7	− 7.0	− 67.9	−103.9	−155.7	−24.9	−36.0	−46.7	−48.0
Capital account[1]	61.9	−14.8	25.7	35.3	113.9	14.4	23.8	28.1	47.6
of which:									
Direct investment	*18.0*	*− 5.2*	*− 31.1*	*− 36.5*	*1.6*	*−14.4*	*− 3.8*	*2.7*	*17.1*
Portfolio investment[2]	*−29.7*	*9.2*	*21.6*	*− 15.1*	*30.9*	*5.9*	*− 8.3*	*11.2*	*22.1*
Banks, other than above	*12.2*	*8.8*	*37.8*	*50.7*	*104.2*	*34.0*	*40.8*	*19.6*	*9.8*
Errors and omissions	*39.9*	*−39.7*	*− 17.1*	*21.1*	*− 33.3*	*−20.3*	*− 5.0*	*− 6.9*	*− 1.1*
Official monetary movements[3, 4]	29.9	21.8	42.2	68.6	41.7	10.5	12.2	18.6	0.4
Japan									
Current account	35.8	72.9	117.6	131.4	129.1	35.0	33.4	29.6	31.2
Capital account[1]	−56.6	−90.0	−118.9	−108.0	−131.4	−28.9	−39.6	−33.7	−29.3
of which:									
Direct investment	*−46.3*	*−29.4*	*− 14.5*	*− 13.6*	*− 17.1*	*− 5.2*	*− 3.8*	*− 4.2*	*− 3.8*
Portfolio investment[2]	*− 5.0*	*41.0*	*− 26.2*	*− 62.7*	*− 48.9*	*54.1*	*−35.3*	*−39.0*	*−28.8*
Banks, other than above	*−13.6*	*−93.5*	*− 73.0*	*− 15.0*	*− 22.7*	*−81.9*	*12.7*	*25.2*	*21.3*
Errors and omissions	*−20.9*	*− 7.8*	*− 10.5*	*− 0.3*	*− 17.8*	*6.3*	*− 7.8*	*−10.1*	*− 6.2*
Official monetary movements[3]	20.9	17.1	1.4	− 23.5	2.3	− 6.1	6.2	4.1	− 1.9
Germany									
Current account	46.3	−19.1	− 21.1	− 14.7	− 23.2	− 2.7	− 0.9	−12.7	− 6.9
Capital account[1]	−39.4	18.9	68.5	− 7.5	30.8	3.3	3.7	18.0	5.9
of which:									
Direct investment	*−20.8*	*−18.6*	*− 15.9*	*− 13.4*	*− 14.6*	*− 3.8*	*− 4.2*	*− 1.6*	*− 5.0*
Portfolio investment[2, 5]	*− 2.4*	*22.5*	*38.7*	*123.0*	*− 7.4*	*−16.1*	*−14.5*	*3.4*	*19.9*
Banks, short-term	*− 0.9*	*24.4*	*40.0*	*− 62.9*	*57.7*	*41.2*	*21.0*	*11.5*	*−16.1*
Other private, short-term	*−11.6*	*5.3*	*5.0*	*− 33.3*	*− 10.3*	*− 5.2*	*7.4*	*− 5.8*	*− 6.9*
Errors and omissions	*15.0*	*7.8*	*7.2*	*− 10.8*	*0.7*	*−14.3*	*− 5.7*	*9.5*	*11.2*
Official monetary movements[3]	− 6.9	0.3	− 47.4	22.1	− 7.6	− 0.6	− 2.7	− 5.3	1.0

[1] Defined as: − (current account + 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. Exchange rate effects are excluded. A minus sign indicates an increase in net official assets. [4] Including US government securities held by foreign monetary authorities. [5] Including borrowers' note loans.

Source: National data. Table VI.1

investment abroad fell much more than foreign flows into US stocks and bonds, despite a considerable, and much publicised, decline in Japanese private investor interest in US assets. Indeed, it seems that the uncertainty in the international bond market affected US portfolio inflows and outflows asymmetrically. In particular, US investors even liquidated holdings of European bonds in the first half of the year while non-residents continued to invest in the US bond market. In addition, with credit demand growing in the United States and short-term interest rates beginning to rise, both the demand for and supply of banking funds accelerated, with net banking inflows more than doubling to $104 billion. On the

liabilities side, the sharp increase from $18 billion to $106 billion was mainly due to transactions of US banks' foreign offices, predominantly those in western Europe and the Caribbean.

The apparent conclusion from the US balance-of-payments accounts seems to be therefore that 1994 saw a sharp shift away from official financing of the enlarged current account deficit and towards private sector inflows. Other evidence, however, suggests that this is almost certainly a premature conclusion and that, indirectly, there was in fact far more official financing by foreign authorities than the US balance-of-payments accounts show. The international banking statistics reported to the BIS reveal that official deposits of dollars with Euro-banks outside the United States jumped by nearly $32 billion last year, the largest increase ever recorded (see Table VI.2). Much, if not all, of this is likely to have contributed to the financing of the US current account deficit since, as a result of interest arbitrage, it will probably have been largely redeposited in the United States and is thus reflected in US banks' net liabilities to banks abroad. In addition, the unallocated $25 billion rise in dollar reserves is likely to reflect the channelling to the United States of foreign central banks' dollar accruals, either via banks outside the BIS reporting area or in the form of securities issued by private US borrowers. At all events, the total increase in identified gross holdings of official dollar reserves rose from $70 billion to $91 billion last year, though as a proportion of the, larger, current account deficit this represented a fall from 67% to 58%.

... supplementary evidence suggests considerable "indirect" official financing

The vast bulk of the $91 billion increase in official holdings of dollar reserves is likely to have taken place in Asia, though information on the currency breakdown of reserves for the region is not published. In addition to the $26 billion increase in Japan's foreign exchange reserves reflecting Japanese intervention to try to curb the rise of the yen, China's reserves rose by over $30 billion and those of Singapore, India, Taiwan, Korea and Thailand by a combined $39 billion. In view of this concentration of reserve gains in Asia (excluding Japan), it is not surprising that the issue of diversification of official holdings away from the dollar and into the yen has attracted greater attention recently. The decline of the dollar against the yen only served to sharpen the issue further, though it was no doubt partly an effect as well as a cause of pressures for diversification.

Reserves rise sharply in Asia and diversification away from the dollar becomes an issue

The role of private flows in *Japan's* capital account hardly changed last year. For example, the identified sum of net private long-term outflows rose by only $2 billion to $73 billion. There was a $32 billion increase in Japanese portfolio investment abroad, but this was more than offset by a resumption of foreign portfolio investment in Japan (see Table VI.3). A very large part of Japanese portfolio acquisitions abroad took the form of international securities denominated in yen. This means that little of the surplus accruals of dollars from the current account was reflected in such acquisitions. Rather, foreign borrowers appear to have exchanged the yen proceeds for dollars. At the same time, Japanese borrowers repaid earlier foreign currency borrowing and banks' foreign currency liabilities also declined. Part of the dollar surplus was also absorbed by official intervention in a further attempt to curb the yen's rise as noted above.

Private Japanese portfolio outflows continue but are invested in yen-denominated assets

There was a massive decline in foreign inflows into (mainly fixed income) securities in *Germany* in 1994, and there were even net liquidations in the first half of the year. In the background was an absence, and indeed an unwinding, of the speculative tensions which had accompanied the ERM crises in 1992 and 1993. But, perhaps more importantly, foreign investors reacted to the especially sharp and sudden revision of earlier expectations of further declines in German interest rates as the economy was seen to be much stronger than had been expected early in the year. The fact that German bond yields had reached historically low levels may have heightened investors' sense of exposure in this regard.

Sharp offsetting shifts in German portfolio and banking flows

In spite of this decline, the net surplus of identified items in the German capital account increased for the year as a whole. The main offset to the large swing in net securities flows was seen in short-term banking transactions, which shifted from a net outflow of $63 billion in 1993 to a net inflow of a similar magnitude last year. This was probably linked rather directly to the decline in non-residents' portfolio purchases. Part of their heavy acquisitions of German bonds in 1993 had been financed by borrowing from German banks, whose foreign assets had risen by $73 billion in 1993, but fell by $16 billion in 1994. At the same time, banks' short-term liabilities rose by $42 billion, in part because foreign investors preferred to keep the proceeds of their bond liquidations, or other Deutsche Mark holdings, in liquid form. Net official monetary assets showed a small increase compared with a large decline in 1993 as ERM-related transactions had begun to be unwound.

Official foreign exchange reserves[1]

Items	1990	1991	1992	1993	1994	Amounts outstanding at end-1994
	in billions of US dollars					
	Changes, at current exchange rates					
Total	123.7	45.8	23.9	100.7	146.7	1,108.2
of which:						
Industrial countries	*82.1*	*–24.3*	*–25.9*	*27.6*	*56.7*	*515.6*
Asian NIEs	*11.7*	*19.5*	*15.5*	*20.6*	*30.4*	*225.1*
Other developing countries	*37.2*	*54.7*	*32.9*	*48.3*	*53.7*	*340.7*
	Changes, at constant exchange rates[2]					
Total	88.7	44.0	45.1	105.0	106.3	1,108.2
Dollar reserves	47.4	29.8	52.8	69.8	91.0	679.3
of which held:						
In the United States	*29.9*	*22.3*	*32.8*	*79.0*	*34.5*	*453.2*
With banks outside the US[3]	*4.6*	*5.8*	*9.2*	*1.1*	*31.7*	*124.6*
Unallocated	*12.9*	*1.7*	*10.8*	*–10.3*	*24.8*	*101.5*
Non-dollar reserves	41.3	14.2	– 7.7	35.2	15.3	428.9
of which held with banks[3]	*16.3*	*–29.2*	– 6.9	*6.6*	*1.7*	*109.8*

[1] Excluding official ECU holdings. [2] Partly estimated. [3] Deposits by official monetary institutions with banks reporting to the BIS.

Table VI.2

Major capital flows in selected industrial countries[1]

	1976–80	1981–85	1986–90	1991	1992	1993	1994
	in billions of US dollars, annual averages						
	Total capital flows						
Outflows[2]	153.7	231.1	678.9	510.8	543.6	975.7	725.8
As a percentage of GDP	*3.0*	*2.9*	*5.4*	*3.3*	*3.2*	*5.3*	*3.6*
United States	43.3	44.1	77.4	96.9	82.5	125.4	164.3
Japan[3]	15.4	53.5	242.2	117.2	25.4	65.0	162.0
Western Europe[4]	95.0	133.5	359.2	296.7	435.7	785.3	399.5
Inflows	168.2	270.7	745.6	510.4	557.6	941.8	635.7
As a percentage of GDP	*3.3*	*3.4*	*5.9*	*3.3*	*3.3*	*5.1*	*3.2*
United States	33.6	100.0	177.7	82.1	108.2	160.7	278.2
Japan	15.2	30.3	178.3	27.2	–93.5	–43.0	30.8
Western Europe[4]	119.4	140.4	389.6	401.1	542.9	824.1	326.6
	of which: Portfolio investment						
Outflows	21.3	63.6	182.7	267.3	244.1	424.6	232.6
United States	5.3	6.5	13.6	44.7	45.1	120.0	60.6
Japan	3.4	25.0	85.9	74.3	34.4	51.7	83.6
Western Europe[4]	12.6	32.0	83.1	148.3	164.6	253.0	88.4
Inflows	26.3	68.3	172.3	354.0	305.8	520.4	175.4
United States	5.2	29.4	44.7	54.0	66.7	104.9	91.5
Japan	5.1	12.6	26.9	115.3	8.2	–11.1	34.7
Western Europe[4]	16.1	26.4	100.7	184.8	230.9	426.5	49.3
	Direct investment						
Outflows	36.9	37.0	149.4	169.8	157.8	160.5	186.4
United States	16.9	7.6	25.3	31.3	41.0	57.9	58.4
Japan	2.3	5.1	32.1	30.7	17.2	13.7	17.9
Western Europe[4]	17.8	24.3	92.0	107.8	99.6	88.9	110.0
Inflows	23.3	33.2	114.2	101.0	84.8	88.5	123.5
United States	9.0	18.6	53.4	26.1	9.9	21.4	60.1
Japan	0.1	0.3	0.3	1.4	2.7	0.1	0.9
Western Europe[4]	14.2	14.3	60.6	73.6	72.2	67.0	62.5

[1] Excluding official monetary movements. [2] Including errors and omissions. [3] Including *net* short-term capital of the non-bank sector. [4] Including intra-regional flows. Data for 1994 are partly estimated.

Sources: IMF, OECD, national data and BIS estimates. Table VI.3

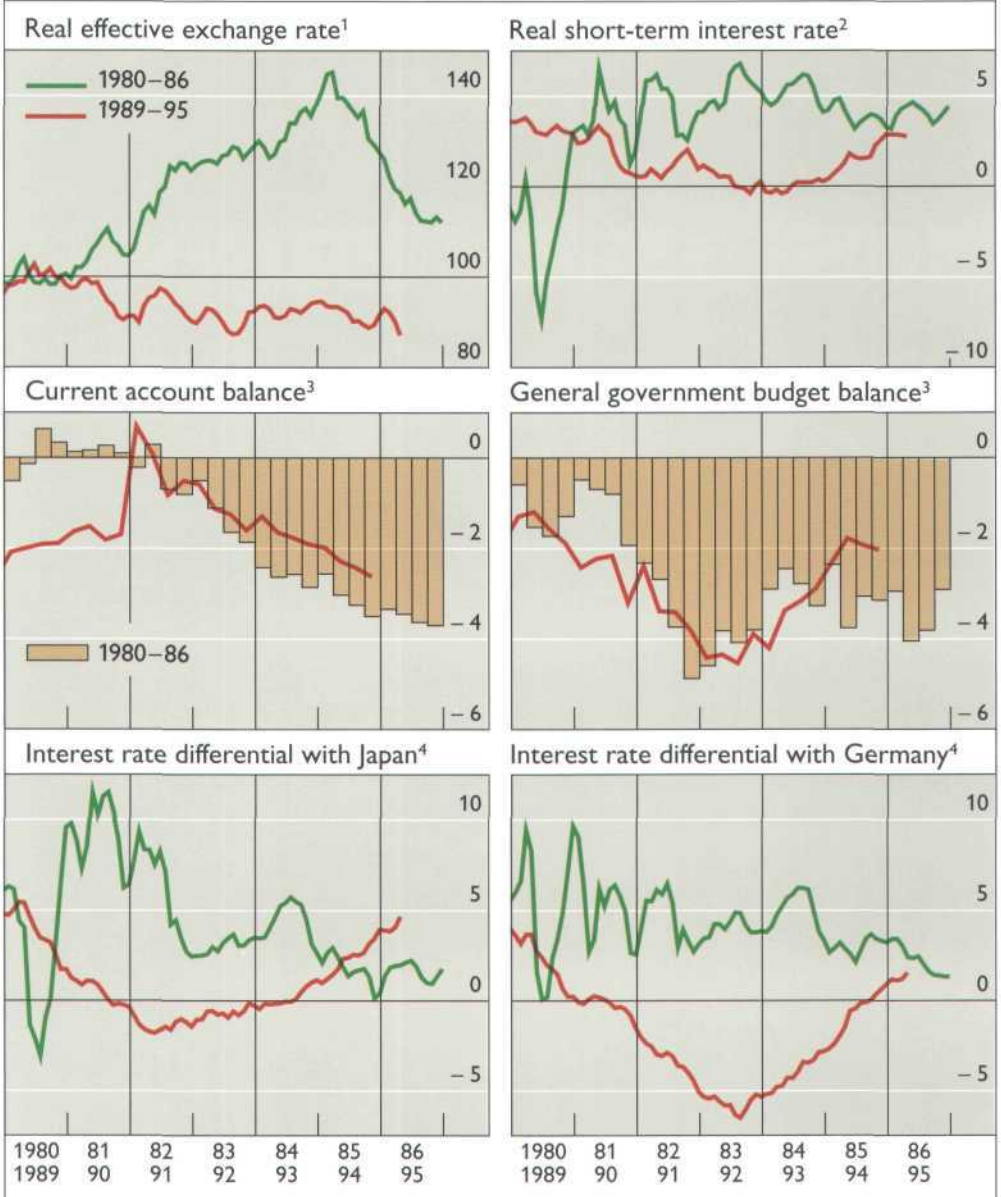
The dollar in the early 1980s and the early 1990s

The dollar's behaviour in the current recovery differs sharply from that in the previous upturn ...

The weakness of the dollar came as a surprise to those who saw the situation as analogous in some ways to that in the first half of the 1980s. Then the US economy had also picked up in advance of the rest of the world, and interest differentials had moved in the dollar's favour as a tight monetary policy was maintained in the face of a rising budget deficit.

On closer inspection, conditions in the two periods were not as similar as might seem at first sight. It is important to recall that the 1980s opened with the second oil price shock and a very sharp tightening of US monetary policy in

The US dollar: two economic recoveries compared



[1] In terms of relative unit labour costs and rebased at 1980 and 1989 = 100 respectively. [2] Three-month Treasury bill rate less twelve-month changes in consumer prices. [3] As a percentage of GDP. [4] In terms of three-month Euro-market rates. Graph VI.4

1979 against a background of high inflation and an extremely weak dollar. Real short-term US interest rates were therefore already very high in 1981 as the Federal Reserve remained more sceptical than the Reagan Administration about the effect of "supply-side" tax cuts on the federal budget deficit. This situation was prolonged by the fact that the Federal Reserve was proved the more prescient. The deficit did rise and the policy mix became highly unbalanced.

... partly because real interest rates were higher in the early 1980s;

In contrast, the 1990s opened with a low and declining rate of inflation and with the financial condition of the economy fragile following earlier borrowing and lending excesses. To nurse a modest recovery in this environment, and without risk to price stability, official interest rates were lowered until they were virtually zero in real terms in 1992–93, compared with 5–5½% in 1983–84. The

actual budgetary outturn was on the whole comparable to that in the earlier period until quite recently, and the prospect for future significant improvement was uncertain during both periods. But one difference which may have made itself felt in the early 1990s was that the US net external asset position had deteriorated sharply since 1980, making the achievement of current account balance more difficult (see page 122 above).

the US net external asset position has deteriorated;

Although much was made of the likelihood that international interest rate differentials would move in the dollar's favour in the early 1990s, Graph VI.4 shows that, especially against the Deutsche Mark, the differential remained adverse and only began to be less *un*favourable to the dollar from 1992 onwards, German interest rates having been strongly affected by the policy consequences of the country's reunification. In contrast, during the early 1980s, differentials were absolutely, and at times substantially, in the dollar's favour. So far as long-term interest rates are concerned, the analysis is not so clear-cut given that capital gains and losses on principal are involved as well as coupon yields. Nevertheless, the final part of the dollar's rise through the early 1980s does seem to have been supported by well-founded expectations of capital gains as long-term rates began to decline in 1984. In 1994 the reverse occurred – though the United States was not alone in this.

and international interest differentials have been less favourable

More generally, however, the international climate – political as well as economic – was more favourable to the dollar in the early 1980s. Cold war tensions remained high following the Soviet invasion of Afghanistan; the second oil shock was potentially less serious for the United States than for, say, Japan; and there was hope that new, more liberal, approaches to US economic policy would make investment there particularly rewarding. Indeed, for some considerable time in 1981–85, the firming of the US currency was viewed by many as a sign of the soundness and effectiveness of the new policy approach and the Administration used such arguments to justify its "benign neglect" of the dollar's strength. In Europe pessimism about the prospects for growth, summed up in the word "Euro-sclerosis", meant that the dollar's rise was not entirely unwelcome. In sum, it was the dollar which was perceived to have safe-haven attributes in the early 1980s, which meant that the first Latin American international financial crisis was favourable to the dollar, compared with the reverse now.

The international political and economic climate also differed between the two periods

The end of the dollar upswing in the 1980s occurred when booming domestic demand, a large budget deficit and a massive loss of competitiveness were seen to be driving up the current account deficit without apparent limit. In the light of experience, and after ten more years of large budget and current account deficits, it does not in fact seem surprising that there was a weakening of the dollar in 1994 rather than a strengthening.

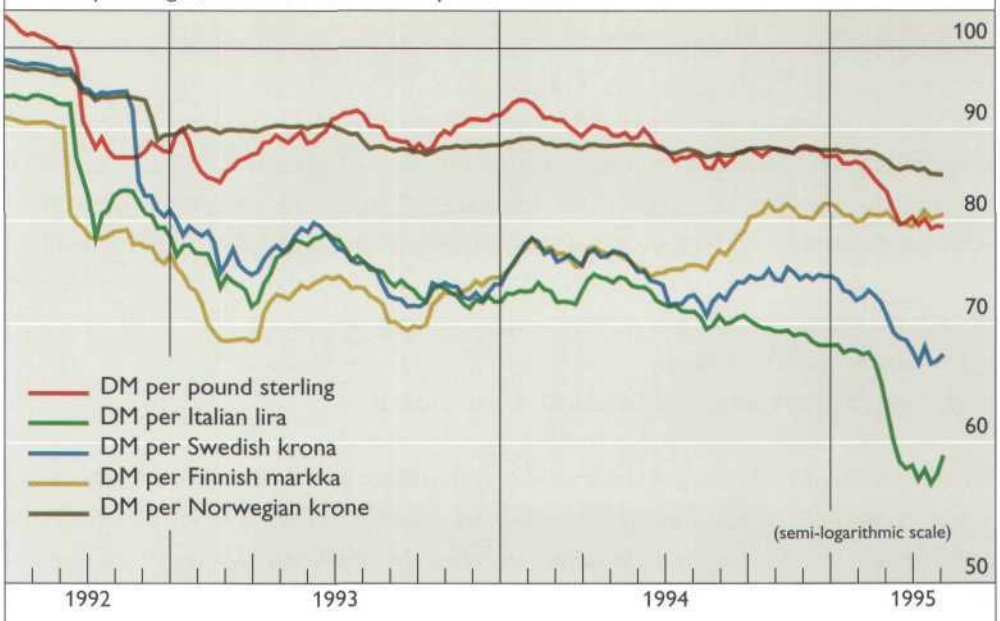
Other selected floating currencies

Several floating currencies fell further in 1994 and early 1995 ...

With the notable exception of the Swiss franc, other major floating currencies have declined further in value since early 1994, albeit by very different amounts, and for varying reasons. The Canadian dollar declined against the US dollar for the third consecutive year, falling by some 6% between the early weeks of 1994

Bilateral exchange rates of selected currencies against the Deutsche Mark

Weekly averages, third week of February 1987 = 100



Graph VI.5

and March this year. Three other currencies, the pound sterling, the Italian lira and the Swedish krona, which had all been forced out of fixed exchange rate arrangements in the autumn of 1992, weakened by 14%, 21% and 11% respectively, against the Deutsche Mark over the same period. For the currencies of Canada, Italy and Sweden, an important background factor was growing concern about the sustainability of fiscal situations, especially as these were linked to political difficulties which were perceived as constraining the capacity to take measures on the scale required. This in turn fed back into doubts about these currencies' exchange rates. In addition, market participants seemed to be increasingly conscious of the effect of rising interest rates on debt servicing costs. For countries with large amounts of short-term debt, it became possible to envisage a vicious circle scenario in which concerns about budget deficits and public sector indebtedness put pressure on the currencies, which, when countered by increases in interest rates, would only worsen the deficits further, and so on. Citing concerns about the fiscal situation, one rating agency followed up its 1994 warning and downgraded Sweden's debt rating for long-term borrowing in foreign currency in January this year. A little later it also downgraded Canadian triple-A domestic debt as well as lowering the country's AA1 foreign currency debt rating to AA2.

... mostly because of interlinked political and fiscal uncertainties

Of the four floating currencies which weakened during the period under review, sterling did so against the background of an underlying budgetary situation which was better than in the other countries and an external current account which was much more favourable than had been expected earlier. Thus the relatively moderate decline in the UK currency during 1994 was not seen as a major threat to the authorities' inflation target. However, the pound's

Sterling falls despite relatively sound fundamentals

decline steepened in 1995. And while this could be interpreted in part as an inevitable side-effect of more severe market turbulence elsewhere, interest rates were raised once more in February.

The lira experiences the most severe pressures

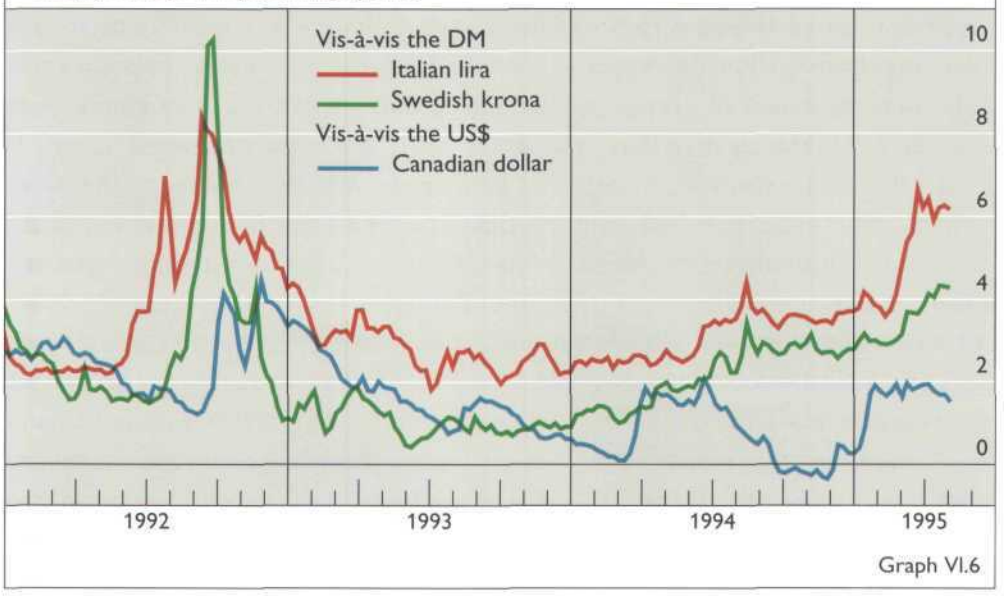
The problems affecting the Italian lira were considerably more complicated and severe. In addition to continuing political and budgetary uncertainties, the inflation rate turned up in early 1995, after a long period during which the domestic inflationary impact of depreciation had been surprisingly muted. An increase in official interest rates was then judged necessary on domestic as well as external grounds. Three-month market rates rose very sharply – at one stage to nearly 7 percentage points above their German equivalent. But with growing fears of knock-on effects on debt servicing costs, even the Government's victory in a vote of confidence on its supplementary budget proposals in March 1995 failed to prevent a further steep fall in the lira. After the middle of that month, however, the lira recovered somewhat and remained above its previous lows at least up to early May.

The Canadian dollar declines in spite of increases in interest rates ...

In Canada and Sweden the underlying situation was less serious but nevertheless difficult. In Canada interest rates were raised quite sharply in the first half of 1994 as the currency weakened again, partly due to concerns about the political situation in Quebec. While tensions eased for a time, particularly after the mid-September election which showed lower than expected popular support for Quebec separatism, the Canadian dollar fell again in the fourth quarter as US interest rates increased further. Canadian short rates were raised even more sharply than earlier in the year, but the effectiveness of this was blunted by associated concerns about the possible impact on the budget. Moreover, the sustainability of these higher rates was also questioned. Since Canadian inflation was very low indeed, the implied levels of real interest rates began to look very high, both in absolute terms and relative to a still high level of unemployment. With the uncertainties generated in the run-up to the crucial

Three-month Euro-market rate differentials in selected countries

Weekly averages, in percentage points



Graph VI.6

March 1995 budget, the Canadian dollar thus touched a nine-year low during the early weeks of this year, which was not tested again during the period to early May.

... as does the Swedish krona

Interlinked political and fiscal uncertainties also affected the Swedish krona, as did fears of higher inflation. With capacity utilisation rising in response to the earlier depreciation of the krona, interest rates were raised three times in the second half of last year. However, the impact of these moves in terms of restoring confidence was limited, not just because of their direct effects on the budgetary position, but also because of their feared indirect effects should the pace of economic activity slow in consequence. Apart from isolated periods of stability, the krona has continued to weaken as rating agencies and financial markets have judged successive statements of budgetary intentions to be inadequate in the circumstances.

The Swiss franc firms

Following its steady recovery in 1993, the Swiss franc remained firm during the period under review. At times, for example during the market turbulence in March this year, the currency's traditional safe-haven characteristics were in evidence as it strengthened even against the rising Deutsche Mark. Although the Swiss authorities reduced official interest rates during the period and at times joined in concerted bouts of intervention in support of the dollar, no other action was taken specifically to curb the franc's strength.

Developments in the ERM

Inside the widened ERM band ...

The main event in the ERM during the period under review occurred in March this year when both the peseta and the escudo were devalued. Pressures on some other ERM currencies also obliged the authorities in Belgium, France, Denmark and Ireland to raise interest rates – though not to the same degree as in earlier crises. This was the first real test of the new wide band arrangements since their introduction in August 1993. It was, however, the fourth time that the peseta had been devalued since it entered the exchange rate mechanism in 1989, and the third time for the escudo, which had entered in 1992.

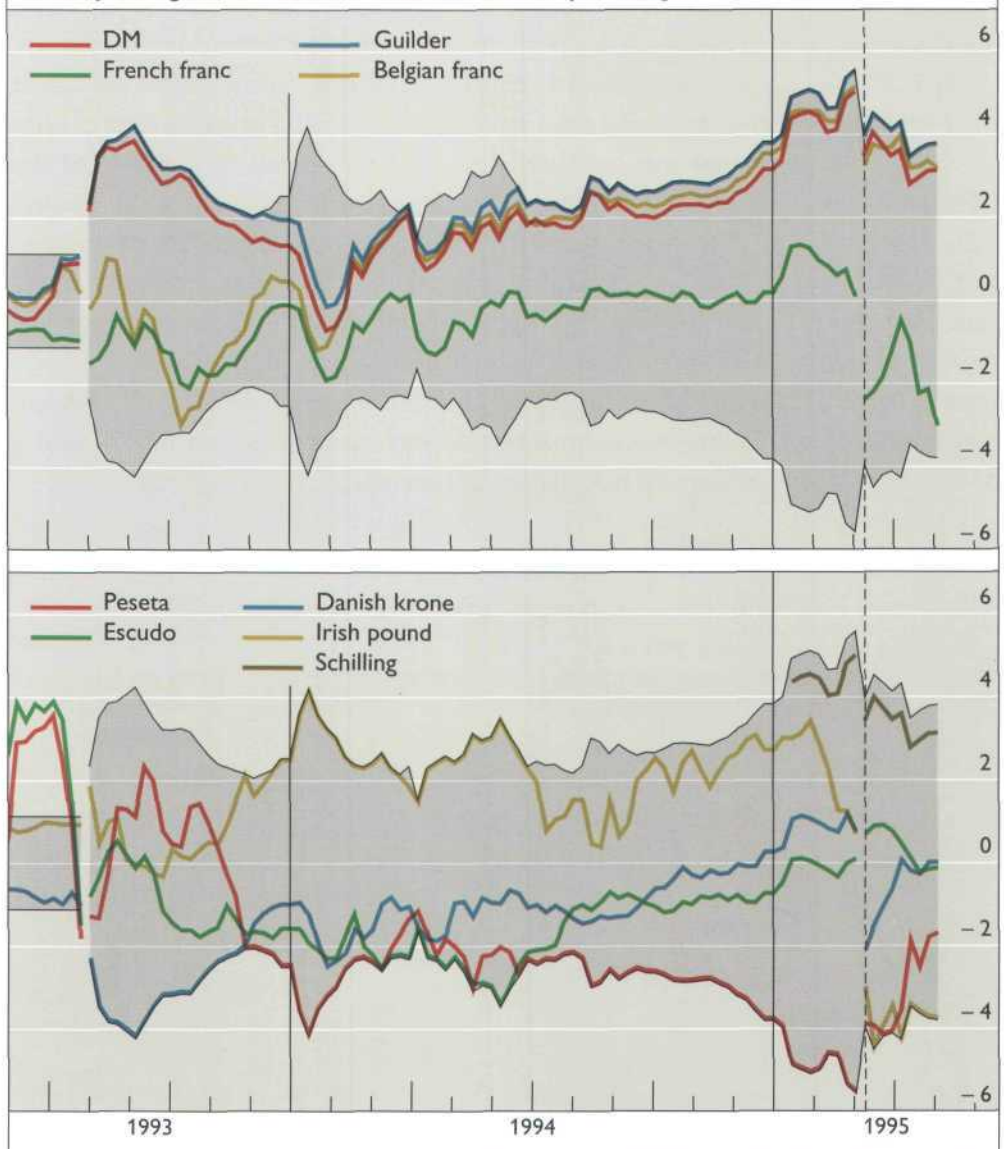
... tensions are absent for most of 1994 ...

For most of 1994 the ERM had on the whole been remarkably tension-free, following three further decreases in German interest rates and as inflation rates in Europe continued to converge. The actual width of the band thus only once exceeded 8 percentage points, compared with the new permitted range of 15%. The crucial element in restoring confidence was that, following the crisis of 1993, the French franc had returned closer to the centre of the new and wider band, and stayed there for most of 1994. Moreover, this occurred despite the dollar's persistent weakening against the Deutsche Mark. Such stability was all the more noteworthy in that declines in so many other European currencies in 1992 and 1993 (including some outside the ERM) had inevitably meant some loss of competitiveness for the three currencies (the French and Belgian francs and the Danish krone) which were the only ones to have survived downward pressures during the series of currency upheavals in Europe, beginning in November 1991 with that surrounding the Finnish markka. Markets were clearly taking note of the fact that domestic inflation had been brought down to very

... despite some adverse factors ...

Positions of member currencies in the ERM

Weekly averages of deviations from central rates, in percentages



Note: On 2nd August 1993 the ERM began operating with 15% margins of fluctuation from unchanged bilateral central rates, with the exception of the Dutch guilder/DM fluctuation band; the shaded area shows the spread between the strongest and weakest currencies and the horizontal lines the limits of the narrow band of the ERM in use prior to that date. The Austrian schilling entered the ERM on 9th January 1995. On 6th March 1995 the Spanish peseta and the Portuguese escudo were devalued by 7% and 3½% respectively. Graph VI.7

low levels in France and were of the view that other fundamentals were generally sound.

... but emerge in early 1995 ...

The ERM tensions, when they came in the early part of 1995, were similar to earlier such episodes in that they reflected a confluence of factors both home-grown and external. However, one difference from earlier periods of severe stress was that the limits of the exchange rate band were not reached by any currency, and there was no question of obligatory intervention.

Both the peseta and, to a lesser extent, the French franc had been weakening against the Deutsche Mark before the turn of the year, the latter in the light of

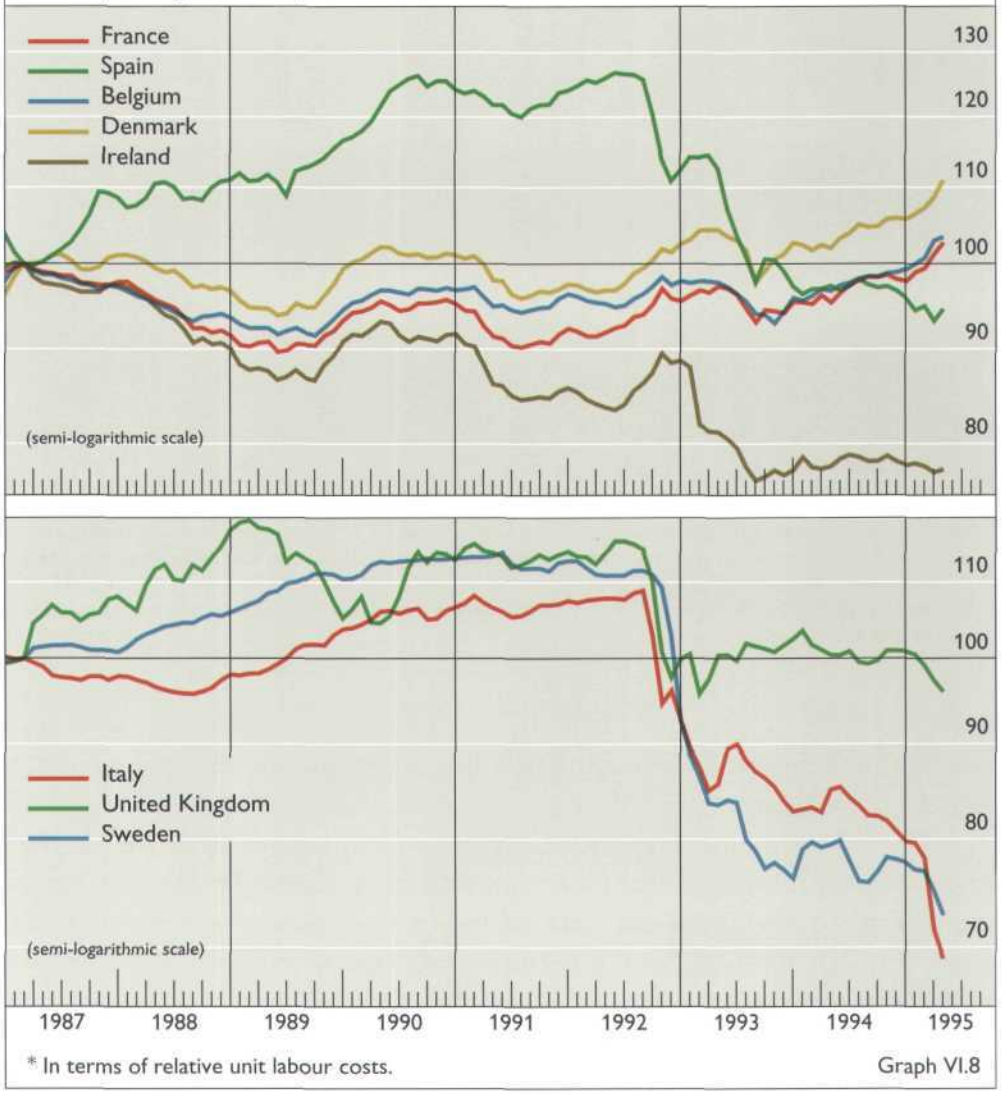
the impending French presidential election. In Spain there was a developing financial scandal, and political uncertainties allied to fiscal problems added to negative sentiment about the peseta. In early January the peseta began falling quite steeply, and the Spanish authorities responded by raising interest rates. In terms of timing, however, it seems that developments in the dollar market at the beginning of March may well have been the trigger that brought the tensions to a head. In particular, the ineffectiveness of intervention in support of the falling dollar on 2nd and 3rd March may have been a factor leading the Spanish authorities to prefer a prompt request for a realignment of the peseta to massive, and possibly unsuccessful, intramarginal intervention. A 7% realignment of the peseta's central rates was eventually agreed upon over the following weekend. At that point the Spanish currency's overall decline against the Deutsche Mark since August 1992 reached about 30%. The realignment was also of sufficient magnitude for the Portuguese authorities to feel it necessary to follow with a devaluation of the escudo by half that of the peseta.

... as the Spanish peseta and the French franc suffer from political and economic uncertainties

Realignment of the peseta and the escudo is preferred to intervention

Selected real effective exchange rates in Europe*

Monthly averages, February 1987 = 100

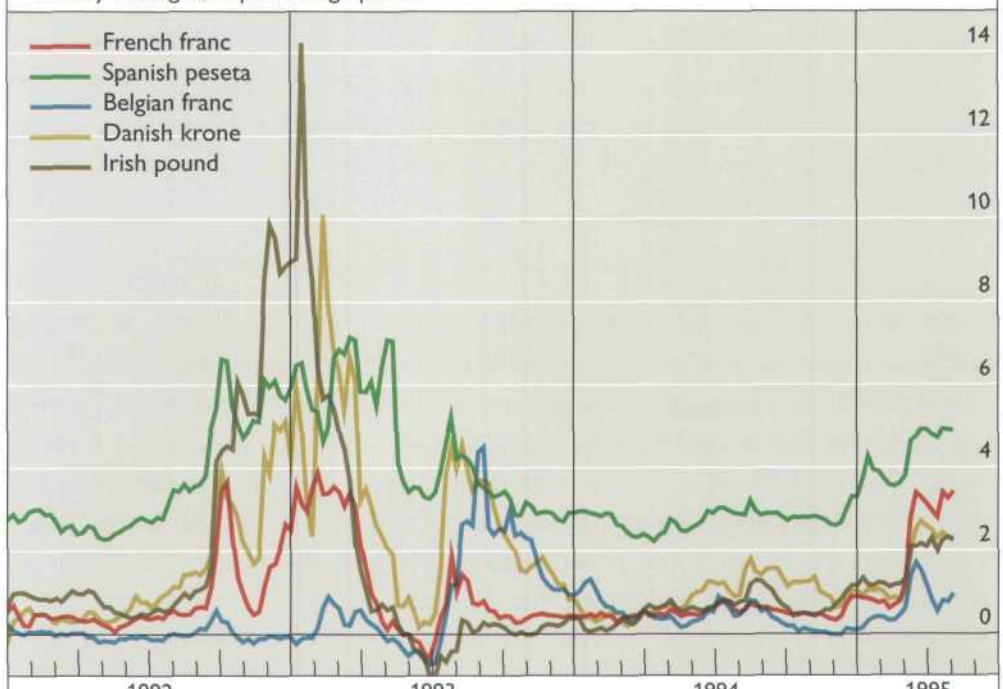


* In terms of relative unit labour costs.

Graph VI.8

Three-month Euro-market rate differentials vis-à-vis the Deutsche Mark

Weekly averages, in percentage points



Graph VI.9

Despite economic recovery in France, the franc is affected by election uncertainties, but is defended

As in previous realignment episodes, pressures within the ERM did not immediately dissipate but rather moved on to other currencies, perhaps on the grounds that their competitive position must necessarily have worsened to some extent. With unemployment still relatively high in France, the franc touched a record low of 3.5880 to the Deutsche Mark on 7th March – about 7% below its bilateral central rate. However, support was provided by the fact that the French economy had clearly been recovering, and that the domestic economy could still be protected to some degree from the full effects of increases in interest rates designed to bear on the exchange rate. Indeed, the authorities' tactics were precisely the same as on earlier occasions: the Bank of France suspended its five to ten-day emergency lending window and opened a 24-hour facility at a higher rate of 8%. This halted the franc's decline and it even recovered some of its lost ground during the remainder of March, before weakening temporarily in April and early May in the context of the presidential election campaign.

Other ERM currencies also come under pressure ...

Fearing that the difficulties might spread to the Belgian franc, given the high level of the country's public debt, the National Bank of Belgium raised interest rates pre-emptively. Pressure also spread to the Danish krone and, especially, the Irish pound, which fell to the lowest position in the band. The Irish currency was affected by the simultaneous weakness of sterling, in addition to the tensions in the ERM. Interest rates were therefore also raised in Denmark and Ireland, and in Spain and Portugal as well, as both the peseta and the escudo continued to

show weakness despite their realignments. The situation was calmed to some degree by supportive statements by senior officials of the Bundesbank, who noted that fundamentals elsewhere were sound and that the political uncertainty in France would necessarily be temporary. It was even suggested that a cut in German interest rates might be feasible. And indeed this proved to be the case on 30th March. Despite the continuing decline of the dollar, tensions in the ERM eased further in early April and this facilitated a reversal of some of the earlier interest rate increases.

... but a decline in German interest rates helps ease tensions in April

Real effective exchange rates and external adjustment

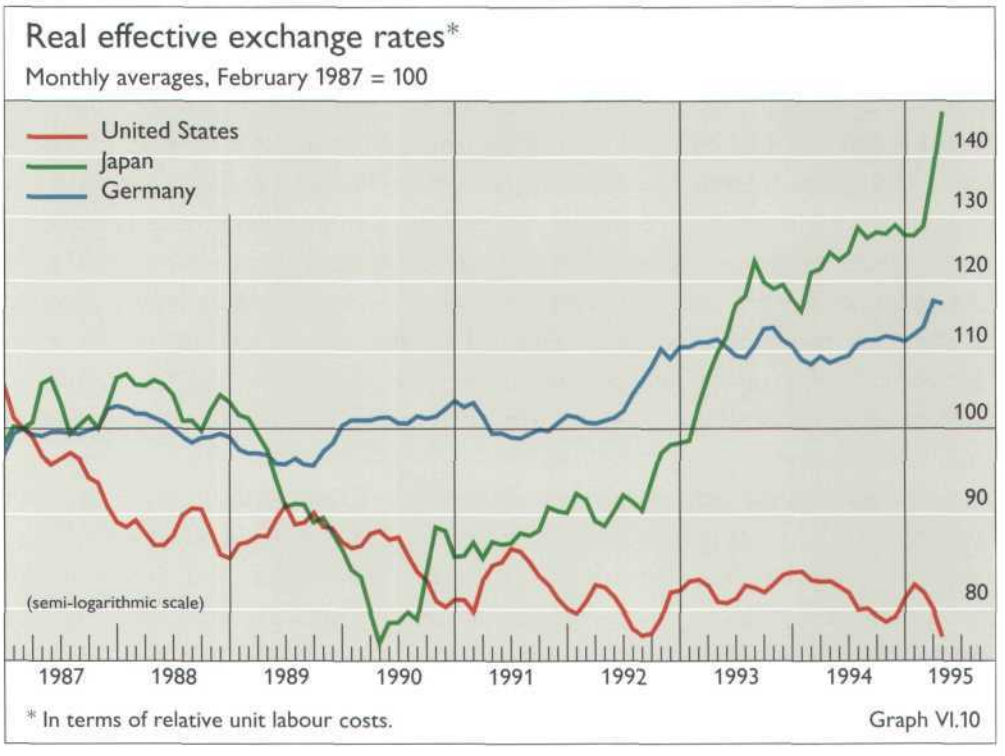
While certain nominal bilateral exchange rates for the dollar have shifted by sizable amounts, its real effective rate has moved by much less. Graph VI.10, which plots indices based at 100 at the time of the Louvre Accord in 1987, shows that the dollar has moved in a relatively narrow band around an index level of about 80 since 1991 after a period of some further depreciation following the Accord. Most recently, during the winter of 1994/95, the dollar's real value actually rose a little for a time, in part because of the sharp decline of the Mexican peso and the weakness of the Canadian dollar.

In real effective terms the dollar falls modestly ...

At the other extreme, the yen had already risen by as much as one-third in only twelve months beginning in the autumn of 1992. While the Japanese currency's real effective rate then drifted up only slowly between the autumn of 1993 and the end of last year, its rise steepened again in the spring of 1995. Recently the real value of the yen has therefore been nearly 50% above its Louvre value, representing a near-doubling from its low point in April 1990.

... while the yen rises sharply ...

After rising by about 10% in the year of the first ERM crisis, the real effective



... and the Deutsche Mark moderately

value of the Deutsche Mark remained quite stable during 1993 and 1994, despite the dollar's tendency to weaken. However, it began to strengthen again in early 1995 and had risen by a further 5% by April.

No precise estimation of levels of "equilibrium" rates is possible ...

It is not possible to assess the appropriate levels of exchange rates now merely by reference to judgements made in 1987. In the first place, such assessments are by no means an exact science. Second, relevant circumstances may have changed in unforeseen ways in the interim. In particular, there are certain legacies of the past whose effects it may not be possible to reverse quickly. The obvious one, already referred to, is the effect on countries' net international investment income of years of cumulating current account surpluses or deficits. Another, less demonstrable, factor concerns the possible distortions introduced into production structures by previous misalignments, and the time and incentives required to unwind them. The yen's undervaluation in 1990 (encouraging investment in the production of tradables) and the dollar's overvaluation in 1984–85 (doing the opposite) are two obvious examples.

... as various considerations ...

Another consideration concerns portfolio diversification away from the dollar on the part of both private and official investors outside the United States against a background of continuing current account deficits. The significance of this may be increased to the extent that international portfolio diversification by US investors (which is still relatively limited by the standards of some other countries) might also revive again at some point.

... complicate an assessment

Calculations of "equilibrium" real effective exchange rates at this time are further complicated by shorter-run considerations. For example, the present current account imbalances are in part the result of relative cyclical developments, most notably in the cases of the United States and Japan. It is also possible that the full effects of the yen's sharp appreciation in 1992–93 on the Japanese surplus may not yet have worked through and that significant J-curve effects may again be present now (see Chapter III, page 55).

But the speed and size of exchange rate changes ...

More can be said about the speed and size of exchange rate movements. It is true that in the medium term exchange rate changes mainly reallocate demand across countries as external adjustment proceeds. They also stimulate a redirection of investments aimed at adjusting capital stocks to the new set of relative prices and profit opportunities in depreciating and appreciating currency countries alike. However, in the short run the effects on aggregate demand may in certain cases be negative, especially if the change in exchange rates has been large and rapid. It is relatively easy to delay or cancel existing or planned investment projects, and to do so immediately if they now look unprofitable. In contrast, it is likely to take time to put in train new investments appropriate to the changed conditions. Potential investors are in any case likely to delay revising their plans as they wait to see how durable the new exchange rate configuration proves to be. Especially where there are doubts as to what exchange rate levels are appropriate, such considerations become even more important given that uncertainty can lead to inactivity. An additional and related point is that the faster the exchange rate changes, the larger the J-curve effects are likely to be and with them the risk of further pressures on exchange rates. The risks of renewed overshooting and general financial instability are also likely to be higher the more rapid the change in exchange rates.

... in the short run may have undesirable and counterproductive side-effects

Domestic price developments could be disturbed as well. The more rapidly an exchange rate depreciates, the more concentrated in time is the import price shock and the greater is the risk of that shock feeding through into the domestic inflation process. This risk is already likely to be high if the economy with the depreciating currency is operating at full capacity. In countries with appreciating currencies where domestic inflation is already low or even non-existent, as in Japan, there is at least some risk that an outright process of deflation could be triggered which existing debt problems could make more severe.

Assessing the appropriateness of exchange rate levels, given the often conflicting requirements of external and internal balance, has always been a difficult task, made more complex by uncertainties regarding the effects of exchange rate changes on economic variables of interest to policy-makers. If these effects themselves depend on the speed of exchange rate changes – a further complication – it is perhaps not surprising that different national authorities sometimes come to different conclusions as to whether or not an exchange rate problem exists. Similarly, uncertainties about the response of exchange rates to policy initiatives make agreement on solutions still more difficult. This issue is taken up again in the Conclusion.

VII. Capital flows and policy in the emerging markets

Highlights

The Mexican financial crisis raises important questions about the role of capital flows in shaping economic developments in the emerging markets. The run on the peso at the end of 1994 highlighted the volatility of many forms of capital movement, drawing attention in particular to the risks that can arise when capital inflows cause exchange rate overvaluation and unsustainably large current account deficits.

The crisis underlined the problems that newly liberalised financial systems can have in coping with sudden outflows of capital. Although there are distinct differences between countries, newly liberalised systems share certain common features: real interest rates have been much higher than before; the expansion of bank credit to the private sector has been very rapid; and some parts of the banking system in a number of countries have proved fragile. The difficulties were often made worse by heavy capital inflows. Very few countries allowed their currency to float freely to insulate the economy from foreign capital; instead, most followed various forms of exchange rate objective, supported where necessary with substantial intervention. Some countries sought to limit real appreciation of their exchange rate by impeding short-term capital inflows. Others increasingly found themselves welcoming inflows as a means of sustaining the use of the exchange rate as a nominal anchor to resist inflation.

Although a hard currency policy has proved its worth (particularly in breaking an inflation spiral), recent events suggest that, if exchange rate adjustments are postponed too long, the viability of the stabilisation programme may be called into question. In addition, there are clearly limits to the size of current account deficits that the financial markets can be counted upon to finance. Market sentiment can also change quickly, and reliance on short-term inflows will magnify borrowing countries' vulnerability to a loss of foreign investor confidence and to resident capital flight.

Only in the immediate aftermath of the Mexican crisis did most emerging markets appear to be affected, and even then to very different degrees. Once the initial shock waves had subsided, the markets began to distinguish between countries on the basis of underlying prospects and policies. The market is well aware that a high level of domestic saving is necessary if emerging economies are to sustain high rates of investment in the face of a reduced flow of foreign capital. As in earlier similar cases, this recent episode suggests that maintaining confidence depends on the pursuit of effective macroeconomic policies.

Capital inflows: context and nature

Capital inflows, attracted by reform ...

The heavy influx of foreign capital into emerging market economies in the 1990s took place against a background of broadly based economic policy reform. The microeconomic elements are well known: trade liberalisation, deregulation and privatisation in the domestic market, freer financial markets and the dismantling of controls on inward foreign investment. The elimination of budget deficits and tighter monetary policies were the main pillars of macroeconomic adjustment. An important supporting element in many countries was the use of the exchange rate as a nominal anchor, in the form either of a fixed rate or at least of a relatively firm rate or band backed up by tight monetary policy.

... bring benefits ...

Viewed from a long-term perspective, it is natural that such reforms should have been accompanied by capital inflows, exchange rate appreciation and current account deficits. Reform raises the prospective rate of return on real investment, thus attracting foreign capital. Over the medium term, higher real income and productivity should be consistent with a permanent real appreciation of the exchange rate. Moreover, the current account deficits that often go hand in hand with capital inflows should prove transient to the extent that investment boosts capacity in the capital-importing country.

... but important difficulties of transition ...

In recent years, capital inflows have indeed made a significant and valuable contribution to strengthening the role of markets and thus promoting growth. And they have sustained hard currency policies in the face of current account deficits. Yet recent events also illustrate how, in the early years after reform, capital inflows – inflated by volatile short-term movements – can reach levels that are not sustainable. In the process, the exchange rate and other financial asset prices can overreact in ways that are inimical to the long-term goals of reform. This is often associated with a boom in consumption (rather than investment), sometimes involving a very large increase in imports of consumer goods. Heavy capital inflows which in effect finance a consumption boom are not tolerated indefinitely by international financial markets.

Although the importance of specific factors will differ from country to country, the radical shift in economic policy towards simultaneous stabilisation and liberalisation can have short-term macroeconomic consequences that complicate economic policy-makers' task of maintaining the orientation of reform.

... such as excessive expansion in bank credit ...

The first problem of transition is that economic agents may take time to adjust to a new environment of low inflation and greater competition. One somewhat paradoxical example of this is that stabilisation policies are often associated with a very large increase in bank credit. The reason is that, when hyperinflation ends, the reduced volatility of interest rates and real household income can make consumer credit more viable. The rapid expansion in consumer credit in Brazil following the currency stabilisation plan owed something to this effect. Even in less extreme circumstances, a previous history of high inflation may make both banks and their customers sceptical as to whether the much lower rates of inflation prevailing as a result of a stabilisation policy will endure. Even high nominal rates of interest may then fail to prevent an excessive expansion of bank credit – all the more so if freeing the financial market from direct controls is part of the reform process. As is discussed more fully below,

there was indeed a credit explosion in a number of emerging markets following liberalisation. A second example is that trade liberalisation tends to lead to a one-time jump in imports as controls are dismantled. In some cases, reforms may face a credibility problem as firms and households doubt that trade liberalisation will be maintained – hence a precautionary surge in imports can occur, and domestic producers of tradable goods may delay the necessary rationalisation. Finally, an overvalued exchange rate may encourage agents to bring forward imports which they fear may become more expensive later. For these reasons, a boom in imports of consumer durable goods has often been a characteristic of periods of economic reform.

... and imports

Short-term horizons in financial markets but ...

The second general problem of transition is that the decision horizons for various agents can differ greatly. A difference of particular significance is that decision horizons are shorter in financial markets than in markets for real assets. Foreign money can easily be attracted into financial assets by calculations of short-term financial gain that may have little or nothing to do with the underlying returns to real assets. Several general aspects of recent flows into the emerging markets suggest that such short-term influences may be important. One is the attraction of investing early in a newly open equity market – in the expectation that other investors are likely to follow and in the process bid up prices – with the intention of withdrawing at the top of the wave. Another arises from the use of the exchange rate as a nominal anchor. As long as it is believed, this commitment will encourage investment in domestic financial assets with high *nominal* yields – and high exchange rate adjusted profits. But once markets come to doubt the viability of the anchor, these inflows can rapidly reverse.

... real investment projects long-term

Although a financial investor may acquire a financial claim that can be quickly traded, the ultimate user of the investment funds may have to make a commitment to long-term projects that are not easy to reverse. Foreign direct investment flows are perhaps least subject to this problem since the provider of funds can withdraw only with difficulty and at a high cost.

Exchange rate regime and ...

From a macroeconomic perspective, a temporary (and reversible) influx of foreign capital – not justified by the underlying returns on real investment – can have lasting consequences that may not be desirable. The exact nature of such effects will depend on the exchange rate regime. Under a fixed exchange rate, exchange market intervention will lead to the inflow being absorbed into the official reserves. Even if sterilisation is complete, there can be significant fiscal costs in financing high levels of reserve holding. With incomplete sterilisation, commercial banks' liquidity is increased, and this may permit an excessive expansion of bank credit. Moreover, such a credit expansion will not be easy to unwind in the event of a withdrawal of foreign capital, and this may create problems for the banks. Under a floating exchange rate, the authorities can avoid unwanted reserve accumulation only by allowing the exchange rate to rise. Although the exchange rate will fall back when the capital flow reverses, some consequences will endure – the long-run effects of investment (and disinvestment) decisions based on a misaligned exchange rate, the build-up of foreign debt and so on. To the extent that bank loans advanced when the exchange rate is high become non-viable when it declines, the banking and financial system itself can be hurt (see below).

... sterilisation response

Such transitional difficulties appear to have created more problems for Latin America than for Asia. This was partly because the starting position for much of Latin America was more difficult, and partly because Asian policy-makers have shown a marked predilection for gradualism in reform. One symptom of this is that real exchange rates appreciated much more, and current account deficits were far larger, in Latin America than in Asia. Other symptoms include differences in the nature of capital flows.

Latin America differs from Asia ...

The first difference is that the step-up in capital inflows into Asia was associated with a pronounced increase in the already high ratio of fixed investment to GDP (see Graph VII.1, panel A). In this sense, the foreign capital going to Asia has been "invested" in real assets. This was not so in Latin America, where investment/GDP ratios have generally remained low, by both historical and international standards; the main exception to this is Chile. In much of Latin America increased private consumption has been an important counterpart of capital inflows.

... in having low investment ratios ...

A second difference is Latin America's heavier reliance on inflows of portfolio capital, rather than foreign direct investment (see panel C of the graph). Not only is foreign direct investment more stable in itself, but it can also help to stabilise the current account over time by expanding capacity in the tradable goods sector. As is discussed in more detail in Chapter III, foreign direct investment has been more export-oriented in Asia than in Latin America (see in particular Graph III.9 on page 67). While in Latin America foreign direct investment has mainly taken the form of debt/equity swaps and privatisation, which do not necessarily generate additional capital formation, in Asia it has mostly involved the setting-up of new or joint enterprises. Although almost all equity markets have risen strongly, Latin American markets experienced the larger and more volatile boom (see panel B of Graph VII.1).

... and greater dependence on portfolio inflows ...

Portfolio flows are more sensitive to shifts in international financial conditions than is direct investment. In this context, it is of interest to note that some research suggests that, while domestic factors have tended to be the dominant influence behind flows of capital to Asia, external factors – such as the level of interest rates and cyclical conditions in the industrial world – have dominated flows to Latin America. Despite the risk of eventual reversal, Latin American countries took a smaller and smaller proportion of net capital inflows into their reserves as the 1990s progressed – a pattern rather unlike that seen in Asia (see panel D of the graph).

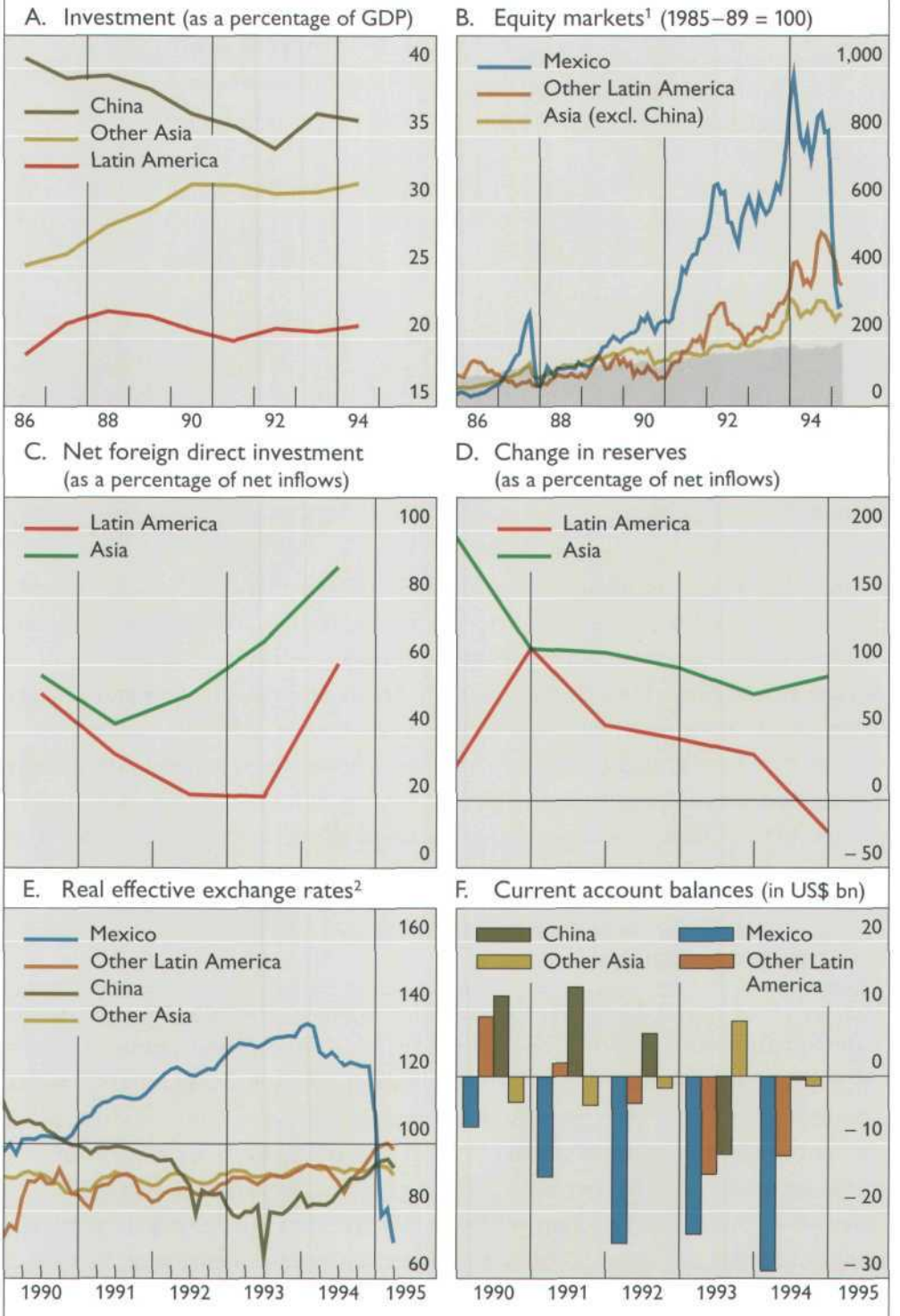
... and is thus more vulnerable

Even without the special circumstances surrounding the Mexican crisis, the strengthening of economic activity and the rise in interest rates in the main industrial countries in 1994 would have been expected to have a disproportionately large and adverse effect on capital flows to Latin America. Indeed, net inflows of foreign capital into Latin America fell from about $60 billion in 1993 to less than $35 billion the following year (see Table VII.1). This drop is more than accounted for by a steep decline in financial flows: foreign direct investment actually increased. An exodus of domestic and foreign capital from Mexico was the main factor.

In considering the ability of financial markets to mediate changes in investor sentiment without disrupting real activity, the two classic dimensions of portfolio

Risks of short-term indebtedness

Macroeconomic indicators in the emerging markets



[1] End-month data, in US dollar terms. The shaded area represents the US equity market (S & P 500).
[2] In terms of relative consumer prices; monthly averages, 1980–89 = 100. Graph VII.1

capital movements are not to be forgotten: debt versus equity and short-term versus long-term. Equity investment serves to diversify risk – indeed, one of the functions of equity markets is to "absorb" shifts in investor expectations without triggering bankruptcies or defaults. The decline in prices may itself encourage

Capital inflows and increases in reserves in the developing world							
	1975–82	1983–90	1990	1991	1992	1993	1994
	in billions of US dollars						
	Net capital inflows[1]						
Total developing countries[2]	22.5	37.7	37.2	152.8	142.1	151.3	135.7
Asia[3]	8.9	12.5	14.6	34.1	46.1	53.1	54.0
Mexico	6.2	0.6	9.8	22.9	26.6	30.6	10.0
Other Latin America[4]	14.1	3.9	1.6	6.1	26.2	26.3	22.9
	Net increase in reserves						
Total developing countries[2]	9.5	15.2	33.3	71.4	69.9	68.2	48.9
Asia[3]	3.7	16.0	16.5	37.4	45.4	41.8	49.7
Mexico	–0.1	0.3	2.3	8.0	1.7	7.2	–18.9
Other Latin America[4]	0.9	0.9	10.5	8.1	22.2	11.8	11.1

[1] Changes in the net official monetary position are excluded. [2] Excluding Hong Kong, for which capital account data are unavailable. [3] China, India, Indonesia, Korea, Malaysia, Singapore, Taiwan and Thailand. [4] Argentina, Brazil, Chile, Colombia and Venezuela. Table VII.1

existing holders – including non-residents – to maintain their stake. Potential downward pressure on the exchange rate may be further alleviated to the extent that other non-residents purchase the securities non-resident holders want to sell (or indeed other local currency assets). Hence the risk of a foreign exchange crisis may be significantly reduced. Unlike equity issuers, governments and other entities that have issued long-term debt have to face fixed servicing obligations; but at least they do not have to seek refinancing in a crisis as do those relying on short-term debt. It was precisely difficulties in refinancing large amounts of short-term dollar-denominated debt that accentuated the Mexican crisis.

Freer financial markets

The revival of capital flows into the emerging markets in Asia and Latin America went hand in hand with the emergence of more liberal, and ultimately more efficient, financial systems. But the combination of reform and heavy capital inflows contributed to the serious transitional problems subsequently encountered in the financial system. The reversal of capital flows experienced by some countries in 1994 and early 1995 highlighted weaknesses that had been revealed in the banking system following deregulation. To varying degrees the prices of shares and other assets came under downward pressure.

Financial liberalisation

The move to freer financial markets ...

While a few emerging market economies have had liberalised systems for many years, most Asian and Latin American countries moved towards a more liberal banking and financial system only during the last decade or so. In the process, interest rate ceilings on bank loans and deposits, restraints on lending and selective credit subsidisation were removed and reserve requirements were lowered. Restrictions on the activity of non-bank financial institutions were relaxed. Privatisation, the development of new financial markets and other

reforms enhancing the environment for financial transactions paved the way for an expansion of equity and international bond issuance. Controls on capital flows and investment abroad by financial institutions were eased.

... is well founded ...

Reforms were spurred by the realisation that it was becoming increasingly difficult to tightly regulate financial markets as economies became more developed. Controls on bank lending had encouraged the growth of non-bank financial intermediaries to serve needs that were ignored by the official financial system. This often undermined macroeconomic control. Growing affluence had led investors and borrowers to seek wider avenues for diversifying their assets and liabilities; if not permitted to do this at home, they would find ways to do it abroad. The inclusion of financial services in the Uruguay Round trade negotiations prompted some countries to consider easing the entry of foreign financial firms into their domestic market. The ambition of developing as an international financial centre also proved to be an important stimulus to liberalising certain cross-border transactions, though not necessarily operations in domestic currency.

The scope and speed of financial reforms varied across countries. The need for reform was seen as particularly great in Latin America, where low saving rates and capital flight made an improvement in financial intermediation more urgent than in Asia. Argentina, Mexico, Venezuela and, to a lesser extent, Colombia underwent radical and rapid deregulation in the late 1980s or early 1990s, while the pace of reform was more measured in Indonesia, Malaysia and Thailand. In the Republic of Korea and Taiwan many restrictions on domestic and cross-border financial operations remain in place.

The macroeconomic impact of financial reform

... but entails risks

The risks of financial sector reform had been amply illustrated by deregulation in the 1980s in industrial countries, even those with well-established financial markets and institutions. Almost universally, a surge in credit-granting resulted and ultimately weakened parts of the banking system. The problems that arose included excessive real estate lending, asset price inflation and, in some cases, the loss of monetary control.

The risks associated with financial liberalisation were all the greater in economies where financial repression was previously severe. As financial liberalisation progresses, official constraints on the liquidity of the private sector become less binding. When monetary policy comes to rely more on interest rates to keep aggregate demand under control, interest rates generally have to become higher and more variable. The actual process of liberalisation, releasing pent-up credit demand and distorting monetary and credit aggregates, makes the appropriate stance of monetary policy more difficult to judge. If monetary control is lost, interest rates rise even higher and become even more variable. Moreover, by opening the financial markets to foreign influences, financial liberalisation may permanently increase the vulnerability of the economy and the domestic financial markets to disturbances originating abroad and, in particular, to changes in sentiment in foreign capital markets.

Difficulties in conducting monetary policy

A tendency for the level of real interest rates to be higher in the 1990s than in the past, evident in most emerging markets, was most pronounced in Latin

High real interest rates

Growth of bank credit to the private sector in real terms

	1988	1989	1990	1991	1992	1993	1994[1]
	December-to-December percentage changes						
Asia							
India	8.6	15.6	−3.7	− 2.8	10.3	2.3	− 1.5
Hong Kong[2]	20.6	23.7	28.8	14.7	0.4	7.2	2.7
Indonesia	26.3	41.6	36.0	8.5	7.6	11.3	11.4
Korea	7.2	19.6	11.5	10.1	7.1	6.6	13.9
Malaysia	5.1	19.7	17.2	15.7	6.0	7.9	9.7
Singapore	9.5	15.6	10.2	9.3	7.9	11.8	13.8
Thailand	25.5	23.8	26.3	15.1	17.0	18.3	22.5
Latin America							
Argentina[3]	–	–	–	14.7	30.2	15.0	17.6
Chile	9.9	12.3	−6.5	5.4	20.2	16.6	15.8
Colombia	4.5	2.0	8.9	−12.7	12.5	27.7	17.8
Mexico	24.8	60.2	24.1	29.1	40.4	13.9	21.3
Venezuela	−4.2	−36.4	−7.8	14.6	2.3	−23.4	−45.5

[1] Year-on-year change, to latest available month. [2] Total domestic credit. [3] Figures before 1991 are distorted by hyperinflation.

Table VII.2

America. In some cases unusually high real rates largely reflected the difficulty of establishing and maintaining the credibility of macroeconomic policy in countries with a history of hyperinflation. Yet high real rates did not prevent a strong expansion in bank credit as pent-up demand was released by financial liberalisation. In the late 1980s and early 1990s, seemingly unresponsive to high real interest rates, the growth of bank credit in many Asian countries was fast and in several Latin American countries explosive. This can be clearly seen in huge increases in bank credit to the private sector in real terms, in some cases continuing over several years (see Table VII.2). To varying degrees the rises were accommodated by capital inflows and increases in domestic demand for monetary assets following a decline in inflation. In Korea, Taiwan, Venezuela, Mexico and other countries, deregulation also fuelled a boom in real estate lending and property prices. Share prices soared almost everywhere.

Adverse impact on governments' budgets

Financial liberalisation may also adversely affect government finances. The reduction of unremunerated reserve requirements and government securities investment requirements which act as taxes on financial institutions, along with the removal of other controls which serve to keep interest rates artificially low, can lead to increases in government budget deficits. Reserve requirements were lowered substantially in Latin America during the 1980s and early 1990s (see Table VII.3). But these effects were generally offset by fiscal reform which greatly reduced the public sector's borrowing requirement and recourse to bank credit (see the table). Nevertheless, increased reliance on market sources of funding following financial liberalisation heightened the vulnerability of budget balances and debt management to financial disturbances from abroad. On occasion, large rises in domestic interest rates could become necessary – as indeed the repercussions of the recent Mexican crisis demonstrated. This increased

Structural monetary indicators

	Bank reserves as a percentage of broad money[1]		Broad money[1] as a percentage of GDP		Bank credit[2] as a percentage of GDP		Credit to government[3] as a percentage of bank credit[2]	
	1981–84	1991–93	1981–84	1991–93	1981–84	1991–93	1981–84	1991–93
	annual averages							
Asia								
China	..	17.3	46.0	95.9	60.2	99.0	..	3.5
India	9.3	12.0	39.3	47.8	46.0	53.6	42.7	48.6
Indonesia	14.4	12.8	18.3	45.9	12.7	48.8	–10.3	– 2.6
Korea	4.8	9.8	34.9	40.4	49.2	55.2	12.3	2.0
Malaysia	6.0	7.5	58.2	78.6	58.9	83.7	10.3	3.3
Singapore	7.5	7.0	68.5	94.4	72.9	63.2	–17.3	–38.2
Thailand	3.4	3.0	46.1	76.2	55.9	75.5	27.7	– 3.9
Latin America								
Argentina	46.6	12.7	21.6	14.0	39.2	22.5	39.1	34.1
Brazil	9.5	..	15.6	30.0	25.8	17.9	29.6	29.1
Chile	11.4	11.6	22.1	26.7	66.5	60.8	12.5	24.5
Colombia	19.3	17.1	30.7	31.9	21.6	18.6	14.2	3.7
Mexico	43.1	2.3	31.4	31.7	35.3	36.1	64.1	14.8
Venezuela	13.8	24.4	41.3	30.3	31.7	20.9	0.9	13.3
Memo items:								
Japan	*2.2*	*1.5*	*91.9*	*111.1*	*111.5*	*139.1*	*15.1*	*10.6*
United States	*2.0*	*1.6*	*64.9*	*65.7*	*81.7*	*80.5*	*19.0*	*17.6*

[1] Money and quasi-money liabilities of the banking system. [2] Domestic bank credit. [3] Net credit to the central government.

Source: IMF International Financial Statistics. Table VII.3

vulnerability might well suggest a need for stronger fiscal positions when financial markets are liberalised.

The impact of reform on the banking system

Robustness of the banking system depends on:

That financial liberalisation can undermine the robustness of the banking system, even leading to a reversal of reforms, can be seen from the experience of Argentina, Chile and Indonesia in the 1980s and Venezuela last year. Strain has been evident recently in parts of the banking system in Argentina, Brazil and Mexico. India and Indonesia have also had to confront the problem of non-performing loans. In short, banks have faced a difficult challenge in adjusting to a freer market environment. Moreover, large-scale capital inflows through the banking system often made matters worse by further encouraging risky lending behaviour. This added to the problems experienced by banks in some countries when capital outflows set in.

Although individual experiences differ, five common elements have been important in the impact of reform on the banking system: the quality of supervision and bank management; the supply of savings; the intensity of competition between banks for deposits; the risks incurred in lending; and, finally, the volatility of capital flows.

In most emerging markets steps have been taken in recent years to

strengthen the supervisory framework, to introduce regulations governing banks' operations, including the capital standards recommended by the Basle Committee on Banking Supervision, and to foster more transparent accounting practices. However, in some cases, as in Indonesia, appropriate arrangements for prudential regulation and supervision were not in place when deregulation was implemented. After a decade of nationalisation, Mexican banks' procedures for loan evaluation and the screening of borrowers were evidently not adequate for a liberalised financial environment.

supervision;

The resilience of banking systems also depends on the supply of retail deposits. The difficulties of Latin American banks have been increased by low rates of private saving available to the banking system in a context of high inflation. Banks in many Asian countries, in contrast, have benefited from the availability of domestic saving at relatively low interest rates.

the availability of saving;

Competition has generally been slower to develop in retail markets than in wholesale markets. In a number of countries some interest rates on deposits are still regulated. Entry into the retail banking market generally remains restricted – even in some countries with highly liberalised financial systems, including Hong Kong. However, in recent years steps towards issuing banking licences more freely have been taken in Mexico, India and, in respect of both domestic operations and offshore transactions in the Bangkok International Banking Facility, Thailand. Argentina has offered national treatment for foreign banks. Banks in many countries have faced increased pressure in retail markets from non-bank financial intermediaries.

the degree of competition;

If profitability is impaired by deregulation, banks may have an incentive to seek higher yields by making riskier loans. Yet the risk to which banks become exposed is ultimately a fundamental influence on profitability. Financial and economic liberalisation exposed previously viable non-financial enterprises to increased foreign competition and assessment of credit risk became more difficult. In countries that came back from hyperinflation, including Brazil and Argentina, some enterprises that had been able to cope with inflation found it difficult to adapt to a low-inflation environment.

the risks incurred in lending;

When capital inflows from abroad ceased (or gave way to outflows), credit, currency, maturity and interest rate exposures entailed serious difficulties for banks in some countries. In some cases relatively high domestic interest rates in the early 1990s had induced banks to incur open foreign exchange positions by financing local currency lending with foreign currency borrowing. Even when rules limited their own foreign currency positions, banks still became indirectly exposed to the risk of devaluation. This indirect risk arose when the use of the exchange rate as a nominal anchor led to relatively high domestic interest rates combined with little immediate prospect of devaluation. Enterprises were encouraged to take up foreign currency denominated loans from domestic banks as well as from abroad. In using as cover sources of funding which could shrink in a crisis, such as dollar deposits from residents or dollar borrowing in the international markets, banks also risked refinancing difficulties. In cases where the borrowers' revenues were predominantly denominated in the domestic currency, the quality of foreign currency loans could also deteriorate in the event of a depreciation of the domestic currency.

and the volatility of capital flows

To the extent that they lent long at fixed interest rates, banks in some countries also faced the risk of capital losses on domestic currency loans, should accelerating inflation following a devaluation of the currency push up interest rates. The quality of banks' domestic currency loan portfolios can also deteriorate when interest rates rise as a result of a tightening of monetary policy designed to defend the exchange rate or to restore stability in the wake of a devaluation. If the market perceives this as a constraint on monetary policy, downward pressures on the currency may intensify. The situation of non-financial borrowers and banks will ultimately worsen if increases in inflation or country risk premia cause lasting rises in interest rates following a devaluation. The recent difficulties experienced in the Mexican banking system exemplified some of these problems.

The impact of the development of securities markets

The development of equity markets ...

Equity markets developed to an extraordinary extent in the early 1990s. In relation to GDP, stock market capitalisation in Chile, Hong Kong, Malaysia and Singapore is now comparable to, or even exceeds, that of the United States and the United Kingdom, and the stock markets in Mexico and Korea are proportionately larger than those of Germany or France. In many emerging markets, share issues have played a more important role in the financing of large companies and investment in general than in most industrial countries. Equity issuance has been substantial in the last five years in Korea, Malaysia and Thailand, as well as in Chile and Mexico (although in some cases it has partly reflected large privatisation operations).

... spreads risks

The rapid development of emerging equity markets may have helped to make the financial system more robust by permitting risks to be spread across a broad investor base. Indeed, increases in the volume of secondary market transactions may have been accompanied by more efficient pricing. Yet emerging

But volatility remains high ...

equity markets have remained very volatile, partly because of a lack of liquidity and, in some cases, the concentration of trading on only a few major shares. In such circumstances, the role played by foreign investors, both in increasing their participation in the early 1990s and in reducing it in recent months, was disproportionately large. Although rules in a number of markets have been tightened in recent years with a view to improving transparency (e.g. by prohibiting insider trading), a certain opacity has persisted in a number of cases.

... and can contribute to systemic risk

In some countries, recent developments in securities markets have constituted a potential source of systemic risk. Declines in equity prices have led to a self-reinforcing process of falling collateral values, rises in non-performing bank loan portfolios and lending restraints – all compounded by a general weakening of confidence. Banks and other financial institutions have often held shares on their own account and depended on equity issuance to strengthen their balance sheets.

Debt markets less developed

Debt markets remained comparatively underdeveloped in the early 1980s. A history of high and variable inflation was an impediment in Latin America, while strong government budget positions help to explain the small scale of government securities markets in most Asian countries. Outside the long-liberalised financial centres of Hong Kong and Singapore, significant bond markets developed only in Chile, Korea, Malaysia, South Africa and Saudi Arabia, often aided by the presence

of large-scale institutional investors, including pension funds. Efforts to stimulate institutional demand for bonds by encouraging active secondary securities and derivatives markets have been made in some countries. Except in a few centres, however, derivatives markets are just gaining a foothold. In the absence of corporate bond markets, non-financial enterprises in many emerging markets have remained heavily reliant on short-term bank credit or the international bond markets.

Policy responses to capital inflows

The abrupt halting or even reversal of capital flows to some emerging markets last year gives particular point to the debate about how policy-makers should respond to a major and perhaps temporary surge in capital inflows. Possible policies can be divided into two groups. A first set seeks to limit net capital inflows. Three options that fall under this heading are controls on inflows, encouraging residents to acquire foreign assets and steps to increase national saving, for example by tightening fiscal policy. The second set of policies comprises intervention and sterilisation, involving adjustments to monetary and exchange rate policy.

Limiting capital inflows

Selective controls on capital inflows

Controls on capital inflows can be designed to discriminate between investment that helps make the economy more productive and responsive to the world market (e.g. foreign direct investment and long-term equity purchases) and potentially volatile investment motivated by considerations of short-term gains. It is now widely agreed that prudence in liberalising capital inflows implies that short-term operations should not be freed until the soundness of the domestic financial system is assured. Many countries restrict non-resident purchases of short-term paper or require non-resident investors to hold securities for a minimum period before resale is permitted. Some countries also limit foreign borrowing by domestic enterprises – a practice often justified on prudential grounds and in order to preserve a country's standing in the international financial markets. Other techniques rely on altering relative prices rather than on blanket prohibitions. Reserve requirements on banks' borrowing from non-residents have been one common way of reducing the returns banks can offer foreigners. Selective taxes have also been applied to limit capital inflows. In Latin America, Chile and Colombia have managed to slow portfolio inflows by maintaining restrictions. Brazil reimposed controls in an attempt to stem inflows in the wake of the cruzeiro real stabilisation plan. However, restrictions on short-term inflows have perhaps been more common in Asia. It would appear that the absence of large non-resident holdings of short-term domestic paper, and limited participation of foreign banks in the domestic markets, made sharp rises in interest rates in some Asian markets in early 1995 particularly effective in deterring short selling of the domestic currency and thus in warding off speculative pressures.

Difficulties with controls

One practical difficulty with controls is that they can create uncertainty in the minds of potential investors about future rules and regulations. This

reinforces the need for caution in the speed and scope of liberalisation, so that restrictions are relaxed only when conditions are strong enough to make subsequent reimposition unlikely. A second difficulty is that controls can often be circumvented in a number of ways (e.g. by arranging finance and payments abroad and manipulating trade invoicing). Over time private financial operators find successive loopholes, and this can induce the authorities to progressively tighten the regulations – often to the point where some desirable economic activity is hampered. Yet controls have been found to be effective – at least in the short run – in a number of countries not only in Asia but also in Latin America (Chile and Colombia being notable examples). Temporary controls which are withdrawn when no longer needed have often proved to be most effective. In particular, in countries seen to be committed to deregulation, an occasional reversal may be viewed by the markets as temporary.

Responses to inflows include liberalising investment abroad ...

A significant number of countries have liberalised residents' acquisition of foreign assets, usually by relaxing constraints on outward foreign direct investment or institutional investment abroad. Such reforms have the additional advantage of widening the diversification opportunities open to domestic institutions. The smaller the economy, the greater is this advantage.

... and encouraging national saving

Increasing national saving is a standard macroeconomic remedy for excessive inflows because it tends to depress domestic interest rates. Funded pension or other saving schemes have been the choice of a number of countries, including Chile, Malaysia and Singapore. Such compulsory saving schemes do not appear seriously to erode voluntary saving, which remains high in these three countries. Fiscal policy adjustments helped in coping with capital inflows in Thailand and, to a lesser extent, some other Asian countries. There was also significant fiscal adjustment in Latin America, although most of this took place *before* the influx of foreign capital. Already strong fiscal positions may have made it difficult to explain to the public the need for any further tightening designed specifically to help cope with capital inflows.

Internal versus external monetary policy objectives

Dilemma for monetary policy

Capital inflows often give rise to a dilemma for monetary policy. Domestic stability may be served by allowing currency appreciation to insulate domestic monetary conditions, thus directly and indirectly exerting downward pressure on inflation. But the resultant real appreciation tends to hurt the tradables sector, leading to a widening of the current account deficit. The longer such a deficit persists, the greater is the risk that the build-up of external debt will weaken investor confidence. Resisting currency appreciation by exchange market intervention can help to preserve competitiveness as long as inflation is kept under control. Accumulating official external reserves might also afford protection against a subsequent reversal of external capital flows. There have, indeed, been circumstances in which a number of countries have thought it prudent to have an objective for the external current account balance and, perhaps implicitly, for their external debt position. The practical question is whether the available instruments are adequate for achieving objectives for both the balance of payments and inflation.

While capital inflows posed some inflationary risks in Asia, monetary policy

in many Latin American countries faced a more daunting challenge, given a much worse inflation heritage and the need to build confidence in the sustainability of sharp declines in inflation rates that were of recent vintage. Countries' responses to capital inflows depended on the monetary policy framework initially in place. Differences were evident, in particular, in the desired degree of exchange rate flexibility, and in how far they relied on the exchange rate as a policy anchor. Differing institutional arrangements and instruments affected the extent to which countries attempted to sterilise inflows of funds and the difficulties they faced in doing so.

Currency boards in some countries ...

In Argentina and Hong Kong, the currency was pegged to the US dollar under currency board arrangements. In Hong Kong the extreme openness of the economy made a stable nominal exchange rate useful and the political transition due in 1997 reinforced the need for stability. Even so, Hong Kong had to accept nominal interest rates below the level suited to domestic demand pressures. The currency board system in Argentina – which succeeded in breaking hyperinflation – was designed to constrain central bank financing of government deficits or the banking system. In linking the expansion in the monetary base to foreign currency inflows, it severely limited the scope for sterilisation but left the Government free to borrow abroad.

... but elsewhere increasing exchange rate flexibility

In most other emerging markets the exchange rate was also managed in various ways, but typically with increasing flexibility over time. For instance, wider fluctuation bands were introduced in Indonesia and, in the context of pre-announced crawling pegs, in Chile, Colombia and (until December 1994) Mexico. The use of a basket standard in Chile, Indonesia and Malaysia implied a degree of uncertainty about movements vis-à-vis individual component currencies and, as in Korea, adjustments in the exchange rate standard were made periodically. Increasing the variability of the exchange rate may deter short-term inflows by making the return on them more risky.

Measures of real effective exchange rates based on consumer prices (see Graph VII.2) suggest substantial appreciation between 1991 and early 1994 in the case of Argentina and Hong Kong (both with US dollar pegs), Mexico (with a dollar band), as well as Singapore (where the nominal US dollar exchange rate rose steadily), Colombia and India. The currencies of most other Asian countries as well as Brazil and Chile depreciated or remained stable on balance. Consumer price based measures do not take account of the effects on competitiveness of cross-country differences in productivity growth in export industries relative to that in the non-tradables sectors but may be indicative of the impact of exchange rate movements on aggregate demand and inflation.

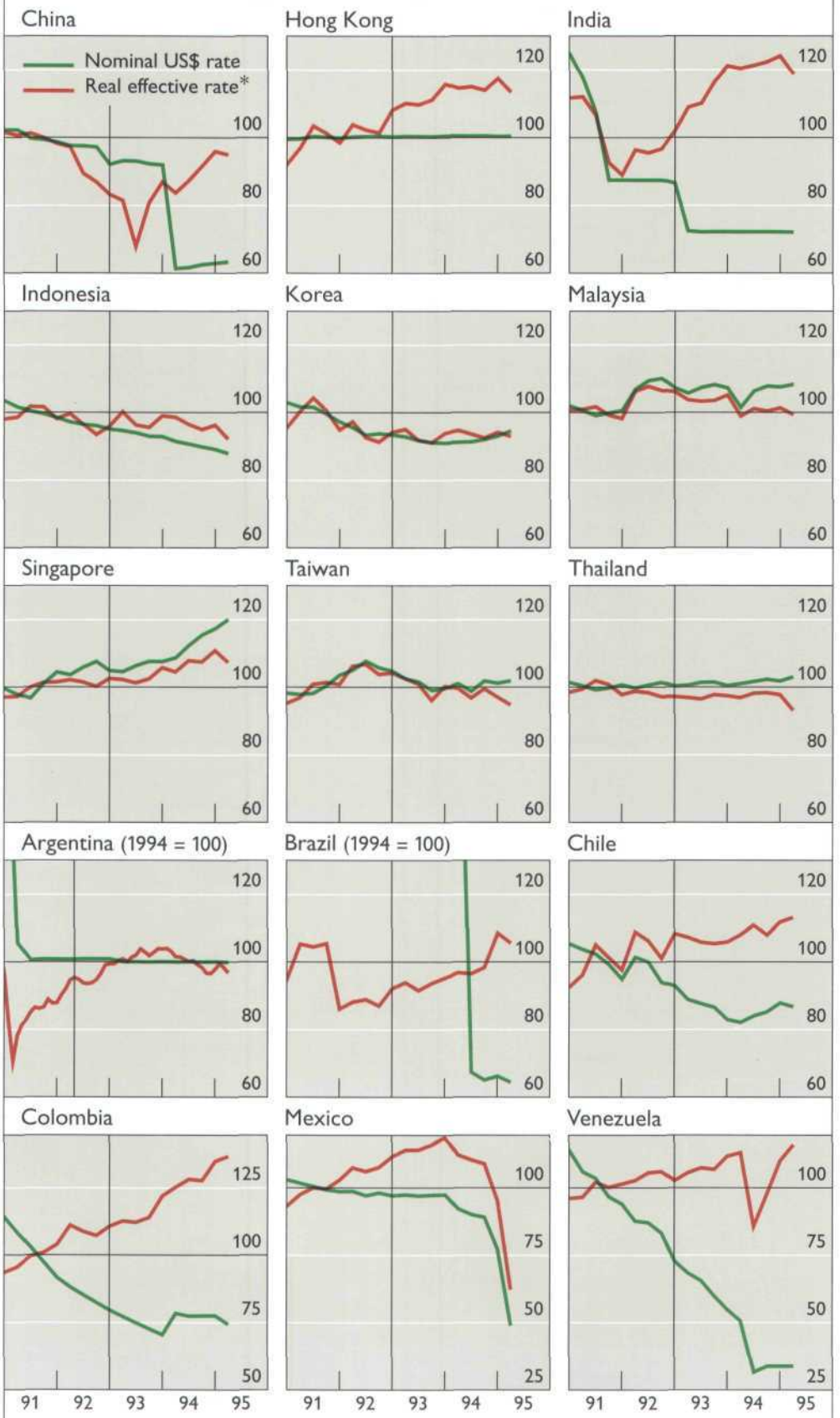
The stance of monetary policy

Experience with sterilisation

Between 1991 and early 1994 the monetary authorities in most emerging markets sought to limit the monetary effects of official exchange market intervention. The impact of sterilisation policies on interest rates depended on the openness of the financial markets and exchange rate policy. In South-East Asia only limited success was achieved in insulating interest rates, which generally fell in real terms. In Latin America rates in some cases followed the declines in domestic inflation but were generally kept high in real terms. Until late 1994 interest rate

Nominal US dollar and real effective exchange rates

At end of quarter, 1991 = 100

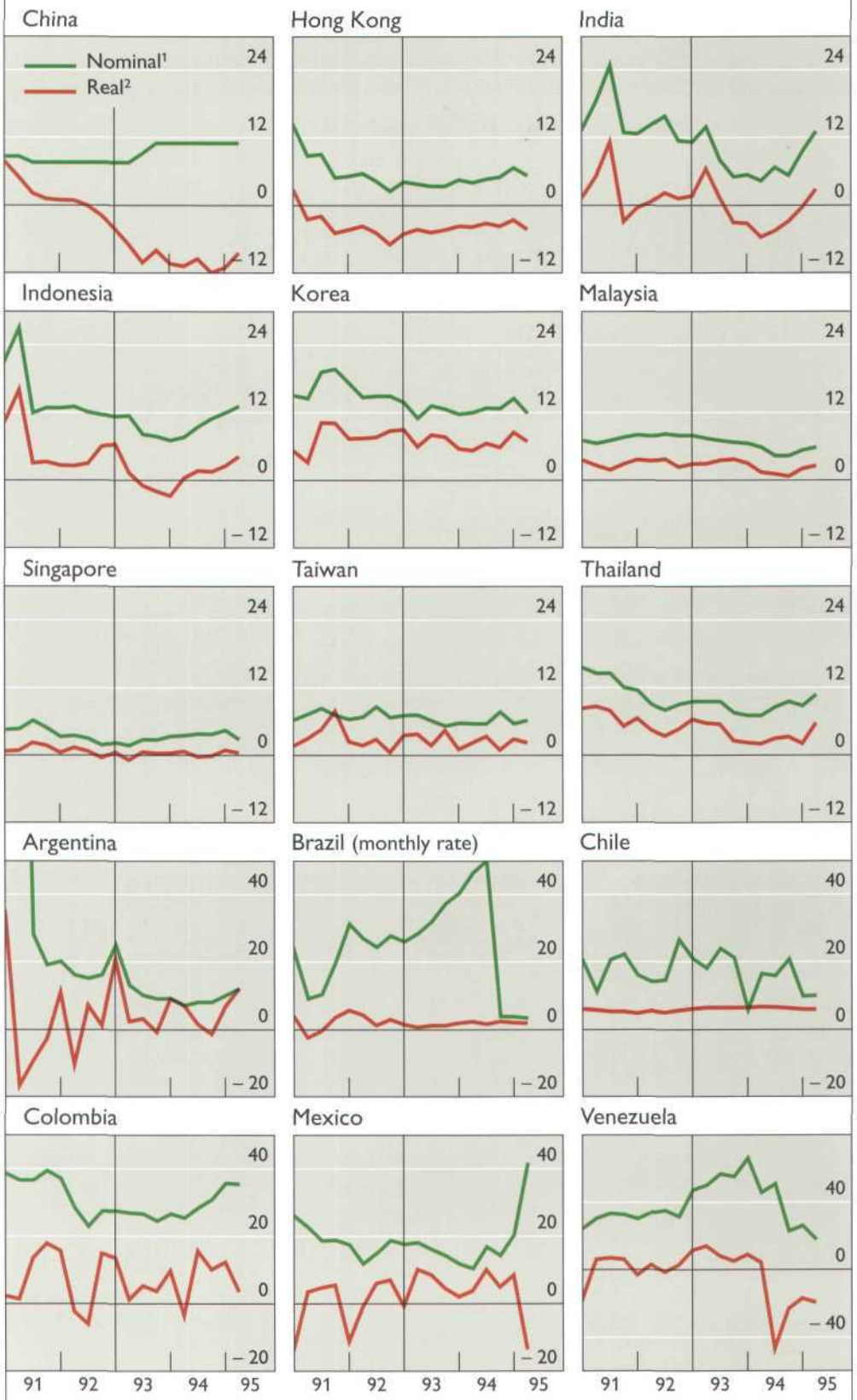


* In terms of relative consumer prices.

Graph VII.2

Nominal and real short-term interest rates

At end of quarter, in percentages



[1] Money market or deposit rates; for Brazil, bank rate; for Mexico, Treasury bill rate. [2] Deflated by twelve-month changes (Asia) and by annualised changes over one month (Latin America) in consumer prices.

Graph VII.3

differentials vis-à-vis industrial countries usually seem to have exceeded expected currency movements and thus to have preserved an incentive to short-term capital inflows.

Contrasting interest rate movements in Asia ...

In most Asian countries short-term interest rates fell in nominal terms between 1991 and early 1994 and reached low levels in real terms (see Graph VII.3). In Korea, Thailand and, to a limited extent, Indonesia money market or deposit interest rates generally remained above both US dollar interest rates and the domestic rate of inflation. Hong Kong's fixed exchange rate kept interest rate levels close to those in the United States; in Singapore expectations of currency appreciation pushed rates even lower. In China real short-term interest rates became strongly negative as from 1993.

This pattern of interest and exchange rates meant that in Asian countries, to varying degrees, exports and investment were protected. But it also meant that demand pressures built up, and it became clear by 1994 that a tightening of monetary policy was called for if inflation was to be avoided. Rises in US rates and, in some cases, a slackening of capital inflows helped but, in addition, a number of countries had recourse to constraints on domestic credit-granting by banks. Typically, credit to the private sector and broad monetary aggregates continued to expand strongly in 1994, but some slowdown was evident in credit to the private sector in India and Hong Kong and in the expansion of broad monetary aggregates in Indonesia, Malaysia and Thailand (see Table VII.4).

... and Latin America

In most Latin American countries, in contrast, short-term interest rates have generally been substantially positive in real terms in the 1990s. In Chile and Brazil

Credit and monetary aggregates

	Credit to the private sector[1]				Money and quasi-money			
	1991	1992	1993	1994[2]	1991	1992	1993	1994[2]
	December-to-December percentage changes							
Asia								
China	19.6	21.4	22.6	22.1	26.7	30.8	23.6	34.4
India	9.9	19.2	11.0	8.1	18.3	16.9	17.0	18.0
Hong Kong	26.1	10.1	16.4	12.1	13.3	10.8	16.0	15.4
Indonesia	19.3	12.5	22.7	21.7	17.5	19.8	22.3	19.0
Korea	20.3	11.9	12.8	20.2	21.9	14.9	16.6	18.7
Malaysia	20.6	11.2	11.6	13.8	16.9	29.2	26.6	18.1
Singapore	12.4	9.8	15.2	18.3	12.4	8.9	8.5	14.4
Thailand	20.4	20.5	23.8	30.6	19.8	15.6	18.4	12.9
Latin America								
Argentina	110.7	53.3	23.3	21.9	141.3	62.5	46.5	20.2
Brazil[3]	29.3	27.4	42.3	5.1	29.4	31.3	35.0	2.9
Chile	25.1	35.5	30.9	25.4	42.3	29.8	25.9	31.7
Colombia	10.7	40.8	57.1	44.1	34.9	38.9	40.0	35.3
Mexico	53.3	57.1	23.1	29.9	47.2	20.4	14.4	22.7
Venezuela	50.2	34.9	11.7	−6.8	38.6	17.2	25.7	49.0

[1] For China, bank credit other than credit to the central government; for Hong Kong, total domestic credit. [2] Year-on-year change, to latest available month. [3] Last monthly change of year shown.

Table VII.4

monetary policy had an explicit real interest rate orientation but real rates were slow to come down in Mexico and Argentina, where policy was based more on exchange rate anchors. Real rates remained very high in Colombia. They rose steeply in 1992–93 in Venezuela but fell following the banking crisis and became strongly negative. Nominal rates in Brazil fell following the introduction of the new currency stabilisation programme in July 1994 (see Chapter II) but real rates remained much higher than in any other country.

As had been seen earlier in Argentina and Mexico, high real interest rates in Brazil, combined with real exchange rate appreciation, contributed to a weakening of enterprise saving and investment but failed to prevent a strong expansion of bank credit to the private sector. A consumption boom worsened the current account position. Bank credit also continued to grow rapidly in 1994 in Chile and Colombia. A renewed acceleration in bank credit-granting in Mexico last year must have helped to neutralise the domestic effect of declines in capital inflows and to finance capital outflows. The main exception to the general tendency was Venezuela, where the banking crisis and severe recession led to a contraction of credit to the private sector.

Sterilisation

Cost of sterilisation

The difficulties experienced by monetary authorities in conducting sterilisation operations have been much discussed. The cost borne by the central bank depends on the scale of the operations and the size of the interest differential vis-à-vis US dollar rates (or the rates in other reserve centres), as well as on the instruments used.

The scale of sterilisation in different countries, which is reflected in various items of central bank balance sheets, is difficult to compare. One indicator, the rise in monetary authorities' gross foreign assets in relation to the increase in the monetary base, suggests that sterilisation operations were very large in the early 1990s in Indonesia, Malaysia, Singapore and Thailand, as well as in Brazil, Chile, Colombia and Mexico (see Table VII.5). There has been some tendency for sterilisation to be greater in Asia as a whole than in Latin America (see the right-hand panel of Graph VII.4). Certainly, the differentials between interest rates on the local currency securities sold by central banks and those earned on official

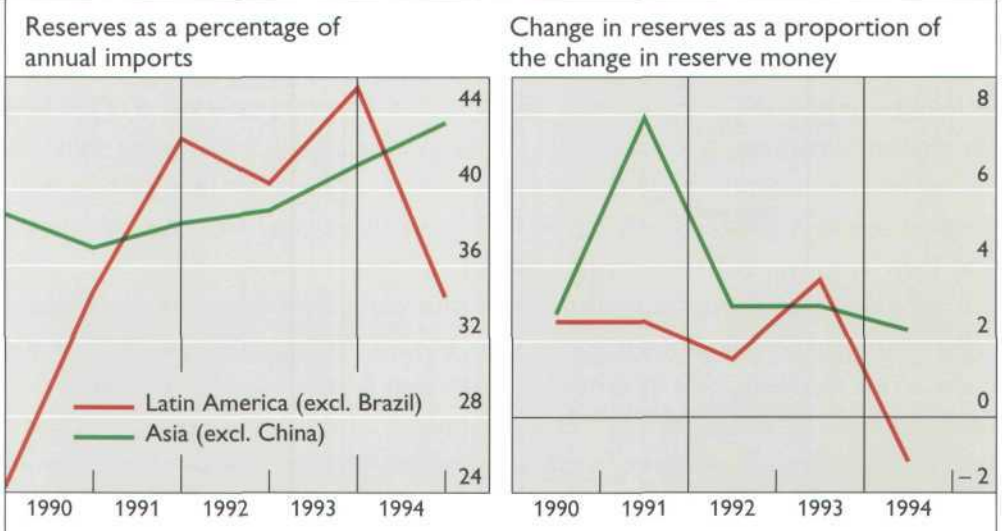
Ratio of the increase in gross central bank foreign assets to that in reserve money

	India	Indonesia	Korea	Malaysia	Singapore	Thailand
End-1980 to end-1984	0.15	1.64	0.35	−0.26	3.88	0.62
End-1989 to end-1993	0.62	3.81*	0.61	4.07	9.02	2.89
	Argentina	Brazil	Chile	Colombia	Mexico	Venezuela
End-1980 to end-1984	0.86	3.62	10.34	−0.52	0.35	1.30
End-1989 to end-1993	1.03	4.20	4.48	1.71	2.22	3.17

* Four-year period ending in June 1993.

Source: IMF International Financial Statistics. Table VII.5

Foreign exchange reserves: import cover and monetary effects



Graph VII.4

short-term reserve assets were typically much smaller in Asia than in Latin America, where they often exceeded the rate of depreciation of the domestic currency.

The cost of sterilisation operations to the central bank can be moderated if part of the burden is borne by increases in low-interest-bearing reserve requirements, as in Chile, Colombia, India, Korea, Malaysia and Venezuela. Adverse effects on banks' profits can be limited by applying marginal requirements to the increase in balance-sheet items closely related to capital inflows, as was done in Chile, Colombia and Malaysia; but these are also subject to circumvention through disintermediation. In Indonesia, Korea, Malaysia and Singapore the placement of government, public enterprise or pension fund deposits with the central bank or in securities – instead of with the commercial banks – helped to sterilise the effect of inflows on bank reserves without putting severe pressure on central bank profits. Open market operations thus played a smaller role than in Brazil, Chile, Mexico and Venezuela, where sterilisation operations relied heavily on the sale of government or central bank paper.

Even when monetary policy is geared to interest rate operating objectives and is implemented mainly through short-term securities repurchase operations, as in many industrial countries, sterilisation tends to preserve an interest rate incentive to inflows. Where sterilisation is geared more to quantitative objectives for monetary and credit aggregates the interest rate impact may depend on the nature of a country's financial structure, for example the range of assets available and the degree of substitutability between them. In some emerging economies, where markets for the paper used in sterilisation operations were thin, the operations may actually have put upward pressure on the interest rates prevailing in these markets. This may have increased the incentive to inflows and, where short-term rates were pushed up by sterilisation, biased the structure of inflows towards the short end.

The Mexican financial crisis: coping with capital outflows

Mexico's exchange rate anchor ...

The maintenance of an exchange rate anchor played a central role in the stabilisation policies embarked upon by Mexico in the late 1980s. This was seen as important not only in providing a clear rule for monetary policy and reassuring the financial markets, but also in allaying organised labour's fears that inflation would erode moderate wage increases. At the same time, exchange rate policy evolved towards greater flexibility, at first upwards to cope with capital inflows and then downwards to cope with weakening competitiveness.

The policy of steady depreciation at a rate well below the country's inflation differential vis-à-vis the United States gave way, in 1991, to a gradually widening band. With capital inflows at first tending to exceed the current account deficit (allowing reserve accumulation), the authorities held the upper limit of the band constant but allowed the lower limit to crawl downwards. The band was thus in effect widened to absorb capital inflows, allowing the real exchange rate to appreciate but leaving room for part of this appreciation to reverse as inflows fell back. For much of 1992 and 1993, the pressure of capital inflows kept the exchange rate close to its ceiling. The strength of the exchange rate, allied with trade liberalisation and the elimination of budget deficits, brought consumer price inflation down from over 100% in the late 1980s to about 7% by early 1994 – but only at the cost of a substantial appreciation of the real exchange rate.

... supported by other reforms cut inflation sharply ...

... but credit expanded strongly

However, using the dollar as an anchor for monetary policy was not sufficient, by itself, to ensure tight monetary and credit conditions. Although short-term peso deposit rates were kept relatively high (and rates on bank loans were higher still), bank credit expanded rapidly during the early 1990s (see Table VII.2). Before 1988, the banking system had been tightly controlled and financed very large public sector deficits. With the liberalisation of the financial sector in the late 1980s and the reduction in government borrowing from banks, the commercial banks gained increased freedom to extend credit to the private sector – and the scope for this was further increased by incompletely sterilised capital inflows. After many years of limited household and company access to bank credit, there was a very large expansion in credit to the private sector. Much of this represented a normal process of re-intermediation in a banking system that had been repressed. Nevertheless, rapid credit growth contributed to the decline in private saving rates: the national saving rate fell to less than 14% of GDP last year, compared with 20% during most of the 1980s. Moreover, high domestic interest rates encouraged recourse to dollar-denominated bank borrowing by residents. An exacerbating factor last year was a steep rise in credit extended by trust funds and development banks.

A series of political shocks hit the peso

When the assassination of a presidential candidate provoked a heavy run on the peso in March 1994, the authorities responded by sharply raising domestic interest rates, selling reserves and allowing the peso to fall. By late March 1994, the peso had fallen about 8% below its end-1993 level. Although the immediate political and other tensions eased, doubts about the viability of the peso/dollar exchange rate band persisted, making it increasingly difficult for the authorities, who were reluctant to raise interest rates further, to sell peso-denominated securities. Hence, maturing government debt was replaced by tesobonos – short-

Pressure at first resisted ...

term dollar-linked securities. By the end of the year, tesobonos held outside the banking system amounted to about $21 billion (up from less than $2 billion a year earlier), of which non-resident holdings were put at over $17 billion. At the same time, the commercial banks had incurred significant short-term dollar-denominated debt as well as being exposed to many customers in the same position.

... but in the end overwhelmed the authorities

The subsequent run on the currency in late 1994 – triggered by renewed tensions in Chiapas – came when reserves were already depleted and heavy short-term dollar debt had been incurred. Moreover, domestic interest rates were not increased sharply as they had been in the crisis earlier in the year. In the face of large losses of reserves, the authorities modified the peso's exchange rate band on 20th December 1994, effectively devaluing the floor by 13%. Two days later, as capital flight persisted, the exchange rate was floated. Doubts about the stance of domestic policies and the scale of external financial assistance that would be made available haunted the Mexican financial markets in the weeks that followed. The exchange rate and the stock market plummeted in the early months of 1995 (see Graph VII.1).

Quest for renewed stability

However, a dramatic improvement in the trade balance had become clear by early spring. The announcement of external financial assistance on an unprecedented scale, an IMF-approved stabilisation programme and a sharp increase in short-term interest rates eventually provided some respite for the currency. Between the end of December 1994 and the end of April 1995, more than $7 billion of tesobonos held by non-residents were redeemed. Yet the greater stability of the currency at a much lower value led to an only gradual decline in money market interest rates, which had risen sharply in the early months of 1995, to a little over 50% by mid-May. Since such high nominal rates inevitably drain cash flows, and may turn out to be high in real terms, many bank loans are unlikely to be viable at these rates. Indeed, banks have faced a steep rise in bad loans: one estimate put non-performing loans in April 1995 at 15% of total loans.

It is clear that the recent events have been quite unlike those that surrounded the international debt crisis in the early 1980s: external deficits in Mexico have this time coincided with both microeconomic and macroeconomic "fundamentals" that were healthy by many standards. The current account deficit did not reflect an out-of-control budget deficit as it had before. Moreover, structural reform has greatly increased the economy's flexibility and responsiveness to market signals. As was suggested at the beginning of the chapter, this crisis raises more delicate issues of economic policy than the earlier crisis, which reflected manifest internal imbalances.

The exchange rate as a nominal anchor has advantages ...

An issue of particular importance relates to the use of the exchange rate as a nominal anchor. Exchange rate anchors are clearly suitable in small open economies where foreign trade prices have a dominant influence on domestic price and wage formation. Moreover, they have proved remarkably effective in bringing very high rates of inflation down quickly in several relatively large Latin American countries. The visibility of official exchange rate commitments has facilitated the mobilisation of public support for stabilisation programmes and has encouraged rapid declines in inflation expectations.

Yet in many cases exchange rate anchors cannot be expected to be permanent. If slippage due to the momentum of domestic wage and price formation or overall demand pressures leads to sizable external current account deficits, the credibility of exchange rate commitments can weaken. Confidence may be further weakened if financial fragility is seen as making the central bank less willing to raise interest rates in defence of the exchange rate. Credibility can perhaps be bolstered for a time by encouraging the issuance of public or private foreign currency debt, which raises the potential cost of changing the exchange rate. Private foreign currency indebtedness may also reduce the authorities' ability to stimulate the economy by exchange rate changes. But the danger is that such stratagems simply help to postpone necessary exchange rate adjustments. By strengthening the constraints on policy, they may ultimately increase both the difficulty of defending the anchor and the economic adjustment costs faced when devaluation can no longer be avoided. Unless problems stemming from a loss of competitiveness are addressed by timely exchange rate adjustment, the reduction in inflation may not prove sustainable and policy-makers may be left to grapple with a more acute dilemma.

... if not held too long when slippages occur ...

One issue is how to ensure that an exchange rate based nominal anchor is buttressed by a consistent rate of domestic credit expansion. The use of a currency board in Argentina and Hong Kong provides a rule-based mechanism for constraining policy. Approaches which involve a measure of policy judgement have to cope with the difficulty of interpreting the stance of monetary policy when traditional indicators are being affected by a major financial liberalisation. In the case of Mexico, high real interest rates and an appreciating real exchange rate in the early 1990s suggest a relatively tight stance of policy. Yet the rapid expansion of domestic credit might be taken as indicating excessive ease. An alternative view is that the credit expansion mainly reflected a one-time portfolio adjustment following deregulation. It might well have been difficult to resist it by raising interest rates in the absence of effective exchange controls, which could have attracted further capital inflows. But it seems clear that the credit expansion contributed to an unsustainable increase in consumption. And, as was pointed out above, it exposed banks to various credit, interest rate and currency risks which became evident when markets perceived that the exchange rate based stabilisation course was unsustainable.

... and if not undermined by excessive credit expansion

Another issue concerns the transition from a policy of using the exchange rate as a nominal anchor to bring inflation down, towards a policy geared to achieving a more competitive exchange rate when large external imbalances make this necessary. The Mexican authorities sought to introduce greater flexibility by a gradual widening of the exchange rate band adopted when the exchange rate was under upward pressure in the foreign exchange markets. Yet the resulting band of around 12–13% for the peso did not in the end give sufficient scope for adjusting the real exchange rate downwards. Waiting until reserves have fallen so low that the market forces adjustment considerably constrains the authorities' subsequent room for manoeuvre.

Repercussions in other emerging markets

The very suddenness of the Mexican crisis shook foreign investors and obliged

Contagion ...

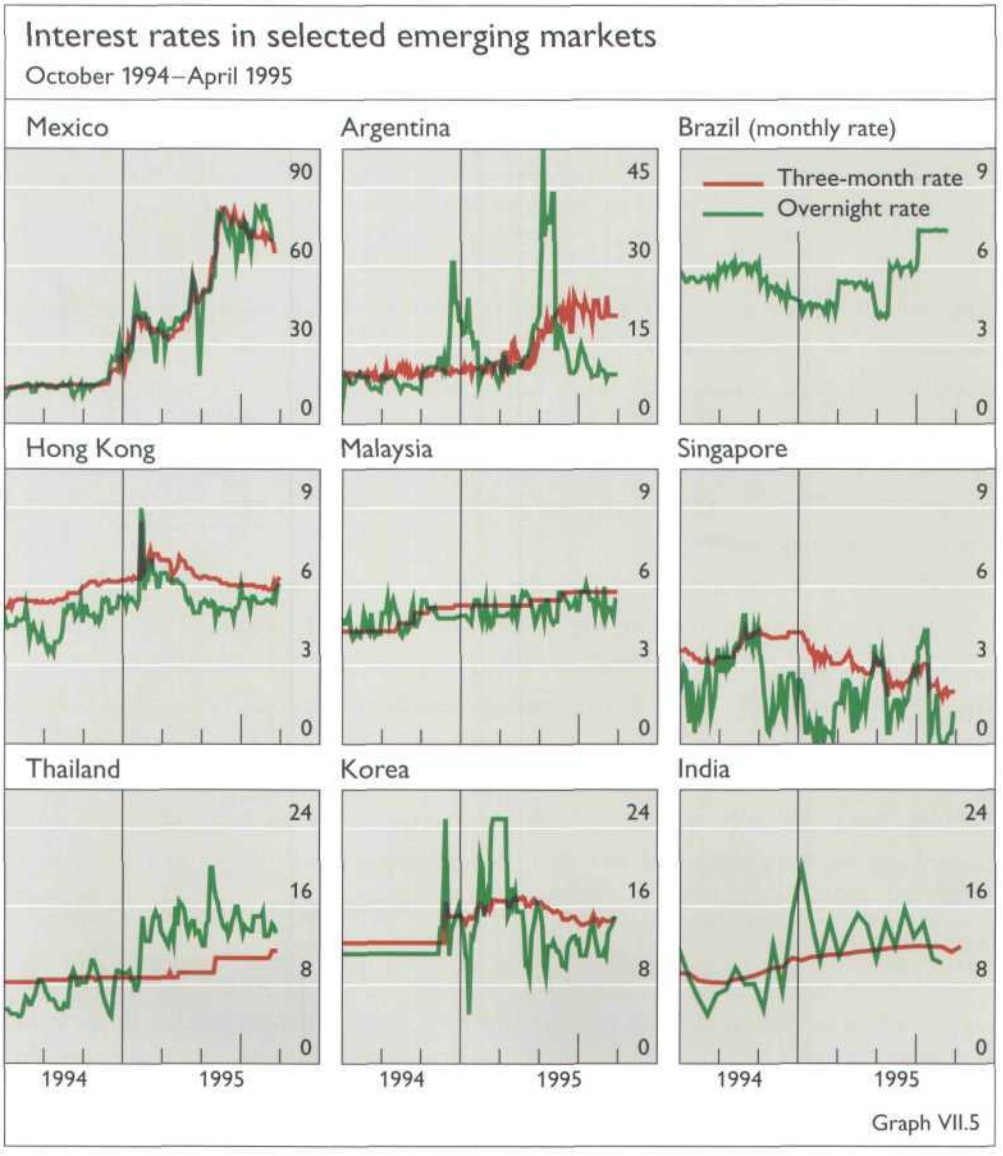
them to reassess the risks of investing in almost all emerging markets. This effect was probably all the stronger given the prominence Mexico had assumed as a leading emerging economy, thanks in no small part to its inclusion in the NAFTA and acceptance as a member of the OECD. International investors often took Mexico as a standard for assessing other emerging economies: for instance, Mexican issues frequently provided the benchmark for the pricing of the international bonds of other emerging economies. In the aftermath of the depreciation of the Mexican peso, access to the international bond market dried up for virtually all Latin American issuers, and conditions became more difficult for Asian borrowers. Equity issuance also declined sharply.

... forces other emerging economies to act

The countries faced with capital outflows had broadly four options open to them: intervention, currency depreciation, reinstating controls and raising interest rates.

Intervention

Intervention was undertaken on a large scale and was particularly heavy in January 1995. This response was facilitated by the substantial build-up of reserves in the developing world in recent years, especially in Asia. By the end of 1994,



Recent financial developments in the emerging markets

	Percentage change in dollar exchange rate[1]	Equity prices, 1994 = 100		Short-term interest rates[2]	
		Dec. 1994 first half[3]	April 1995	Dec. 1994 first half	April 1995
Latin America					
Argentina	– 0.5	90.9	72.9	9.9	21.5
Brazil	– 6.8	122.2	82.8	5.2[4]	7.4[4]
Chile	1.3	116.9	112.1	5.8[5]	6.0[5]
Colombia	– 5.0	87.1	82.0	39.8	36.1
Mexico	–44.3	95.6	44.4	14.7	71.6
Venezuela	0.0	79.6	70.7	24.8	17.7
Asian NIEs					
Hong Kong	0.0	84.8	89.8	6.1	6.0
Korea	3.3	105.6	96.5	12.3	14.5
Singapore	4.9	95.9	96.2	4.1	2.3
Taiwan	3.4	108.1	101.4	9.1	7.4
China	2.1	78.3	67.1	11.0	11.0
Other Asia					
India	– 0.5	95.2	78.2	9.4	11.8
Indonesia	– 2.1	90.6	84.5	13.9	15.5
Malaysia	3.4	91.7	96.2	5.1	5.8
Philippines	– 7.8	97.3	86.5	7.8	10.4
Thailand	2.2	95.0	91.7	8.7	10.9

[1] Change from the first half of December 1994 (average of 1st to 16th) to April 1995 (average). [2] Three-month money market rate (or, where available, bank deposit rate). [3] Average of 2nd, 9th and 16th December. [4] Monthly rate. [5] Real interest rate. Table VII.6

the official foreign exchange reserves held by Asian developing countries amounted to almost $380 billion. In Latin America, reserves were around $100 billion, with particularly large holdings by Brazil. However, the degree of short-term contagion from the Mexican crisis served as a warning of the speed and scale of the reserve losses which might follow a change in sentiment in international financial markets. This may have led some countries to reassess the adequacy of their reserves.

Exchange rates

A currency devaluation was ruled out in Argentina and Hong Kong but some depreciation against the US dollar was accepted in Indonesia, Brazil and Colombia. There was a substantial fall in Argentina's international reserves in the first quarter of 1995; bank deposits declined and parts of the banking system experienced difficulties. A further dollarisation of the economy was accommodated by changes in banks' reserve requirements and government-backed arrangements to assist troubled banks through foreign currency borrowing. In the context of an IMF-approved programme, Argentina announced in March 1995 strong fiscal action aimed at supporting the exchange rate parity with the dollar.

Exchange controls not reimposed

With the exception of Venezuela, which took such action last year, most countries have refrained from reimposing exchange controls on capital outflows, either as a matter of principle or because of the risk of adverse market reactions. However, a number of countries seem to have reconsidered earlier plans for further liberalisation of cross-border flows; in others scheduled domestic

deregulation measures, including interest rate liberalisation, were postponed, Hong Kong being one prominent example.

Higher interest rates

Many central banks raised short-term interest rates sharply, accepting that this might add to downward pressures on the prices of shares and other assets. Large increases in overnight interest rates in many South-East Asian markets, including Indonesia and Hong Kong, were particularly effective in making speculation against the currency more expensive; as pressure eased, they were quickly reversed. In Thailand, where the pressures were more prolonged, the central bank took steps to limit the rise in money market rates and to insulate long-term interest rates with a view to protecting asset markets and the domestic economy. Much stronger and more persistent downward pressures on the currency were reflected in steep rises in short-term interest rates in Argentina and Brazil. In contrast, inflows of capital into Chile and some Asian countries continued. In Singapore short-term interest rates came under increased downward pressure. In Brazil, India, Hong Kong, Indonesia, Malaysia, Singapore and Thailand, administrative measures were used to restrain domestic bank lending.

Most take the shock in their stride ...

For many countries, the aftershocks from Mexico proved to be rather transient and, by early spring, the financial markets' initial worries about the emerging markets had given way to a more discriminating perspective. With the important exception of Brazil, although even there the depreciation was modest, exchange rates recovered (see Table VII.6). Indeed the dollar values of the currencies of Chile, Korea, Malaysia, Singapore, Taiwan and Thailand had, by April 1995, risen above their pre-crisis levels. Except in Chile (which had a strong economic performance), Latin American equity values had not recouped much of their earlier losses by April 1995. In dollar terms, Brazil's market has fallen the most (after Mexico), followed by Argentina. With the exception of India, most Asian markets rebounded strongly.

... markets rebound ...

In sum, recent experience has been that, once the initial shock had been absorbed, the financial markets in most other emerging markets proved rather resilient. And investors appeared to look more closely at individual markets, favouring those where economic policies and underlying prospects were sound.

... and some countries tighten policy

This has prompted a number of countries to redouble efforts to tighten macroeconomic policies; an enduring easing of financial market tensions will depend on the successful implementation of these policies.

Nonetheless, aggregate portfolio inflows into the emerging markets are likely to decline this year. Financial markets appear to have become less tolerant of current account deficits that are not based on high domestic investment rates. This change of sentiment may well prove salutary. A reduced level of inflows would indeed be welcome in those Asian countries that are facing overheating. Moreover, some Latin American countries could cope better if inflows were more evenly spread over time – rather less now but with a greater assurance of continuity in the future.

Persistence with the important economic reforms begun in the 1980s, tempered with a clearer recognition of the dangers of excessive reliance on volatile forms of external finance, should ensure that substantial capital flows will continue to promote growth in the developing world in the years ahead.

VIII. International financial markets

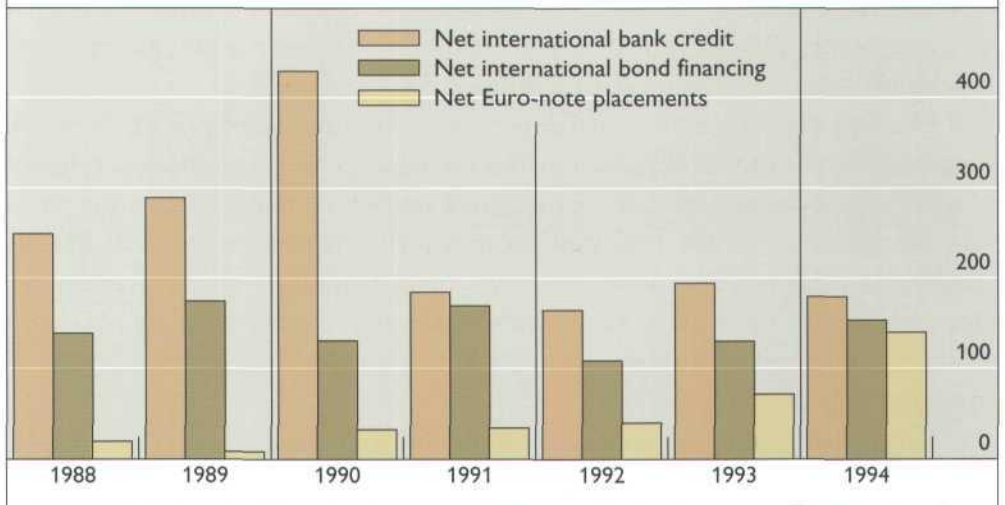
Highlights

The international financial markets underwent a major adjustment following the global bond market reversal of February 1994. The unwinding of leveraged foreign securities positions led to massive repayment of, essentially short-term, cross-border bank credit. At the same time, international banks benefited on the deposit side from the preference shown by investors for more liquid assets. Although such deposits were largely rechannelled by commercial banks to their own domestic economies, limited lending opportunities in many countries created an ample supply of funds which was available for international syndicated loans, as well as for interbank and trade financing to the developing world. The simultaneous reduction in the supply of long-term capital and in the demand for short-term bank financing by non-bank customers may have contributed to the steepening of the yield curve observed in major European currency sectors. By the same token, the parallel reduction in supply and demand in currencies most affected by the reappraisal of international investment strategies helped, at least until the beginning of this year, to minimise the exchange rate repercussions of the change in bond market sentiment.

The ability of the international securities markets to adapt to rapidly changing market conditions took total issuance of international bonds and Euro-notes to new highs in 1994. The upsurge in activity was even stronger after allowance is made for the slowdown in debt repayment, with total net issues of

Activity in international financial markets

In billions of US dollars



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

Estimated net financing in international markets

Components of net international financing	Changes[1]						Stocks at end-1994
	1989	1990	1991	1992	1993	1994	
	in billions of US dollars						
Total cross-border claims of reporting banks[2]	684.7	614.7	– 48.0	186.6	317.4	268.4	7,103.2
Local claims in foreign currency	130.7	130.2	– 61.4	–39.9	–0.9	–5.1	1,269.9
minus: Interbank redepositing	*525.4*	*314.9*	*–294.4*	*–18.3*	*121.5*	*83.2*	*4,133.0*
A = Net international bank credit[3]	290.0	430.0	185.0	165.0	195.0	180.0	4,240.0
B = Net Euro-note placements	8.0	33.0	34.9	40.4	72.1	140.2	406.1
Total completed international bond issues	264.5	239.8	319.7	332.6	437.1	381.8	
minus: Redemptions and repurchases	*89.7*	*108.9*	*149.9*	*223.5*	*306.8*	*227.9*	
C = Net international bond financing	174.9	131.0	169.9	109.0	130.3	153.9	2,047.6
D = A + B + C = Total international financing	472.9	594.0	389.8	314.4	397.5	474.1	6,693.7
minus: Double-counting[4]	*57.9*	*79.0*	*34.8*	*69.4*	*127.5*	*69.1*	*863.7*
E = Total net international financing	415.0	515.0	355.0	245.0	270.0	405.0	5,830.0

Note: The inclusion for the first time at end-September 1990 of the positions of banks in the five eastern German Länder added about $20 billion to the recorded expansion in the cross-border claims of reporting banks. At the same time, positions vis-à-vis the former German Democratic Republic have been reallocated to Germany.

[1] Banking and, from 1990, Euro-note placement data relate to changes in amounts outstanding at constant end-of-quarter exchange rates; bond financing data relate to flow figures converted at exchange rates prevailing on announcement dates. [2] 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] International bonds taken up by the reporting banks, to the extent that they are included in the banking statistics as claims on non-residents. Table VIII.1

international securities rising by 45% compared with 1993. The flexibility offered by Euro-note programmes led to a near-doubling of the volume of funds raised in this sector, but adjustments in the characteristics of issues also sustained primary activity in the international bond market. Adaptation to the more defensive posture of international investors was reflected in a shift to floating rate notes and shorter-term fixed rate instruments. It also led to greater recourse to the vast pool of resources available in yen in the wake of Japanese investors' move back to domestic currency assets. Although the markets accommodated a wider range of borrowers, the change in market sentiment in the course of the year was associated with a widening of spreads according to credit quality. This was most evident in December, when the Mexican crisis had adverse repercussions not only for developing countries but also for market access by certain developed countries. There were also signs of renewed capital outflows from Latin America towards the end of the year.

The reversal in the interest rate climate heralded the beginning of what may prove to have been a watershed year for the derivatives markets. The trading of interest rate instruments expanded strongly in the first half of the year, following the turbulence in bond markets, and highlighted the role of these instruments both in transmitting new market conditions across maturities and currencies and in facilitating portfolio adjustment when liquidity in underlying markets weakens. At the same time, significant losses emerged among users of derivative products. The resulting adverse publicity and loss-related litigation made for less favourable conditions in the over-the-counter markets for the

remainder of the year. The collapse of Baring Brothers further underscored the risks to institutions when internal risk controls fail, and demonstrated the need for improvements in this area. Efforts to this end, as well as to improve market transparency and infrastructure, rather than restrictive legislation, were also reflected in the main official initiatives taken in the period under review.

The international banking market

Offsetting influences meant that the growth of the total international claims of reporting banks remained subdued last year. On the one hand, the unwinding of positions taken earlier in European currency and debt markets led to massive repayments of bank credit. Since such loans had been funded not only directly from the national banking systems but also through the corresponding Euro-currency sectors, the rise and fall in such transactions had a multiplying effect on the gross data inclusive of interbank flows. The turnaround mostly involved continental European currencies, which suggests that a high volume of hedged and/or leveraged transactions had previously taken place in those sectors (see Chapter V). On the other hand, loan repayments and the parallel shift away from longer-term fixed rate instruments left financial intermediaries with ample liquidity. While a large proportion of the funds was rechannelled to banks' own domestic economies, limited lending opportunities in several markets meant that

Massive loan repayments ...

... leave banks with ample liquidity

Main features of international banking activity

Uses and sources of international bank credit	Changes, excluding exchange rate effects				Stocks at end-1994
	1991	1992	1993	1994	
	in billions of US dollars				
A = Claims on outside-area countries	6.8	66.1	10.8	39.0	879.8
B = Claims on entities within the reporting area	–166.6	81.4	252.6	214.7	7,312.1
(1) Claims on non-banks	*100.8*	*89.6*	*126.3*	*–47.1*	*2,084.0*
(2) International financing of banks' domestic lending	*77.0*	*10.1*	*4.8*	*178.6*	*1,095.1*
(3) Interbank redepositing	*–294.4*	*–18.3*	*121.5*	*83.2*	*4,133.0*
C = Unallocated	0.4	– 0.8	53.1	9.5	181.1
D = A + B + C = Total international claims of reporting banks	–109.4	146.7	316.5	263.2	8,373.0
E = D – B *(3)* = Net international bank credit	185.0	165.0	195.0	180.0	4,240.0
A = Liabilities to outside-area countries	– 11.7	13.3	–18.2	75.5	794.0
B = Liabilities to entities within the reporting area	–208.8	92.4	114.7	528.3	7,049.8
(1) Liabilities to non-banks	*15.2*	*104.4*	*87.1*	*132.2*	*1,536.9*
(2) Domestic funding of banks' international lending	*117.7*	*41.6*	*78.4*	*–60.2*	*1,375.5*
(3) Interbank redepositing	*–341.7*	*–53.6*	*–50.7*	*456.3*	*4,137.4*
C = Unallocated	63.9	5.6	47.8	32.5	533.6
D = A + B + C = Total international liabilities of reporting banks	–156.7	111.4	144.3	636.3	8,377.4
*Memorandum item: Syndicated credits**	*136.7*	*221.4*	*220.9*	*252.0*	

* Announced new facilities, excluding non-spontaneous medium-term credit and renegotiated loans where only spreads are changed.

Table VIII.2

Currency composition of banks' cross-border claims*

Currencies	Domestic currency					Foreign currency				
	Changes, excluding exchange rate effects				Stocks at end-1994	Changes, excluding exchange rate effects				Stocks at end-1994
	1991	1992	1993	1994		1991	1992	1993	1994	
	in billions of US dollars									
All currencies	20.8	7.3	189.3	−81.8	1,828.9	−74.2	179.2	127.8	189.8	3,595.6
US dollar	1.6	−18.4	−13.0	− 5.1	477.4	−78.0	78.5	23.5	132.3	1,867.5
Deutsche Mark	− 6.4	−16.0	75.5	−36.7	257.5	−10.5	75.6	43.5	21.5	576.0
Japanese yen	20.8	−28.5	− 4.0	24.0	569.5	−43.6	−43.9	−20.3	24.7	183.6
French franc	5.5	49.5	42.9	−32.8	128.0	14.0	6.9	10.6	− 7.0	105.4
Pound sterling	−10.0	24.0	15.1	1.4	105.8	−18.7	12.9	− 6.9	9.7	113.4
Swiss franc	− 8.2	− 8.5	− 0.4	− 2.2	95.3	1.1	4.2	−18.4	0.9	119.1
Italian lira	3.3	2.8	17.7	−16.0	49.4	20.1	8.5	33.3	20.7	121.1
Spanish peseta	1.7	10.6	36.2	− 7.5	41.1	..	..	..	..	..
ECU						15.8	12.3	4.8	−20.0	152.4
Other	12.6	− 8.1	19.4	− 6.8	105.0	25.7	24.2	57.8	7.0	356.9

* Banks in industrial reporting countries only. Table VIII.3

a high volume of loanable funds also became available in the international market. This provided strong incentives to arrange syndicated loans and to respond to the revival of demand for short-term capital in parts of the developing world. The overall result was a 4% expansion in total international bank credit net of interbank redepositing.

Developments by currency

Reversal of positions taken in European currencies in 1992–93

The most significant turnaround in the gross banking aggregates between 1993 and 1994 was recorded in the Deutsche Mark and French franc sectors and affected primarily the external claims of the German and French banking systems. This development was a direct consequence of both the ERM crisis and the growing intertwining of bank credit and securities business observed in recent years. Thus, a strong rise had been recorded in 1992–93 in outright credit and in lending against securities (repos), either for hedging purposes or for the taking of new positions in individual currencies. In particular, demand for DM-denominated securities had boosted international banking activity in that currency in 1993, while both hedging and speculative demand for French franc paper had resulted in a similar expansion of French franc denominated business. To a considerable extent, these positions were reversed in 1994. There was also evidence of a similar tendency in smaller European currency sectors, those of the Italian lira and the Spanish peseta in particular, albeit on a lesser scale. Of significance in the European context was the absolute contraction recorded by the ECU banking market (12%), the largest decline among the various currency sectors of the Euro-market.

Strong expansion of business denominated in dollars and yen

The reversal of positions in European currency sectors in 1994 contrasted with the expansion of cross-border claims in dollars and yen. The buoyancy of the US economy led companies in that country to increase their recourse to the international market, while subdued demand for dollar loans abroad enabled the

US banking system to finance itself more cheaply in the Euro-dollar interbank market than internally. Growth in yen-denominated cross-border lending, on the other hand, was related to the international demand for yen assets, as well as domestic round-tripping through neighbouring offshore centres, and followed a sharp retreat in the preceding three years.

Activity by reporting centre

An examination of cross-border activity by reporting centre reveals that declines in assets were often accompanied by increases in liabilities, which accentuated the net currency flows recorded through individual banking systems. In the case of banks in Germany and France, for instance, repayments of domestic currency loans by non-residents were accompanied by large deposit accruals from abroad. These resulted for the year in net inflows through banks of $97.5 billion and $46.6 billion respectively, which more than financed the deficits on long-term capital account. The magnitude of these net supplies of (predominantly short-term) funds to banks and the associated shift out of long-term paper by international investors are consistent with the steepening of the yield curve and the absence of exchange rate pressures on the Deutsche Mark and the French franc in 1994.

Large net inflows through banks in Germany and France ...

Net banking inflows into the United States were also large ($115.1 billion). Such net financing of the country's external deficit on other accounts involved not only the rechannelling to the domestic financial system of funds initially exported by resident entities for tax and regulatory reasons, but also the recycling through the Euro-market of foreign official dollar reserves (see Chapter VI). In the case of banks in Japan, the net outflow recorded for the year as a whole ($19.3 billion) concealed sharp swings within the year, with the shift

... as well as in the United States ...

... but net outflows through banks in Japan

Cross-border banking activity in individual reporting centres

Country of residence of reporting banks	Assets					Liabilities				
	Changes, excluding exchange rate effects				Stocks at end-1994	Changes, excluding exchange rate effects				Stocks at end-1994
	1991	1992	1993	1994		1991	1992	1993	1994	
	in billions of US dollars									
All countries	−48.0	186.6	317.4	268.4	7,103.2	−121.8	91.1	50.5	552.1	7,134.8
United Kingdom	−51.9	87.7	49.3	97.3	1,199.8	− 43.7	63.1	38.2	85.2	1,278.1
Japan	−35.9	−57.9	− 6.6	22.3	1,007.6	−127.9	−128.8	−38.8	3.0	723.7
United States	6.8	−24.7	−17.1	−17.0	531.8	1.2	38.2	27.1	98.1	820.7
France	−14.5	75.0	70.3	−24.1	526.8	18.7	23.6	13.6	22.5	550.6
Germany	10.2	6.1	95.1	−12.8	469.2	12.3	50.4	43.1	84.7	411.9
Switzerland	− 6.5	6.0	−12.3	22.2	404.3	0.1	3.8	− 9.7	33.7	338.3
Netherlands	7.3	6.0	4.7	− 8.1	176.6	3.2	17.8	5.0	1.0	169.5
Italy	4.5	4.2	13.6	−20.6	136.6	25.0	31.4	−19.8	1.1	230.2
Spain	8.3	25.4	55.6	−11.8	110.6	9.9	14.8	9.1	10.9	103.2
Caribbean centres	8.5	−23.9	−10.4	67.1	640.1	12.4	− 30.2	−25.6	66.7	638.8
Asian centres	− 3.2	24.0	10.6	93.2	1,038.6	− 21.9	19.6	− 2.3	86.2	997.4
Other countries	18.4	58.6	64.5	60.7	861.2	− 11.0	− 12.5	10.7	59.0	872.5

Table VIII.4

Banks' cross-border business with non-bank entities inside the reporting area

Positions of banks vis-à-vis	Changes, excluding exchange rate effects								Stocks at end-1994	
	Assets				Liabilities					
	1991	1992	1993	1994	1991	1992	1993	1994	Assets	Liabilities
	in billions of US dollars									
All countries	89.1	134.4	163.5	–21.8	4.5	59.3	56.4	90.6	1,513.5	1,164.7
United States	5.6	29.7	33.3	– 1.7	–12.1	–9.1	–9.0	35.2	341.1	284.9
Japan	44.1	12.3	12.9	10.2	– 5.7	–0.3	–3.2	3.8	310.8	23.3
Germany	9.5	35.0	33.0	– 2.7	11.7	30.8	24.2	–6.9	158.2	200.7
United Kingdom	5.6	1.7	37.9	–19.0	3.9	–2.1	8.5	8.4	99.6	81.7
Italy	8.0	9.2	8.3	2.5	3.2	5.4	1.0	1.2	92.9	40.4
Netherlands	4.7	– 1.9	2.0	– 3.9	4.7	9.1	13.7	13.4	61.8	87.7
Canada	3.4	3.1	4.0	0.8	– 3.6	–1.7	–0.9	1.0	49.1	13.2
France	2.2	6.6	13.0	– 3.4	– 0.1	7.0	–0.4	3.6	47.0	47.8
Belgium*	0.9	– 0.4	1.9	– 0.7	0.0	5.8	6.7	4.7	33.1	50.6
Sweden	1.5	15.2	– 4.3	– 4.0	0.6	–0.8	1.6	–0.2	25.7	4.8
Switzerland	–1.3	1.8	– 0.3	1.0	1.3	1.6	0.4	2.2	23.5	58.5
Other countries	4.8	22.2	21.8	– 0.7	0.4	13.8	13.8	24.3	270.9	271.1
Memorandum item: Banks' local positions in foreign currency	*11.7*	*–44.8*	*–37.2*	*–25.4*	*10.7*	*45.1*	*30.7*	*41.6*	*570.4*	*372.2*

* Including Luxembourg.

Table VIII.5

from net exports in the first quarter to net imports thereafter mirroring developments in cross-border securities positions.

Upsurge in business booked in offshore centres

Another feature of the activity by location of transactions was the upsurge in cross-border business booked in reporting offshore centres. There was a record volume of lending through Hong Kong, which was second only to the United Kingdom in terms of total market expansion last year ($76.5 billion and $97.3 billion respectively). While international banking activity in the latter country was related to business within Europe and with the United States, business in Hong Kong reflected buoyant lending conditions in Asia and the particular role of that centre in intermediating funds between Japan and China. There was at the same time a recovery in banking intermediation through Caribbean centres, owing primarily to the pick-up of credit demand in the US economy. Active external borrowing by banks located in the United States facilitated the rechannelling to that country of deposits placed in Caribbean centres.

Business with non-banks inside the reporting area

Strong depositing by non-bank entities ...

Non-bank entities within the reporting area were a primary source of funding for the market. In fact, the 9% rise in their deposits represented nearly three-quarters of total net international bank credit. The supply of non-bank funds from within the reporting area was boosted by a renewed build-up of Euro-deposits by US entities ($35.2 billion), subsequently rechannelled to the US economy through the Caribbean centres. On the other hand, German non-bank residents withdrew some $6.9 billion from the Euro-market, as the lowering of the

minimum reserve requirements by the Bundesbank as from March 1994 and the newly authorised money market mutual funds in Germany reduced the relative attractiveness of Deutsche Mark deposits outside Germany.

... not matched by lending to non-bank customers

In spite of large-scale depositing by non-banks, reporting banks pared down their international claims on non-bank customers located within the reporting area by $47.2 billion. In several countries, especially Japan, Sweden and Italy, the corporate sector continued to reduce its foreign currency denominated debt to domestic and foreign banks. Moreover, non-bank entities located in Euro-currency centres repaid loans denominated in European currencies as earlier position-taking in currencies and securities markets was unwound. Most affected by this development were reporting banks' claims on UK entities, which include a large number of international non-bank financial intermediaries.

Business with countries outside the reporting area

Buoyant lending to Asia but subdued credit to other regions ...

The $39 billion rise in reporting banks' outstanding claims on the group of countries outside the reporting area was more than accounted for by Asia. Although the sharp reduction in claims on eastern Europe suggests that banks remained selective in their lending policy, transfers of guaranteed credit to official agencies and increased payments of principal or interest (by Bulgaria, Poland and Hungary, in the first two cases in connection with debt rescheduling agreements) accentuated the decline. Moreover, net repayments made by the group of developed countries reflected either an active repayment policy (New Zealand) or greater recourse to international securities issuance (Australia). A massive withdrawal of short-term interbank lines to Turkey, following the acceleration in the rate of currency depreciation in March and April 1994, also contributed to the subdued pace of overall lending. In the case of Latin America, the rise in reporting banks' claims was more than accounted for by Mexico ($7.6 billion), Argentina ($2.9 billion) and Chile ($2.1 billion). These increases were, however, partially offset by the impact of the Brazilian debt reduction agreement completed in April 1994 and the retrenchment in Venezuela in the wake of the domestic

... except for some major countries in Latin America

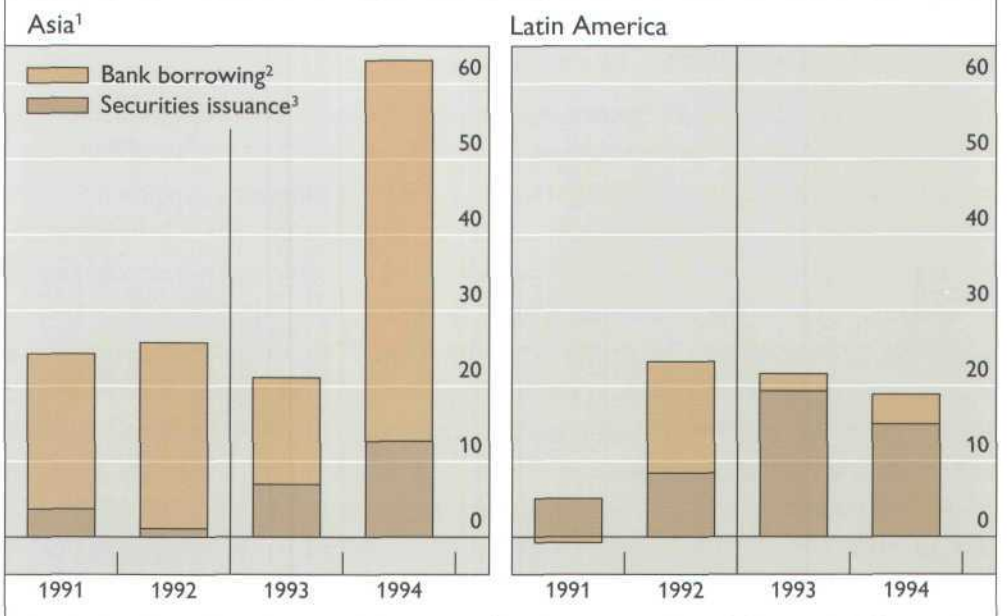
Banks' business with countries outside the reporting area

Positions of banks vis-à-vis	Changes, excluding exchange rate effects						Stocks at end-1994	
	Assets			Liabilities				
	1992	1993	1994	1992	1993	1994	Assets	Liabilities
	in billions of US dollars							
Total outside area	66.1	10.8	39.0	13.3	−18.2	75.5	879.8	794.0
Developed countries	7.0	5.0	− 2.3	11.2	10.1	21.7	161.5	148.9
Eastern Europe	3.9	−3.8	−13.3	9.7	2.6	2.0	80.4	35.9
of which: Former Soviet Union	*5.9*	*−1.9*	*− 5.0*	*5.8*	*2.2*	*−0.8*	*53.6*	*16.1*
Developing countries	55.2	9.7	54.7	−7.6	−31.0	51.8	637.9	609.2
Latin America*	14.8	2.3	4.0	−2.1	− 6.8	22.1	231.6	159.3
Middle East	16.0	−5.4	3.1	−6.9	−20.3	2.7	80.1	194.5
Africa	−1.2	−2.0	− 2.0	2.6	0.4	3.2	39.6	41.3
Asia	25.7	14.8	49.6	−1.3	− 4.2	23.8	286.6	214.1
of which: China	*6.2*	*5.7*	*7.8*	*1.8*	*0.5*	*10.3*	*57.4*	*60.0*

* Including those countries in the Caribbean area which are not classified as offshore banking centres. Table VIII.6

International bank borrowing and securities issuance

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 Euro-notes and international bonds.

Sources: Bank of England, Euroclear, ISMA, national data and BIS. Graph VIII.2

banking crisis. New credit to Latin American countries should be set against the slowdown in their recourse to the international securities markets, with the non-renewal of maturing claims on Venezuela as well as, towards the end of the year, on Mexico.

In Asia, bank lending continues to predominate

In contrast, banks were particularly active in developing countries in Asia. Despite their increasing use of domestic and international securities markets, borrowers from the area raised a record $49.6 billion from reporting banks. In addition to the continuing high volume of syndicated loans, this group of countries recorded large inflows of short-term interbank funds. The figure for lending to the area excludes loans to entities in Hong Kong (a reporting centre), which are used extensively by Chinese companies to raise funds indirectly on the international market. There was a heavy concentration of credit on Thailand ($20 billion) and Korea ($15.2 billion), while China ranked a distant third with $7.8 billion in direct borrowing from reporting banks. The large volume of banking flows to the first two countries can largely be explained by special circumstances: in Thailand, the setting-up of the Bangkok International Banking Facility in 1993; and in Korea, the tightening of monetary conditions in the latter part of 1994. This contrasts with the situation in the international securities markets, where the growth of Asian borrowing (from $7 billion in 1993 to $12.7 billion) was more evenly spread among the major economies of the region.

Another feature of banks' relations with outside-area countries in 1994 was the large volume of new deposits received from the group ($75.5 billion). These represented in part the placement of official reserves by a wide range of countries as the counterpart to large private capital inflows. On the other hand,

the substantial share of the private non-bank sector in the new deposits received from Latin America (45% of total deposits from that region) reflected a resumption of capital outflows following three years of repatriation.

Renewed capital outflows from Latin America

International syndicated loans

The syndicated bank credit sector was one of the most active segments of the international financial markets last year, with an all-time high of $252 billion of credits arranged, up from $220.9 billion in 1993. Refinancing transactions on better terms accounted for about one-quarter of the total, which still implies a record level of net new financing. The high level of liquidity and strong capital positions of several major banking groups moved conditions clearly in favour of borrowers: the average size of spreads over LIBOR for dollar credits declined, from a peak of 120 basis points in the third quarter of 1992 to less than 50 points in the fourth quarter of 1994; the average maturity of loans lengthened slightly; and covenant clauses were relaxed. There was in particular a marked increase in the volume of facilities arranged for public sector borrowers, often at very low spreads. Other factors which stimulated syndicated credit activity included the difficulty of arranging fixed rate financing in an unsettled interest rate environment and an increase in mergers and acquisitions, which can be more easily accommodated by the flexibility and tailor-made nature of syndicated facilities. Competition between lenders to win loan mandates was heightened by the entry of new intermediaries, in particular US investment banks. Moreover, the development of market-making, progress in document standardisation and the introduction of clauses protecting lenders against early redemption further encouraged the development of loan trading, and therefore the participation of institutional investors such as life assurance companies and pension funds. This contributed to a further blurring of the distinction between loans and securities.

Record volume of syndicated loans ...

... in a context of intense competition between lenders

The international securities markets

Total net issues of Euro-notes and international bonds soared by 45% between 1993 and 1994. While the greater flexibility offered by Euro-note programmes favoured issuance in that sector, partly at the expense of traditional Euro-bonds, adjustments in the characteristics of issues also sustained primary activity in the international bond market. The more cautious mood of international investors was reflected in a move to shorter-term securities and floating rate assets, as well as a decline in complex structures. As the year progressed, there was growing sensitivity to the credit quality of issuers, which manifested itself in a change in the composition of borrowers.

Continuing buoyancy of international securities financing

The short and medium-term Euro-note market

The Euro-note market continued to grow rapidly in 1994. Announcements of new facilities surged to $197.2 billion, bringing the cumulative total of Euro-note programmes launched to almost $1 trillion. At the same time, total drawings under existing facilities nearly doubled (to $140.2 billion), bringing the stock of notes outstanding to $406.1 billion by the end of the year. Euro-medium-term notes (EMTNs) further consolidated their dominant position, accounting for

EMTNs consolidate their dominant position ...

Borrowing in the securities markets by type and currency of issue

Type and currencies	Net issues[1]								Amounts outstanding at end-1994	
	Domestic[2]				International[3]				Domestic[2]	International[3]
	1991	1992	1993	1994	1991	1992	1993	1994		
	in billions of US dollars									
Total borrowing	1,351.3	1,417.1	1,590.4	1,463.3	204.8	149.4	202.5	294.1	21,974.7	2,453.7
Short-term notes[4]	114.1	137.0	87.5	181.8	16.5	12.1	−6.3	3.3	3,846.8	114.1
US dollar	27.6	23.1	42.5	84.7	10.2	14.6	−8.1	−4.2	1,643.4	81.9
Japanese yen	−63.9	14.8	29.3	−2.6	−0.3	−0.2	−0.4	2.2	646.7	2.5
French franc	37.4	26.3	−16.6	16.7	0.0	0.2	−0.3	0.0	372.1	0.0
Pound sterling	− 4.8	−10.2	3.3	20.8	0.3	0.0	2.6	0.5	131.5	5.1
Deutsche Mark	24.5	0.7	− 7.7	−2.1	1.2	2.5	−0.7	3.1	23.5	6.2
Other[5]	93.3	82.3	36.7	64.4	5.1	−5.0	0.6	1.6	1,029.7	18.5
Medium-term notes	45.0	93.4	65.8	32.6	18.4	28.3	78.4	136.9	349.5	292.0
US dollar	42.4	34.4	34.0	23.6	7.0	11.2	31.3	40.5	234.3	104.6
Japanese yen	0.0	0.0	0.0	0.0	0.8	3.6	18.3	59.3	0.0	87.2
French franc	0.0	55.9	24.2	3.3	0.2	0.5	2.0	4.1	87.7	7.0
Pound sterling	1.2	3.4	7.0	5.4	1.4	2.8	6.2	6.9	18.0	17.8
Deutsche Mark	..	..	..	..	0.3	2.1	6.0	6.8	..	16.1
Other[5]	1.4	− 0.3	0.6	0.3	8.8	8.1	14.6	19.3	9.5	59.3
Bonds	1,192.3	1,186.7	1,437.1	1,248.9	169.9	109.0	130.3	153.9	17,778.4	2,047.6
US dollar	568.0	554.9	606.9	503.1	37.9	31.0	10.8	41.5	7,891.0	728.1
Japanese yen	141.5	141.6	175.2	292.5	20.5	5.9	15.8	47.4	4,103.7	325.1
French franc	31.6	35.8	56.1	33.4	15.9	20.7	33.1	23.5	636.7	125.8
Pound sterling	13.9	43.3	67.0	29.1	20.6	9.2	22.9	7.6	362.5	155.9
Deutsche Mark	125.9	189.5	217.7	127.2	11.2	20.0	25.9	17.8	1,642.6	222.0
Other[5]	311.4	221.6	314.2	263.6	63.7	22.2	21.9	16.1	3,141.9	490.7

[1] Changes in amounts outstanding at constant exchange rates, except for data on international bonds, which are on a flow basis. [2] Issues by residents and (for notes) non-residents in local currency in the local market; OECD countries only, excluding Iceland and Turkey. [3] Issues by residents in foreign markets and in foreign currency in the local market; for notes, excluding local currency issues in foreign markets. [4] Data on domestic issues relate to certificates of deposit, commercial paper and Treasury bills; data on international issues relate to Euro-commercial paper and other short-term Euro-notes. [5] Including the ECU.

Sources: Bank of England, Euroclear, ISMA, national authorities and BIS. Table VIII.7

virtually the whole of total net Euro-note issuance and for 72% of the stock outstanding at end-1994. In particular, strong demand by Japanese investors for yen-denominated assets supported issuance in that currency, which ranked first in terms of net Euro-note issuance, with 44% of the total. Rapid expansion was also recorded in several European currencies, including the Deutsche Mark, the lira, sterling and the French franc. Non-dollar issues now account for over 50% of the total stock of outstanding Euro-notes.

In the *short-term Euro-note market*, growth in outstanding notes was marginal. While the stock of dollar paper declined by 5%, mirroring foreign issuing activity in the US commercial paper market, the 44% expansion in non-dollar issuance – largely in Deutsche Mark, Dutch guilders and yen – reflected the rapid growth of recently authorised markets. In the Deutsche Mark segment, in particular, the limited range of short-term paper available in the domestic market boosted demand from German money market funds. The stagnation of the Euro-

commercial paper (ECP) market in recent years can be explained by the cyclical weakness in the demand for working capital in a number of countries, attempts by corporate borrowers to trim their debt burdens and the opportunities for issuing short-term paper under the umbrella of EMTN programmes. It is also worth noting that, except in the United States, most other major domestic CP markets have either contracted or stagnated since 1992.

... as the ECP market remains stagnant

The *EMTN market* continued to expand much more rapidly than its US counterpart, exceeding the latter in size by 25% at the end of 1994. The climate of interest rate uncertainty and the high degree of flexibility with respect to drawings in terms of maturity, currency, size, interest rate exposure and derivative features supported market growth. The standardisation of documentation, which allows issues to be launched efficiently and at lower cost, has encouraged Euro-bond issuance as well as private placements under EMTN programmes. The trend towards fully underwritten transactions has also contributed to a further blurring of the distinction between Euro-bonds and notes issued under EMTN programmes.

Investors become more cautious ...

Detailed information by type of drawing is not available, but the more cautious behaviour of investors last year appears to have been reflected in a reduction in the average maturity and size of notes and a higher proportion of floating rate instruments. There was a drying-up of structured notes, which had been an important factor in market growth in 1993, when they reportedly accounted for a large part of business. Finally, although global facilities were announced by a number of borrowers, this did not appear to represent a clear trend given that such arrangements continued to consist of separate US and EMTN facilities.

The international bond market

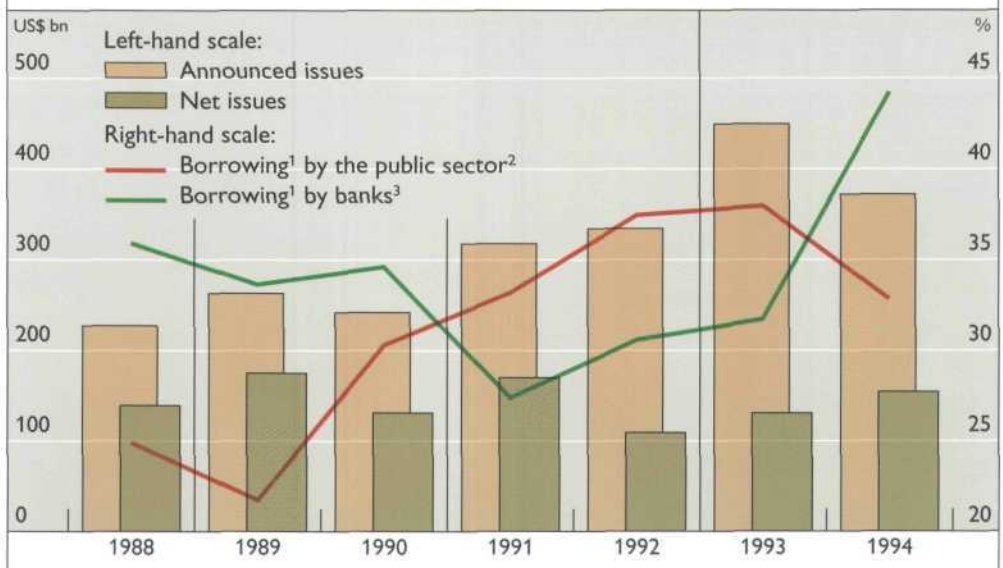
... but this is reflected in the structure rather than in the volume of issuance

In spite of unsettled market conditions and a sharp fall in repayments from the unprecedented level of 1993, gross announcements of international bond issues declined by only 17% from their record 1993 figure, to $371.8 billion. Indeed, net financing actually increased by 18% to reach $153.9 billion. However, the new interest rate environment and the resulting defensive posture adopted by investors and borrowers were reflected in the composition of bonds, with a smaller volume of fixed rate issues and considerably more floating rate paper. A reduction in the average maturity and size of issues and in the number of complex structures was also recorded. The strong demand for yen assets on the part of Japanese investors encouraged issuance in that currency. There was, moreover, a change in the mix of borrowers, with an increase in the share of financial institutions and a marked drop in the funding of international financial institutions. Financing by developing country borrowers remained high, with the slowdown in issues from Latin America being largely offset by a greater volume of financing for a widening range of other developing country entities.

Increasing concerns about credit quality

As the year progressed, international investors became increasingly concerned about the credit quality of issuers, in both developing and industrial countries, particularly those with large budget deficits and/or high levels of indebtedness. This increased the relative attractiveness of prime quality financial and industrial borrowers in countries perceived to be highly creditworthy. The

The international bond market



[1] As a percentage of total announcements. [2] Governments, state agencies and international institutions. [3] Commercial banks and other financial institutions.

Sources: Bank of England, Euroclear, ISMA and BIS. Graph VIII.3

reappraisal of credit quality became even more stringent at the end of the year, when the Mexican crisis had repercussions throughout Latin America and, to a lesser extent, Asia. This led to sharp declines in secondary market prices and less favourable conditions in the primary markets.

Rapid rise in secondary market turnover ...

Secondary market turnover reported by the international clearing houses rose by 29% compared with 1993, to $24.4 trillion. The offloading of paper on the secondary market pushed trading to record levels in the first quarter. The increase in turnover for the year was more pronounced for domestic bonds (34%) than for Euro-bonds (18%), where much of the rise was accounted for by floating rate notes. The marked expansion of trading was due to a confluence of factors, including uncertainty and volatility in global bond markets, more efficient and open domestic debt markets and the growth of repurchase transactions. However, inventory losses and more difficult trading conditions strongly affected the profitability of market-makers, leading some to pare down their inventories and even to withdraw from some segments of the market. Pressures on profit margins were also evident in the primary market, where competition to win underwriting mandates was intense and made it very difficult to maintain established syndication arrangements. Investors' preference for shorter-term assets and the reduction in market-makers' inventories reportedly constrained liquidity in some longer-term Euro-bond instruments.

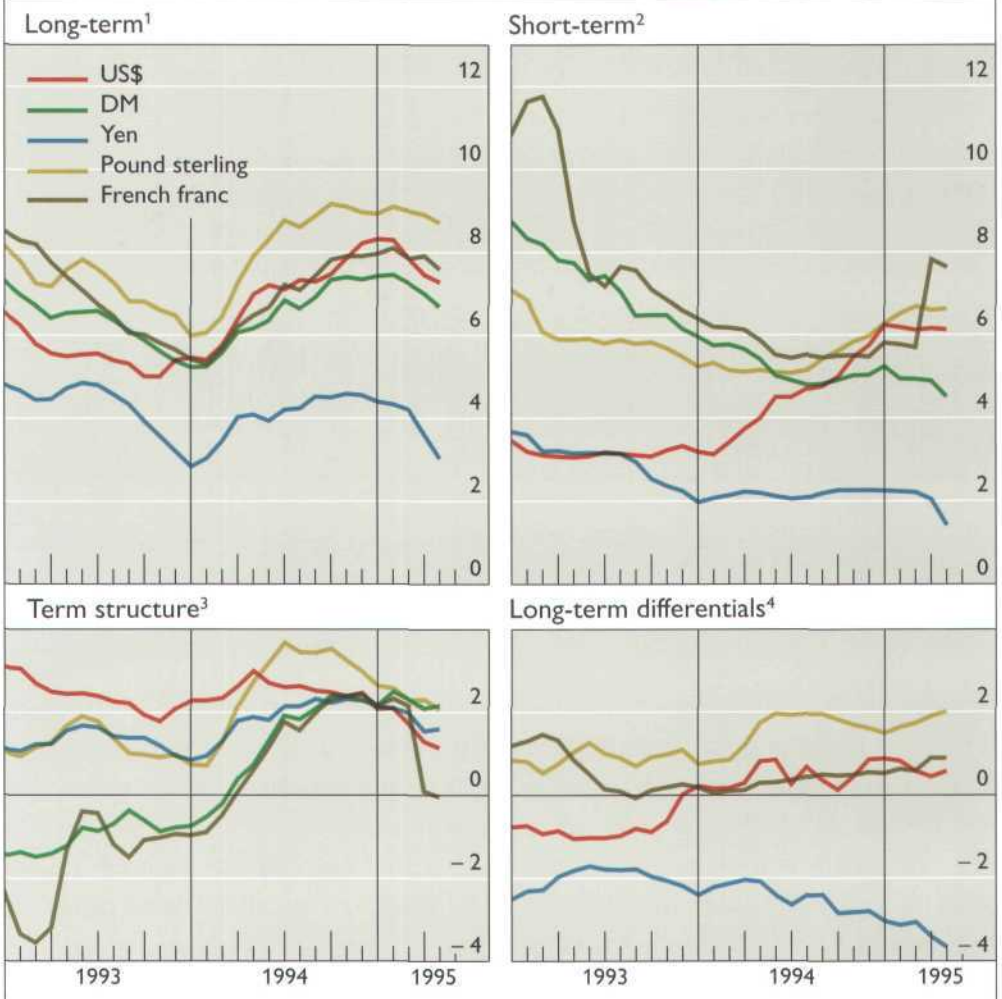
... but pressures on dealers' profit margins intensify

Bond financing is affected by the market reversal of early 1994

Straight fixed rate bonds. The abrupt change in market sentiment triggered by the Federal Reserve's raising of short-term interest rates in February 1994 led to a sharp reversal of the buoyant conditions which had prevailed in the primary market for fixed rate international bonds. Fears of rising interest rates and volatility made investors reluctant to purchase fixed rate issues, forcing many borrowers to delay planned flotations or to launch shorter-term offerings or floating rate instruments. As a result, straight fixed rate financing declined sharply

International long and short-term interest rates

Monthly averages, in percentages and percentage points



[1] Yields in annual terms on five-year interest rate swaps. [2] Three-month Euro-market interest rates. [3] Long-term rates minus short-term rates. [4] Vis-à-vis German long-term rates. Graph VIII.4

in February and March and, despite some recovery thereafter, remained well below the levels seen in 1993. Whereas international investors had been willing in 1993 to take on longer-term or lower-rated debt for additional yields or capital gains, the more conservative mood prevailing in 1994 had the opposite effect. The uncertainty made it especially difficult to sell large or long-term straight bond issues, and there was therefore a reduction in both the average size of issues and their weighted average maturity. Investors also began to attach greater importance to the financial position of borrowers, thus slowing the trend reduction in required risk premia.

Sharp decline in many currency sectors ...

The turnaround in the interest rate outlook led to particularly large liquidations of positions in certain European debt securities which had been built up on expectations of further rate declines. The associated steepening of the yield curve, combined with a number of other specific factors, had a strong negative impact on issuance in the currencies concerned. Deutsche Mark issues declined by 53% as borrowers from many countries turned to other fixed rate currency sectors (in particular the yen) and to DM-denominated floating rate

notes (FRNs). Issues in sterling likewise fell sharply (43%) owing to some currency weakness and a particularly sharp increase in interest rates in the first half of the year. The French franc sector also suffered a severe setback (40%) as restrictions on offshore issues by French entities were enforced. However, the lifting of restrictions on Euro-lira issues, together with strong retail demand from Italian investors, swap opportunities and a widening range of borrowers, was apparently sufficient to offset the adverse effects of an unsettled political and market climate, leading to a 44% increase in that sector. Tax advantages and swap-related business led to a near-tripling of Luxembourg franc issues.

... but some support in others ...

The strong liquidity position of Japanese institutional investors – and their apparent reluctance to invest in Japanese equities or foreign currency debt securities – allied with the liberalisation of the Euro-yen market (see below) led to a 32% increase in yen-denominated international bond issues. Conditions in other major currency sectors were mixed. A steady flow of financing for US borrowers seeking dollar funding at lower rates than were available in the domestic market was not sufficient to offset the lack of interest on the part of other issuers, leading to a 37% fall in dollar-denominated issues. The strength of the Australian currency raised international institutional investors' interest in Australian dollar debt, with a near-doubling of issuance in that currency. Lastly, concerns about the domestic fiscal and political situation, which resulted in a steady depreciation of the Canadian dollar and a sharp rise in long-term interest rates, were accompanied by a 62% drop in Canadian dollar issues.

... such as the Euro-yen

Bearish conditions favour FRNs ...

Floating rate notes. Bearish market conditions for fixed income securities tended to favour FRN issues, and announcements rose by 31% to a record

Type and currency structure of international bond issues

Type and currencies	Announced issues				Net issues				Stocks at end-1994
	1991	1992	1993	1994	1991	1992	1993	1994	
	in billions of US dollars								
All issues	317.6	334.1	449.3	371.8	169.9	109.0	130.3	153.9	2,047.6
Straight fixed rate issues	256.2	268.2	351.2	262.1	142.0	106.8	163.4	120.8	1,562.2
of which: US dollar	*75.0*	*86.9*	*105.1*	*66.2*	*27.8*	*37.2*	*51.6*	*27.0*	*465.8*
Japanese yen	*39.1*	*39.6*	*46.3*	*60.9*	*20.7*	*3.6*	*10.4*	*36.6*	*294.3*
Deutsche Mark	*12.2*	*28.7*	*49.6*	*23.5*	*4.9*	*16.6*	*25.8*	*9.4*	*166.7*
Floating rate notes	19.0	41.7	58.5	76.5	3.4	22.4	25.2	51.3	302.9
of which: US dollar	*4.4*	*24.2*	*35.3*	*38.7*	*–5.0*	*13.9*	*15.7*	*28.0*	*167.9*
Japanese yen	*1.4*	*3.9*	*5.4*	*7.4*	*0.0*	*2.1*	*2.6*	*7.8*	*23.2*
Deutsche Mark	*2.8*	*3.5*	*3.9*	*14.1*	*2.7*	*1.9*	*2.3*	*12.4*	*40.7*
Equity-related issues*	42.4	24.2	39.6	33.2	24.4	–20.1	–58.2	–18.2	182.5
of which: US dollar	*24.9*	*12.9*	*19.5*	*14.8*	*15.0*	*–20.0*	*–56.5*	*–13.5*	*94.4*
Japanese yen	*0.1*	*0.2*	*3.3*	*3.5*	*–0.2*	*0.2*	*2.7*	*2.9*	*7.6*
Deutsche Mark	*4.7*	*2.1*	*2.3*	*0.7*	*3.7*	*1.5*	*– 2.1*	*– 4.0*	*14.6*
Memorandum item: Bonds announced under EMTN programmes	*0.0*	*9.6*	*31.6*	*48.9*	*0.0*	*9.6*	*29.6*	*50.1*	*89.9*

* Convertible bonds and bonds with equity warrants.

Sources: Bank of England, ISMA and BIS. Table VIII.8

$76.5 billion. The year was characterised by a marked change in issuing volume and instrument type between the first quarter and the rest of the year. During the first quarter strong investor demand, combined with the greater cost-effectiveness of FRNs (relative to fixed rate bonds swapped into floating rate funds), encouraged borrowers to bring an unprecedented volume of deals to market. Highly rated financial institutions, in particular, issued a large number of structured FRNs, with cash flows customised through the use of derivatives. Most structures were denominated in US dollars and offered investors higher coupons than standard LIBOR-based FRNs provided that certain interest rate thresholds were not reached. For example, collar-type deals established minimum and maximum coupons, while corridor-type instruments paid interest provided that LIBOR remained within a specific range for a given period of time. Such securities, combined with swaps, allowed issuers to reduce their funding costs substantially.

Conditions became more subdued in the following quarters, notably in the US dollar segment, owing initially to temporary oversupply and borrowers' reluctance to launch issues as short-term rates continued to rise. Issues of structured securities also dried up following heavy price losses on outstanding issues (as the increase in US short-term rates meant that many issues approached their cap levels or moved out of their corridors). However, activity in some other currency segments expanded after the first quarter. For example, a confluence of vigorous demand on the part of German investors for money market type instruments and supply by German banks for funding purposes led to a near-quadrupling of Deutsche Mark issues between 1993 and 1994.

... except structured notes

Several sovereign borrowers launched issues of a record size – including a $4.1 billion multi-currency issue by Italy and a $3 billion EMTN by Sweden – at very low margins over reference rates. Such aggressive pricing encouraged investors to diversify into higher-yielding developing country bonds and asset-backed issues. This enabled Asian LDC borrowers to increase their recourse to the FRN market to $3.3 billion. Although issues arranged for these borrowers often shared the legal characteristics of Euro-bonds, a longer syndication period and a graduation of fees in relation to underwriting commitments meant that the underwriting process was more akin to the syndication procedures for international loans. The international asset-backed market saw new issuers and the use of new types of collateral such as credit card and trade receivables.

Higher volume of LDC and asset-backed issues

Equity-related bonds. A spurt of equity-related issues in the first quarter of 1994 was followed by a steady decline in activity. Interest rate uncertainty and equity market volatility negatively affected investor sentiment and made the pricing of new issues more difficult. For the year as a whole announcements contracted by 16% (to $33.2 billion). At the same time, a sharp increase in arrangements for developing country borrowers meant that non-Japanese issuers predominated. The lack of upward momentum in Japanese equity markets and the introduction in April of new Japanese accounting rules which were less favourable for issuers were important contributory factors in the weakening of the primary market for bonds with equity warrants. The withdrawal of a number of market-makers and institutional investors and the expiry of a large volume of outstanding warrants were reported to have reduced secondary market liquidity.

Poor conditions for equity-related bonds

The equity warrants market had in the past been one of the most popular offshore financing vehicles for Japanese borrowers. With non-Japanese Asian companies increasing their recourse to convertibles, activity in such instruments was higher than in the equity warrants market ($22.3 billion and $10.8 billion respectively). Although total repayments declined by 46% relative to 1993, the low volume of new issues led to a further contraction in the stock of outstanding paper (from $191.8 billion to $182.5 billion).

Type and residence of international securities issuers

Active borrowing by financial institutions ...

With continuing subdued borrowing by industrial companies (except in the United States, the United Kingdom and France) – and indeed net repayments by Japanese issuers – and a slowdown in the volume of funds raised by public sector entities, banks and other financial institutions were the most active borrowers in the international securities markets last year (see Graph VIII.3). A near-tripling of issuing volume from 1993 meant that they accounted for 55% of the $294.1 billion total net Euro-note and international bond issuance. Two-thirds was raised by entities located in Germany, the Netherlands, the United Kingdom and the United States. A significant amount was also raised through financial vehicles located in the Cayman Islands, making use of the tax advantages and opportunities for private placements offered by that centre. While borrowing by financial institutions in the United States and the United Kingdom was related to

Borrowing in the securities markets by sector and residence of issuer

Sectors and country of residence	Net issues[1]								Amounts outstanding at end-1994	
	Domestic[2]				International[3]				Domestic[2]	International[3]
	1991	1992	1993	1994	1991	1992	1993	1994		
	in billions of US dollars									
Total borrowing	1,351.3	1,417.1	1,590.4	1,463.3	204.8	149.4	202.5	294.1	21,974.7	2,453.7
Private sector	450.9	431.7	447.5	321.0	126.1	67.0	69.3	184.1	7,998.6	1,573.8
United States	160.1	157.1	225.7	225.0	11.5	11.3	9.6	40.6	3,587.4	245.8
Japan	40.5	55.3	46.6	11.9	36.4	–5.3	–47.4	–25.8	1,497.8	243.8
Germany	95.0	72.0	73.2	35.1	3.7	6.4	12.8	33.6	861.1	66.2
France	49.2	62.5	2.2	–7.7	20.6	18.7	20.8	15.4	590.0	167.9
Italy	48.9	42.9	39.8	10.7	3.0	–1.5	– 1.2	– 2.2	324.9	12.1
United Kingdom	–0.8	0.6	14.8	27.1	20.5	10.1	16.2	33.9	169.4	212.0
Sweden	15.0	11.5	8.7	–4.4	–0.2	5.0	9.6	3.9	142.6	26.0
Netherlands	4.5	6.1	7.7	17.8	10.0	10.5	25.3	28.2	96.0	178.6
Canada	0.2	–1.6	3.8	3.5	–0.2	–1.6	0.1	– 1.4	47.9	41.3
Australia	2.1	1.7	–3.2	1.7	0.4	–1.3	1.5	0.5	44.4	45.7
Other	36.1	23.6	28.1	0.4	20.4	14.8	22.0	57.3	637.0	334.1
Public sector	900.5	985.4	1,142.8	1,142.3	78.7	82.4	133.2	110.0	13,976.1	879.9

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

Sources: Bank of England, Euroclear, ISMA, national authorities and BIS. Table VIII.9

the recovery in domestic credit, institutions in continental Europe displayed a clear tendency to replace domestic funding by international borrowing. This was most notably the case for German banks, which, both directly and through their foreign affiliates (in particular those in the Netherlands), made extensive use of the Euro-note and Euro-bond markets last year to broaden their funding sources in terms of both currencies and instruments.

... but slowdown in public sector financing

The slowdown in total net new international securities issues by public sector bodies was wholly due to a sharp reduction in the demand for funds from international institutions (from $33.7 billion in 1993 to $11 billion). In contrast, public sector entities in Canada and Sweden maintained their borrowing at a high level, albeit with increasing risk premia. With about $20 billion each, they accounted together for 41% of total net issuance of international securities by national public sector bodies. At the same time, borrowers in these two countries tended to shift their financing away from international bonds and in favour of Euro-notes, where they could more quickly adjust to changes in investors' preferences. This shift was most pronounced for Swedish public sector entities, whose net financing through Euro-bonds ($6.2 billion in 1993) dried up entirely last year, whereas their net issuance of Euro-notes rose from $14.1 billion to $21.2 billion.

The Mexican crisis fails to dampen activity

In *the first quarter of 1995*, the deepening of the Mexican crisis led to some deterioration in market sentiment from February onwards, and some shift away from the US dollar and from debtors perceived to carry a high degree of credit risk. The turbulence on the exchange and debt markets also stimulated turnover in securities and derivative instruments. However, in contrast to earlier periods of exchange rate instability and interest rate uncertainty, there was no major shift away from long-term paper on the part of international investors. Net international securities issuance remained brisk, with the total of $73.2 billion for the quarter as a whole being equivalent to the quarterly average for 1994. Although the flight to quality increased investment demand for paper denominated in traditionally strong European currencies, a number of influences acted to divorce the currency composition of new issues from the underlying performance of individual currencies. In particular, favourable swap opportunities and the demand for Euro-currency paper by retail investors located in the home country of the currency of issue supported activity in the Euro-lira and Luxembourg franc sectors. In contrast, yen business was dampened somewhat by a combination of currency appreciation and reduced purchases by Japanese investors.

Structural and regulatory issues

Further deregulation of domestic and Euro-bond markets

The authorities of several countries continued to deregulate their domestic bond markets and facilitate residents' access to Euro-bond financing in 1994. Measures affecting domestic markets were generally designed to improve efficiency, liquidity and cost-effectiveness for resident issuers and to make the markets more attractive to foreign investors. For example, in Italy the stamp duty on the regulated trading of government bonds was removed; in Portugal the 20% withholding tax imposed on foreign holders of government bonds was effectively abolished and non-residents were allowed to issue on the domestic

market without requiring official permission; in Switzerland the authorisation requirement for foreign issuers was lifted in February 1995; and in Japan the eligibility standards for corporate issuers of domestic and foreign unsecured bonds were eased. Measures affecting the Euro-markets proper focused on liberalising access by resident borrowers and investors and authorising the use of the national currency in offshore issues. The largest number of initiatives were taken in Japan, including: the abolition of the ninety-day waiting period for the purchase by domestic investors of Euro-yen bonds issued by foreign governments and international organisations; the relaxation of the eligibility criteria for certain categories of bonds issued by resident firms in overseas markets; and a liberalisation of the issuance of international asset-backed securities. These measures will have mixed implications for the international bond market. On the one hand, the more hospitable conditions will boost resident and non-resident issues in domestic markets, thus potentially reducing Euro-bond issuance. On the other hand, the elimination of restrictions on Euro-bond issues will support activity, as has already happened in the Euro-yen market.

Rules governing Euro-issues are clarified

The year was also marked by continued attempts on the part of national authorities to clarify or reaffirm rules governing Euro-issues. Such clarifications were generally aimed at improving the transparency of offshore business involving residents and/or the national currency. The motivations for these measures were varied and included a desire to anchor the lead management of offshore issues at home, to reduce the fiscal uncertainty relating to residents' purchases of paper, to achieve a clearer institutional separation between domestic and offshore business, and to establish a level playing-field between domestic and Euro-markets. For example, France and Belgium clarified rules aimed at ensuring the multinational nature of the underwriting syndicates and effective foreign placement of Euro-issues.

The market for derivative instruments

Derivatives transactions fuelled by volatility

Volatile financial market conditions provided strong incentives to undertake transactions on organised derivatives markets in 1994. Expansion in the number of financial contracts traded occurred mainly in interest rate and stock index instruments, whereas currency-related business remained generally subdued. Activity continued to be supported by the globalisation of investment flows, the opening of new exchanges, the introduction of new products and a broadening of the user base. Exchanges introduced additional contracts designed to compete with over-the-counter (OTC) instruments, while also offering new services for OTC products, and continued to establish bilateral trading links. In OTC markets, several well-publicised losses and associated litigation reportedly had the effect of dampening activity in the second half of the year, following rapid growth in the first half. These losses, and the collapse of Baring Brothers in early 1995, gave further impetus to the debate in official and private circles about the risks posed by derivatives markets. However, the official view remains that existing regulations, complemented by further efforts to improve internal controls, external transparency and market functioning, should be sufficient to contain systemic risks.

Markets for selected financial derivative instruments

Instruments	Notional principal outstanding					
	1989	1990	1991	1992	1993	1994
	in billions of US dollars					
Exchange-traded instruments	1,766.6	2,290.2	3,518.8	4,632.5	7,760.8	8,837.8
Interest rate futures	1,200.8	1,454.5	2,156.7	2,913.0	4,942.6	5,757.4
Interest rate options[1]	387.9	599.5	1,072.6	1,385.4	2,362.4	2,622.8
Currency futures	15.9	16.9	17.9	24.9	32.2	33.0
Currency options[1]	50.2	56.5	62.8	70.9	75.4	54.5
Stock market index futures	41.3	69.1	76.0	79.7	109.9	127.7
Stock market index options[1]	70.6	93.7	132.8	158.6	238.3	242.4
Over-the-counter instruments[2]	..	3,450.3	4,449.4	5,345.7	8,474.6	..
Interest rate swaps	1,502.6	2,311.5	3,065.1	3,850.8	6,177.3	..
Currency swaps[3]	449.1	577.5	807.2	860.4	899.6	..
Other swap-related derivatives[4]	..	561.3	577.2	634.5	1,397.6	..

[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.10

Exchange-traded instruments

Rapid expansion on exchanges ...

The number of financial futures and options contracts traded on organised exchanges increased by 45% in 1994. Much of the expansion took place in the first half of the year, triggered by the rising volatility of bond and equity markets following the Federal Reserve's raising of US short-term interest rates in early February. While the leverage provided by derivatives might have amplified market volatility at times, exchange-traded derivatives also appear to have been instrumental in providing additional market liquidity. Although activity declined in the second half of the year as market conditions calmed, turnover was nevertheless 29% higher than in the same period of 1993. Growth was particularly rapid in short-term interest rate instruments, with, for example, the Euro-dollar contract traded on the Chicago Mercantile Exchange (CME) overtaking the US Treasury bond contract of the Chicago Board of Trade (CBOT) as the most actively traded financial contract in the world. The trading of stock index futures also increased sharply, reflecting the growing use of this instrument in domestic and international portfolio allocation strategies. The relative stability of foreign exchange markets in 1994 led to an overall decline in the volume of exchange-traded currency futures and options, save for the marked growth in small-denomination contracts on the Brazilian currency.

... especially in interest rate and equity contracts ...

... but not in currency instruments

Development of new markets ...

Total trading on established as well as on rapidly growing new exchanges in Europe, Asia and Latin America exceeded trading in the United States by a widening margin, with 630.7 million and 509.5 million contracts respectively in 1994. Despite the strong performance of most European exchanges, the broad range of domestic and international contracts available on the London International Financial Futures and Options Exchange (LIFFE) allowed it to retain its leading position in Europe and to close the gap with the main US exchanges. Innovation continued worldwide, as new contracts were introduced on short and

... and of new products

long-term interest rates, equities and currencies. A notable development was the extension of "flex" options, combining some of the benefits of customised OTC options with the financial guarantee and price transparency of exchange-traded products, to the bond and currency markets. Flex options on equities were successfully introduced in the United States in 1993 and similar contracts have been launched or are being considered elsewhere. In addition, futures and options on the yield spread between different underlying debt instruments are in the process of development.

Over-the-counter markets

Swap market activity accelerates ...

Swaps and swap-related business. In the first half of 1994, the latest period for which data on new contracts are available from the International Swaps and Derivatives Association (ISDA), swaps business accelerated strongly, with new contracts increasing by 46% relative to the second half of 1993 to reach a record $3,363.9 billion. Of this, interest rate swaps accounted for $3,182.9 billion. While the turmoil in financial markets in the first half of 1994 reduced business related

Financial derivative instruments traded on organised exchanges

Instruments	Annual turnover of contracts					Notional principal outstanding at end-1994
	1990	1991	1992	1993	1994	
	in millions					in billions of US dollars
Interest rate futures	219.1	230.9	330.1	427.0	627.7	5,757.4
On short-term instruments	76.0	87.3	144.9	180.0	281.3	5,401.8
of which: Three-month Euro-dollar rates[1]	*39.4*	*41.7*	*66.9*	*70.2*	*113.6*	*2,468.6*
Three-month Euro-yen rates[2]	*15.2*	*16.2*	*17.4*	*26.9*	*44.2*	*1,467.4*
Three-month Euro-DM rates[3]	*3.1*	*4.8*	*12.2*	*21.4*	*29.5*	*425.7*
On long-term instruments	143.1	143.6	185.2	247.1	346.4	355.6
of which: Japanese government bonds[4]	*16.4*	*12.9*	*12.1*	*15.6*	*14.1*	*164.3*
German government bonds[5]	*9.6*	*12.4*	*18.9*	*27.7*	*51.5*	*41.7*
US Treasury bonds[6]	*78.2*	*69.9*	*71.7*	*80.7*	*101.5*	*36.1*
French government bonds[7]	*16.0*	*21.1*	*31.1*	*36.8*	*50.2*	*12.7*
Interest rate options[8]	52.0	50.8	64.8	82.9	114.5	2,622.8
Currency futures	29.7	30.0	31.3	39.0	69.7	33.0
Currency options[8]	18.9	22.9	23.4	23.8	21.3	54.5
Stock market index futures	39.4	54.6	52.0	71.2	109.0	127.7
Stock market index options[8]	119.1	121.4	133.9	144.1	197.9	242.4
Total	478.3	510.5	635.6	788.0	1,140.2	8,837.8
of which: In the United States	*310.9*	*301.5*	*340.1*	*380.3*	*509.5*	*4,754.9*
In Europe	*83.0*	*110.5*	*185.0*	*263.5*	*398.5*	*1,832.0*
In Japan	*60.6*	*66.2*	*51.7*	*57.8*	*70.5*	*1,498.2*

[1] Traded on the Chicago Mercantile Exchange – International Monetary Market (CME-IMM), Singapore Mercantile 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 Tokyo Stock Exchange (TSE), LIFFE, Chicago Board of Trade (CBOT) and SIMEX. [5] Traded on the LIFFE and Deutsche Terminbörse (DTB). [6] Traded on the CBOT, MIDAM, LIFFE, New York Futures Exchange (NYFE) and TSE. [7] Traded on the MATIF. [8] Calls and puts.

Sources: Futures Industry Association, various futures and options exchanges and BIS calculations. Table VIII.11

Markets for selected derivative instruments traded over the counter[1]

Instruments	New contracts arranged					Amounts outstanding at end-1993
	1990	1991	1992	1993	1994 H I	
	notional principal in billions of US dollars					
Total instruments	1,769.3	2,332.9	3,717.0	5,517.0	4,214.1	8,474.6
Interest rate swaps	1,264.3	1,621.8	2,822.6	4,104.8	3,182.9	6,177.3
Currency swaps[2]	212.8	328.4	301.9	295.2	181.0	899.6
Other swap-related derivatives[3]	292.3	382.7	592.4	1,117.0	850.2	1,397.6

[1] Data collected by ISDA only; the two sides of contracts between ISDA members are reported once only; excluding instruments such as forward rate agreements, currency options, forward foreign exchange contracts and equity and commodity-related derivatives. [2] Adjusted for reporting of both currencies; including cross-currency interest rate swaps. [3] Caps, collars, floors and swaptions.

Source: ISDA. Table VIII.12

to capital market issues, transactions were boosted by the restructuring of existing exposures (which in the case of OTC instruments typically involves the writing of new contracts) following the revision of interest rate expectations by market participants. However, large losses experienced by certain end-users of complex swaps and other derivatives were reported to have moderated demand for such products in the second half of the year.

... but increasing caution is reported

Within the interest rate swaps sector, a notable increase in Deutsche Mark, French franc and sterling swaps led to a further decline in the share of the US dollar to 34% in the first half of 1994 (against 76% in the first half of 1987, when ISDA began publishing data). In addition, the share of inter-dealer transactions rose further to 51% (compared with 32% in 1987) reflecting the active use of swaps among financial institutions in the trading of short-term interest rate exposures. The turmoil in financial markets did not, however, materially affect the average maturity of transactions. The small currency swaps sector, which had been stagnant or in decline since the second half of 1991, rebounded owing to a sharp increase in the volume of contracts with US dollar and yen legs. Currency swaps involve an exchange of principal and thus larger and more volatile exposures than interest rate swaps, and this may explain why activity in these instruments remains driven primarily by securities issuance rather than by short-term asset and liability management. Business in swap-related instruments, such as caps, floors, collars and swaptions, continued to expand rapidly (by 40% relative to the preceding six-month period), boosted by the reversal in the interest rate outlook.

Performance varies between sectors

The data collected by ISDA represent only a partial indicator of OTC market activity. OTC business is substantially larger, incorporating a variety of forward and option-type instruments on currencies, fixed income and equity securities as well as a vast array of cross-product swaps and structured securities. In an effort to improve data on the size, structure and distribution of risks in derivatives markets, the central banks and monetary authorities of twenty-six countries conducted a survey of local derivatives activity in March and April this year, in conjunction with the triennial Central Bank Survey of Foreign Exchange Market Activity. National survey results are expected to be released in the autumn, and global results should be available some time later.

Survey of derivatives activity is being conducted

Other OTC instruments. Activity in warrants remained dynamic and innovative. According to market sources, the number of public issues of new warrants on equities, currencies, interest rate instruments and commodities rose by 40% between 1993 and 1994, with almost 4,500 new issues for an aggregate nominal value of about $75 billion. Warrants on commodities and on developing country equity markets proved particularly popular. However, there was a change in the mix of issues in the course of the year as greater emphasis came to be placed on simpler structures. Warrant issues are generally of a longer maturity than regular OTC options and are purchased by retail and institutional investors who want to take a tailored exposure to specific markets or to cash assets which do not have well-developed derivatives markets.

Many new warrants are introduced ...

As was the case on organised exchanges, OTC market participants continued to develop and market new instruments. Of note was the increased interest in OTC forwards, warrants and structured notes linked to base metals. Derivatives specialists actively marketed such products to institutional investors as a means of improving the risk/return characteristics of financial portfolios. Several commodity indices developed by intermediaries were adopted for a variety of new OTC derivatives transactions. Many firms also sought to market credit derivatives, which allow the unbundling of the credit attributes of debt instruments and their transfer to third parties for a given price. Finally, a number of market participants introduced instruments bearing a close resemblance to products offered on derivatives exchanges. For example, "contracts for difference" – involving the exchange of payment streams based on the performance of underlying equity positions – were offered in the UK market as a means of bypassing regulatory restrictions on the short selling of equities, while in the United States new contracts on the yield spread between US Treasuries and Euro-dollar rates appeared.

... as well as other OTC products

Developments in market structure

Further signs of converging practices in derivatives markets emerged as exchange-traded and OTC markets adopted desirable features from each other, while derivatives exchanges formed new alliances. Exchanges attempted to improve their competitive position relative to OTC markets or to capitalise on the development of OTC activity through the provision of more flexible products and services. At the same time, greater use was made in OTC markets of financial safeguard features that are standard in exchange-traded contracts. Although trading links between exchanges continued to expand, bilateral arrangements appeared to take the lead over centralised global facilities.

Convergence between exchange-traded and OTC markets ...

As an illustration of the first point, exchanges introduced a variety of centrally cleared currency instruments designed to compete with OTC or interbank foreign exchange products by offering users a wide choice of currency pairs, contract sizes, strike prices and settlement dates. In addition to the flex options already described, these included "forward" and "dollar-denominated delivery" contracts, in which the exchange of gross amounts of currencies is replaced by net settlement. Exchanges also sought to capitalise on concerns about counterparty credit risk exposures by introducing collateral and margining facilities for OTC products. For example, one US exchange announced a

centralised collateral depository system for interest rate swaps which would offer daily trade valuation (i.e. marking to market) and collateral management, thus facilitating market access for smaller or lower-rated counterparties. A number of other exchanges are in the process of developing similar facilities.

In the OTC markets, attempts by banks to minimise capital requirements and counterparty credit risk led to the growing use in contracts of financial safeguard features which closely resemble those available on exchanges. Examples include multi-product bilateral netting and collateral arrangements and provisions for periodic settlement of longer-dated contracts. Further progress was also made in the standardisation of legal documentation for swaps and other derivative instruments, notably commodity and emerging market transactions. Lastly, several financial information and service providers continued to develop OTC cash and derivatives dealing systems which should improve the dissemination of price information as well as liquidity in the plain vanilla segments of OTC markets.

... and its limits

Despite signs of an alignment of practices between OTC and exchange-traded derivatives markets, the two markets retain distinct functions and characteristics. A basic function of exchange-traded derivatives markets is the provision of liquidity, achieved by the attraction of significant trading volumes through standardised contracts, price transparency and the interposition of the clearing house as a central counterparty. OTC markets, in contrast, provide users with contracts whose terms and conditions can be tailored to individual requirements. There is a growing recognition that these attributes, liquidity and customisation respectively, complement one another and that expansion in one market supports that in the other. However, impediments to the integration of exchange-traded and OTC markets are likely to remain. Efforts to customise contract specification in exchange-traded markets always bear the risk of fragmenting their liquidity, while excessive standardisation in OTC markets could weaken the ability of intermediaries to respond to customer needs and reduce their profit margins.

Links between exchanges

In the exchange-traded derivatives markets, European exchanges with complementary products and customer bases continued to form trading alliances. At the same time, competitive pressures and growing demand for cash and derivative instruments traded across time zones led exchanges in different regions to establish trading links and move further in the direction of 24-hour trading. Several agreements between European and Asian exchanges were announced in an attempt to capitalise on the growth of cash and forward European currency trading in Asia and the development of markets in yen products in Europe. Links between North America on the one hand and Europe and Asia on the other were also under discussion. Such linkages could relieve pressures at times of market stress and thus be beneficial for the functioning of the global market. Greater uniformity in business practices and improved cooperation between exchanges would also help to reduce systemic risk.

Preference for bilateral over centralised arrangements

The issue of whether round-the-clock derivatives trading is best served by bilateral trading links between exchanges or by a global system continued to be the subject of lively debate. However, the plethora of bilateral trading links arranged in recent years may have tilted the balance in favour of such arrangements. For example, the CBOT and LIFFE both declined to join a

restructured version of the Globex system, preferring instead the greater flexibility allowed by the development of their own recently introduced after-hours trading systems and the establishment of independent trading links with other exchanges.

Derivatives and the regulatory debate

Large derivatives-related losses ...

As was noted at the beginning of this chapter, events over the last twelve months may prove to have been something of a watershed for the derivatives markets. The reversal in the interest rate climate in the first half of last year caught many market participants by surprise, resulting in sizable losses among end-users as well as intermediaries. At the same time, adverse publicity combined with diminished margins and increased earnings volatility induced a number of major intermediaries to reduce the level of resources committed to these activities. As in the past, losses on derivatives could be traced to inadequate internal controls, inappropriate or misguided usage, or excessive risk-taking, and underscored concerns expressed in the central banking, supervisory and market communities about the risks posed by failings in these areas. Nonetheless, financial markets on the whole weathered the events reasonably well. Whether this means that earlier worries about more widespread risk have been overstated, or rather that market participants have responded adequately to the concerns expressed, is not easy to judge. For the industry and for regulators, the silver lining to an otherwise clouded year is that these events will have greatly heightened risk awareness and attention to internal controls. In time, this should improve market functioning and increase prospects that derivatives markets will be recognised more widely for the benefits they bring than for the risks they pose. Accordingly, while losses added to pressures in some quarters for regulatory action to constrain derivatives activities, regulatory initiatives have aimed at minimising potential risks while preserving the benefits of these markets. The principal efforts to this end have been devoted to bolstering defences at the level of the firm, improving market functioning and discipline through increased transparency, and strengthening market infrastructure. Market participants and their associations have made important contributions to these efforts.

... reveal inadequate internal control ...

... but help heighten risk awareness

That sound risk management practices must be the first line of defence for limiting losses was amply demonstrated by the collapse of Baring Brothers. In order to reinforce earlier efforts by market participants to raise standards in this area, national and international supervisors of banks and securities firms last year issued additional risk management guidelines. Although the threat of supervisory sanctions could encourage compliance, the supervisory process cannot be a substitute for the responsibility that properly lies with senior management for ensuring that best practices are implemented and continuously observed. Recent surveys of risk management practices revealed that, while progress has been made, many market participants have yet to implement the principles set out in the 1993 report of the Group of Thirty. Improved public disclosure of risk management practices and performance could accelerate progress in this area (see below).

New supervisory guidelines are issued ...

Should risk management procedures fail, capital adequate to absorb losses can help to limit the knock-on effects on other market participants. Credit

exposures incurred by banks in derivatives transactions have been subject to capital requirements under the Basle Capital Accord since 1988. Last year the Basle Committee on Banking Supervision recognised bilateral close-out netting of credit exposures (where legally enforceable) for capital adequacy purposes, and this year it refined the methodology for assessing potential credit exposures in derivatives transactions. To reduce further the risk that banks could become a source of default contagion, the Basle Committee has also been working to extend the Capital Accord to market risks. Following comments by market participants on proposals issued in April 1993, the Basle Committee released a revised set of proposals in April 1995. These will allow banks that qualify to use internal risk management systems as a basis for calculating market risk capital charges, subject to stringent conditions and parameters set by supervisory authorities. This amendment to the 1988 Capital Accord is expected to come into force in the Group of Ten countries, after appropriate consultation with the international banking community, at the end of 1997.

... as well as new proposals to cover banks' market risks ...

International securities regulators have also been concerned to develop and refine capital adequacy criteria for derivatives and other trading activities, but the diversity of interests and traditions has complicated the conclusion of a global agreement. In March this year, a group of major US securities firms agreed on a framework for voluntary oversight of OTC derivatives trading activities, including a methodology for evaluating risks in relation to capital. While the focus of this framework is on supervisory oversight, there are some overlaps with the Basle Committee's proposed procedures for the assessment of market risk exposures at banks, and this may increase the scope for an alignment of international banking and securities regulation in this area in future. Major securities houses in Europe will have to comply with the EU Capital Adequacy Directive as from 1996.

... encourage transparency ...

A second thrust of official policy has centred on improving market discipline and functioning through greater transparency. Efforts to enhance transparency in derivatives markets reflect a view that financial markets are likely to function best when participants are able to make informed investment and trading decisions. Events last year showed that asymmetries of information can cause market reaction to heighten the risk of wider disruptions, whether as a result of limited knowledge of the sources of price movements or through a rapid but unwarranted withdrawal from dealings with counterparties whose solvency is questioned. Greater transparency in derivatives markets generally, and more meaningful public disclosure of exposures in particular, could reduce the risk of such overreactions as well as help prevent the build-up of excessive exposures in the first place.

... and enhance public disclosure ...

It is widely recognised that the evolution of trading and risk management activities in recent years has moved well ahead of the public disclosure practices of the principal participants in financial markets. Despite efforts by accounting bodies, regulators and market participants to improve disclosure practices, progress has been hampered by the difficulty of capturing financial risks in traditional accounting conventions and by a lack of consensus among market participants on ways of quantifying risk exposures. However, last year several proposals emerged which, judging from the recent annual reports of leading

market participants, appear to have led to measurable progress. The Institute of International Finance, a grouping of major banks and securities houses, published a framework for the disclosure of credit risks associated with derivatives activities which simplified disclosure arrangements suggested earlier by market participants and accounting bodies. In an effort to improve disclosure of market as well as credit risks in trading activities, and with a view to promoting discussion of risk measurement and disclosure methods more generally, a working group set up by the Group of Ten central banks released a discussion paper which encouraged firms to adapt their internal risk measurement and performance assessment systems for disclosure purposes. The adoption by leading participants of elements of these proposals will heighten pressures on others to follow suit and has increased the prospect that a consensus on risk measurement and improved disclosure practices will develop over time. In this regard, the decision by two major banks to make publicly available elements of their risk measurement systems prompted a welcome debate on methods of market risk assessment, benefiting market transparency as well as the regulatory process.

... of internal risk assessments

End-user losses raise suitability issues ...

Separately, the recent losses suffered by end-users set in train initiatives which should improve transparency in dealing relationships. Documentation presented in support of litigation following end-user losses in the United States raised legitimate questions about transparency and conflicts of interest in derivatives transactions in which an intermediary acts as both adviser and principal vis-à-vis a non-professional counterparty. This led to suggestions that intermediaries be legally obliged to establish that a proposed derivatives transaction is suitable for the counterparty concerned. Suitability criteria are not uncommon at the retail level, but in wholesale markets they might lessen the incentives for participants to exercise due diligence. Liability for failure to prove suitability would also tend to limit the marketing of derivatives, and thus their use by end-users who could benefit from them; it would also be likely to encourage litigation. In response, US and UK intermediaries agreed on a document clarifying the desired relationship between intermediaries and customers and setting out guidelines regarding the type of information that intermediaries would be expected to disclose. A similar code of conduct is being drawn up by French and Japanese market participants for local use.

... and prompt initiatives to clarify dealer/end-user relationships

Efforts to improve the infrastructure supporting derivatives markets have centred on strengthening the clearing, payment and settlement systems that underpin financial market activity more generally and on clarifying legal uncertainties pertaining to the enforceability of derivatives contracts and netting arrangements. There have also been ongoing efforts to further develop channels of communication and information exchange between financial market regulators, both to bolster the robustness of markets and institutions and to prevent wider disruptions when a crisis strikes. The collapse of Baring Brothers raised a number of additional issues to be addressed in this context: for example, officials of the international derivatives industry have begun to examine ways of strengthening the financial integrity of exchanges and ensuring that differences in national bankruptcy procedures do not ensnare customer funds and positions in insolvent clearing firms.

Integrity of exchanges

Macroeconomic and monetary policy implications of derivatives markets

Derivatives and the conduct of monetary policy

Whereas the growth of derivatives markets has given rise to extensive study of their potential risks, relatively little attention has been paid to the question of their implications for macroeconomic performance and for the conduct of monetary policy. A study released by the Group of Ten central banks last year concluded that, when appropriately used, derivatives markets – by permitting the transfer of price risks to agents that can be presumed more willing and able to assume them – can be expected to support investment growth and to increase the resilience of markets and the economy to shocks. Although widespread hedging of interest rate and exchange rate exposures could alter the response of the economy to policy-induced changes in these variables, the fact that derivatives involve zero-sum transfers and must be renewed at maturity at newly prevailing market prices means that any such effect can only be temporary. One consequence of the growth of derivatives markets has been a quicker response of prices to shocks, reflecting the lower cost of transacting in these than in cash markets. However, the question of the role of derivatives in market volatility remains unresolved. The weight of empirical evidence suggests that derivatives markets do not increase asset price volatility in normal circumstances; but there is mounting evidence that commonly used hedging strategies can alter short-run market dynamics and temporarily accentuate market swings. The study also suggested that the growth of currency options markets can complicate the defence of an exchange rate target and that, by increasing the substitutability of asset types, derivatives may introduce some marginal distortions to traditionally defined monetary aggregates. However, it concluded that the growth of derivatives markets was unlikely to significantly affect central banks' ability to conduct monetary policy.

IX. 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 turbulence in financial and exchange markets, inflation risks in the current upswing and the impact of financial structure on the monetary policy transmission mechanism. Special meetings addressed policy issues facing central banks in transition countries as well as the changing financial landscape in emerging markets. The Bank participated as an observer at meetings of both the Interim Committee of the Board of Governors of the International Monetary Fund and the Finance Ministers and central bank Governors of the Group of Ten countries. It contributed to the work of the Deputies of the Group of Ten Ministers and Governors. As in the past, the Bank also provided the secretariats for various committees and groups of experts.

The principal focus of the work of the Basle Committee on Banking Supervision over the past year has been to ensure that banks meet an appropriate capital requirement for market risks and strengthen the monitoring and control of their trading activities. The main product of this work, a consultative proposal to refine the 1988 Basle Capital Accord to incorporate market risks incurred by banks, was released in April 1995. The proposal, on which comments have been invited by the end of July 1995, is intended to strengthen banks' defences against the risk of losses caused by adverse movements in exchange rates, interest rates and other market prices. Banks would be allowed to choose between two broad methodologies, subject to the approval of the national supervisor. One alternative is to measure these risks in a standardised manner following Basle Committee guidelines. Under the other option, banks would be free, subject to strict standards, to use their internal models to measure market risks for supervisory purposes.

The Basle Committee has also, since mid-1994, issued a number of documents concerning banks' management of derivatives risks. The first of these papers, released in July 1994 simultaneously with similar guidelines for the securities industry drawn up by the International Organisation of Securities Commissions (IOSCO), sets out guidelines for the prudent supervision and risk management of derivatives business. In December 1994 the Committee issued a report summarising its past and ongoing work relating to banks' derivatives activities and in May 1995, again in collaboration with IOSCO securities regulators, it published a framework for the supervisory reporting of derivatives activities. In addition, the Committee refined the treatment of credit risk for

derivative products under the 1988 Capital Accord in two reports, published in July 1994 and April 1995. In October 1994 the biennial International Conference of Bank Supervisors took place in Vienna. The first day was devoted to the problems of supervision in emerging markets; the second day focused on the Basle Committee's work on risk management systems.

The Euro-currency Standing Committee continued to monitor developments in international financial markets and to discuss issues bearing on their functioning and stability. The Committee examined in particular changes in the scale and direction of capital flows to emerging markets and developments in government bond markets. The Committee also completed a series of enquiries into the implications of the growth of derivatives markets for the financial and monetary system. It found that derivatives have had a generally positive effect on the efficiency of financial intermediation and the ability of institutions to individually manage risks, and that derivatives markets are unlikely to complicate materially the conduct of monetary policy. In the Committee's assessment, problems of asset price volatility and associated losses are related to macroeconomic instability and the general process of liberalisation and innovation rather than the growth of derivatives per se. It therefore concluded that measures to restrict derivatives activities would fail to remove sources of systemic vulnerability, and that any regulatory initiatives should be carefully tailored to preserve the advantages of derivatives markets while reducing the risk that accidents could lead to wider disruption.

In the light of these conclusions, the Committee recommended that regulatory action should seek to enhance risk controls at the level of individual firms, reinforce market discipline through improved transparency and public disclosure practices, and strengthen further the infrastructures underpinning financial market activity more generally. The Committee released three reports prepared in the context of its discussions: "A Discussion Paper on the Public Disclosure of Market and Credit Risk by Financial Intermediaries", in September 1994; "Macroeconomic and Monetary Policy Issues Raised by the Growth of Derivatives Markets", in November 1994; and "Issues Related to the Measurement of Market Size and Macroprudential Risks in Derivatives Markets", in February 1995. The Bank continued to compile, analyse and publish statistical data on developments in international banking and other financial markets.

The Committee on Payment and Settlement Systems held regular meetings to review developments in domestic and cross-border payment, netting and settlement arrangements in the Group of Ten countries. It finalised its analysis of the settlement arrangements for cross-border securities transactions. In March 1995 the BIS published a report on Cross-Border Securities Settlements. The report serves two purposes: it examines the channels used by market participants to complete cross-border securities transactions and the risks associated with the various arrangements, and it contributes to a deeper understanding of risks in domestic securities settlements. The Committee has set up a Steering Group on Settlement Risk in Foreign Exchange Transactions to follow up the work carried out previously by the Committee on central bank payment and settlement services in connection with cross-border and multi-currency transactions. This Steering Group has conducted a survey in all the Group of Ten countries of

banks' practices with regard to the settlement of foreign exchange transactions and is analysing various measures which could be taken by the private sector and the central banks to reduce cross-currency settlement risk. Other issues being studied by the Committee include developments in the use of collateral to secure payment and settlement systems, the operation of real-time gross settlement systems, recent trends in retail payment systems and clearing and settlement arrangements for exchange-traded derivatives. The BIS published a number of reference studies on payment systems in countries outside the Group of Ten, namely Australia (July 1994), Finland (July 1994), Iceland (May 1995) and Norway (May 1995), and an update of the statistics contained in the volume on payment systems in the Group of Ten countries, known as the "Red Book" (December 1994). The Committee has taken initiatives to broaden cooperation with the central banks of countries outside the Group of Ten and the European Union and intends to extend further the geographical coverage of the publications on national payment systems.

The Service for Eastern European Countries and International Organisations continued to help coordinate the technical assistance and training provided by a large number of central banks to their counterparts in eastern European countries, in the states of the former Soviet Union and in Asian economies in transition. To this end, a database is maintained on the technical assistance and training received by these countries. This information, updated on a quarterly basis, is important in avoiding a wasteful duplication of effort.

The Bank also participated actively in the work of the Joint Vienna Institute (JVI), which was set up to provide training for officials from transition countries. In its first two and a half years of operation, the JVI's courses have been attended by over 4,000 participants. Courses organised by the BIS focus on monetary policy, banking and financial reform and also include a range of specialised seminars on central banking topics such as payment and settlement systems, banking supervision and reserve management. In 1995 the BIS is chairing the Executive Board of the JVI.

The discussions held by the Group of Computer Experts at its twice-yearly meetings focused on recent information technology developments. The Group devoted special attention to the general trend towards distributed information systems, which often involve the adoption of Unix platforms and client/server technology. These systems underscore the key role played by internal networks in the provision of IT services. The Group also examined the implications of electronic links with wider computer networks, which have become increasingly important over the last few years, not least as a result of users' demands for access to external databases. The Working Party on Security Issues complemented the work of the Group of Computer Experts by studying the security aspects of distributed systems and examining ways to establish secure links to the Internet. It also considered the role of users in IT security and the approaches followed by member central banks in drawing up their IT security manuals.

The Group of Experts on Monetary and Economic Data Bank Questions continued to focus its attention on BIS Data Bank Services, particularly in the context of the needs of the central banks of the Group of Ten countries. Efforts

to strengthen information security procedures were reviewed and developments in the field of international data exchange standards were discussed. The Group indicated a strong interest in broadening the coverage of the database, by means of bilateral arrangements between the BIS and the central banks of countries outside the Group of Ten.

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.

(a) Agent for the European Monetary Co-operation Fund (EMCF) – Agent for the European Monetary Institute (EMI)

From June 1973 until the end of 1993 the BIS acted as Agent for the EMCF. The Agency functions were related, on the one hand, to the operation of the EMS and, on the other, to the execution of financial operations in connection with Community borrowing and lending for the purpose of balance-of-payments support for EU member countries. With effect from 1st January 1994 the EMCF was dissolved and, pursuant to the Treaty on European Union, the tasks previously performed by the EMCF were taken over by the EMI. It was decided by the Council of the EMI and the Board of Directors of the BIS that the Bank would continue to perform, as Agent for the EMI, on a transitional basis and on the same terms, the functions it had previously carried out as Agent for the EMCF. In mid-February 1995 the EMI gave the BIS notice of termination of the Agency Agreement between the BIS and the EMI with effect from 15th May 1995.

The volume of ECUs issued by the EMI through three-month swap operations with each of the EU central banks that are signatories to the Agreement of 13th March 1979 and with the Luxembourg Monetary Institute decreased from ECU 58.0 billion at 31st March 1994 to ECU 57.8 billion at 31st March 1995. This slight reduction over the year, which occurred despite an increase in the US dollar reserve contributions received from EU central banks and the contribution by the Austrian National Bank and the Bank of Finland to the EMI of 20% of their gold holdings and US dollar reserves as at 31st December 1994, was primarily due to a fall in the price of gold in terms of ECUs and in the US dollar/ECU exchange rate.

As regards the Community borrowing and lending operations referred to in Council Regulation (EEC) No. 1969/88, which adjusted the Community loan mechanism designed to support the balance of payments of member states,

Outstanding Community loans as at 31st March 1995

Borrowing countries	Deutsche Mark	ECUs
	in millions	
Greece	536	740
Italy	3,900	1,975
Total	4,436	2,715

during the period under review the Agent continued to receive from the borrowers, namely Greece and Italy, and to distribute to the creditors vis-à-vis the Community the sums due in respect of interest, commission and expenses on loans outstanding. The preceding table shows, as at 31st March 1995, the total of outstanding Community lending operations.

(b) 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. Member banks of the EBA may be granted the status of clearing bank on the basis of criteria drawn up by that body. On 31st March 1995 there were forty-five clearing banks.

(c) 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 sixty-third Annual Report, pages 205–207. The German Federal Debt Administration (Bundesschuldenverwaltung – BSV) informed the Trustee that Deutsche Bank Securities Corporation, New York, had been appointed in 1994 as Exchange/Paying Agent in the United States for the new funding bonds.

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 1994, 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 BSV in the Federal Journal.

Concerning the application of the exchange guarantee clause for the Young Loan by the BSV, the Bank has repeated its earlier reservations and has stressed that they 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 be found in announcements published by the Deutsche Bundesbank, inter alia in the Federal Journal No. 192 of 12th October 1993 (page 9459).

(d) Collateral Agent for Brazilian bonds

As mentioned last year, on 15th April 1994 the BIS assumed new functions in connection with the restructuring of Brazilian external debt which had been agreed by Brazil in November 1993. In accordance with two Collateral Pledge Agreements, 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 fifteen or thirty years, which have been issued by Brazil under the restructuring arrangements.

3. Multilateral financial assistance to central banks

As part of an international financial support programme for Mexico put together in early 1995, the BIS arranged a short-term credit facility of up to US$ 10 billion in favour of the Banco de México. This facility, which is backed by a group of participating central banks, became effective on 15th March 1995 and is available for some three months with the possibility of renewal for a similar period.

4. Operations of the Banking Department

The Balance Sheet of the Bank and the Profit and Loss Account, expressed in gold francs, have been certified by the auditors; they are reproduced at the end of this Report. The gold franc (abbreviated to GF) is the equivalent of 0.290 322 58... grammes fine gold (Article 4 of the Statutes). Assets and liabilities in US dollars are converted at US$ 208 per ounce of fine gold (equivalent to GF 1 = US$ 1.941 49...); all other items in currencies are converted on the basis of market rates against the US dollar.

At the close of the financial year 1994/95, on 31st March 1995, the balance-sheet total stood at GF 65,227,521,478

On 31st March 1994 it had amounted to GF 64,975,713,443

There was thus an increase of GF 251,808,035

or approximately 0.4%, compared with a rise of 8% a year earlier and one of 25% over the financial year 1992/93.

In fact this apparent stability masks a decline in resources in currencies, which was more than offset by the impact, in gold franc terms, of exchange rate movements: these affected the balance-sheet items denominated in currencies other than the US dollar and occurred in particular during the last few months of the financial year. They resulted in a sizable appreciation over the year of currencies such as the Swiss franc (25%), the Deutsche Mark (21%) and the Japanese yen (17%).

BIS: Development of the balance-sheet total over the past five financial years

Financial years ended 31st March	Balance-sheet total	Movement over the year	
	in millions of gold francs		in percentages
1991	45,719	+ 4,428	+ 11
1992	47,961	+ 2,242	+ 5
1993	59,966	+ 12,005	+ 25
1994	64,976	+ 5,010	+ 8
1995	65,227	+ 251	–

The following are not included in the Balance Sheet:

– bills and other securities held in custody for the account of central banks and other depositors;

– accounting entries arising from the Bank's functions as Agent for the European Monetary Institute as described in Section 2 above;
– gold held under earmark, which stood at 1,575 million gold francs on 31st March 1995, compared with 960 million on 31st March 1994.

Liabilities (composition of resources)

BIS: Development of resources over the past five financial years
(after allocation of the net profit for the year as proposed to the Annual General Meeting)

Financial years ended 31st March	Paid-up capital and reserves	Borrowed funds	Other liabilities	Balance-sheet total
	in millions of gold francs			
1991	1,557	42,856	1,306	45,719
1992	1,644	44,866	1,451	47,961
1993	1,745	56,515	1,706	59,966
1994	1,842	61,226	1,908	64,976
1995	1,951	61,091	2,185	65,227

A. Capital and reserves

(a) Paid-up capital GF 295,703,125

The Bank's authorised capital remained unchanged at 1,500 million gold francs; there was likewise no change in the issued capital, which is made up of 473,125 shares paid up to the extent of 25%.

(b) Reserves

The Legal Reserve Fund remains unchanged. On the other hand, it is proposed that all the other reserve funds be increased, as shown below, by transfers from the net profit for the financial year 1994/95.

The movements in the Bank's reserves are shown in a table at the end of this Report (under Item I).

(1) Legal Reserve Fund GF 30,070,313

In 1971 the total of this Fund was raised to 10% of the then paid-up capital. It has since remained unchanged. This is the proportion laid down in Article 51(1) of the Statutes.

(2) General Reserve Fund GF 764,916,157

On 31st March 1994 this Fund had stood at 732.2 million gold francs; it is proposed that a sum of 32.7 million be transferred to it from the net profit, in conformity with the provisions of Article 51(3) of the Statutes.

(3) Special Dividend Reserve Fund GF 53,530,055

It is recommended that this Fund be raised from 50.5 million gold francs to 53.5 million by allocation of 3 million from the net profit.

(4) Free Reserve Fund GF 806,966,872

This compares with 733.7 million gold francs at the end of the previous financial year, representing an increase of 73.3 million.

On 31st March 1995 the total of the Bank's reserves will thus stand at

GF 1,655,483,397

compared with 1,546.5 million on 31st March 1994, showing a rise of 109 million, transferred from the net profit for the financial year 1994/95. The reserves had been raised by 97 million gold francs at the end of the preceding financial year.

B. Borrowed funds

The following tables show the origin, nature and term of the Bank's borrowed resources.

BIS: Borrowed funds, by origin

Origin	Financial years ended 31st March		Movement
	1994	1995	
	in millions of gold francs		
Deposits of central banks	59,211	58,012	– 1,199
Deposits of other depositors	2,015	3,079	+ 1,064
Total	61,226	61,091	– 135

There was a slight decrease in borrowed funds, resulting from a decline in deposits received from central banks which was almost entirely offset by funds received from other depositors. The expansion in the latter item reflected new deposits made by a number of international organisations. Consequently, the share of "Deposits of central banks" in total borrowed funds contracted: on 31st March 1994 this item had represented 96.7% of the total; it fell to 95% a year later. Conversely, the share of other depositors recorded an increase from 3.3% to 5%.

The financial year under review was chiefly characterised by a substantial decline in deposits in US dollars, while resources in most other currencies increased. It should, however, be borne in mind that the effect of exchange rate movements, in gold franc terms, on currencies other than the US dollar

BIS: Borrowed funds, by nature and term to maturity

Term	Deposits in gold			Deposits in currencies			Total		
	Financial years ended 31st March		Movement	Financial years ended 31st March		Movement	Financial years ended 31st March		Movement
	1994	1995		1994	1995		1994	1995	
	in millions of gold francs								
Sight	3,927	4,042	+ 115	1,233	1,471	+ 238	5,160	5,513	+ 353
Not exceeding 3 months	44	63	+ 19	53,951	54,565	+ 614	53,995	54,628	+ 633
Over 3 months	90	52	– 38	1,981	898	– 1,083	2,071	950	– 1,121
Total	4,061	4,157	+ 96	57,165	56,934	– 231	61,226	61,091	– 135

contributed to the marked rise in some items. Moreover, as regards the composition of borrowed funds, the share of the US dollar remained predominant (61.1%), followed by that of the Deutsche Mark (22.2%).

As the preceding table shows, the total of liabilities in gold rose (by 2.4%), while that of deposits in currencies declined slightly (by 0.4%). As a result, the share of gold in total borrowed funds stood at 6.8% (compared with 6.6% on 31st March 1994) and that of currencies at 93.2% (compared with 93.4%). An examination of deposits in currencies reveals an increase in sight deposits (19.3%) and in funds with a maturity not exceeding three months (1.1%), whereas those with longer maturities decreased by more than half (54.7%).

On the basis of maturity, sight deposits constitute 9% of the total, those with a maximum maturity of three months 89.4% and those with a maturity of more than three months 1.6%, compared with 8.4%, 88.2% and 3.4% respectively on 31st March 1994.

(a) Deposits in gold GF 4,156,970,218

This compares with 4,061 million gold francs on 31st March 1994. This item registered an increase after having declined in each of the two preceding financial years.

The expansion of 96 million gold francs in these resources was due to an increase in sight deposits and deposits with a maximum maturity of three months, partially offset by a reduction in deposits at over three months.

(b) Deposits in currencies GF 56,934,458,058

The total of these resources had stood at 57,165 million gold francs on 31st March 1994. The decrease thus amounted to 231 million; it was due to the decline in deposits with a maturity of more than three months.

C. Other liabilities

The total of other liabilities amounted to GF 2,184,906,680
compared with 1,908 million gold francs at the end of the preceding financial year. This amount includes the items "Staff pension scheme", "Miscellaneous" and "Dividend payable on 1st July 1995".

(a) The item "Staff pension scheme" stood at GF 271,008,944

compared with 200 million gold francs on 31st March 1994. This item, which is regularly increased during the financial year, represents the Bank's liability in respect of staff pensions; it is denominated in Swiss francs, and most of the rise reflects the appreciation of that currency in gold franc terms.

(b) The item "Miscellaneous" stood at GF 1,860,489,020

It had amounted to 1,666 million gold francs on 31st March 1994.

(c) The item "Dividend payable on 1st July 1995" stood at GF 53,408,716

This corresponds to the dividend of 250 Swiss francs per share – against 240 Swiss francs in 1993 and 1994 – which it is proposed be set aside out of the net profit for the financial year 1994/95. In 1994 a sum of 41.1 million gold francs had

been set aside for this purpose. The difference of 12.3 million gold francs is due to the increase in the dividend payable per share and, in larger measure, to the appreciation of the Swiss franc in gold franc terms.

The net profit for the financial year 1994/95, before deduction of the above-mentioned dividend, amounted to 162.4 million gold francs, compared with 138.1 million for the preceding financial year. It is proposed that the balance of 109 million gold francs be allocated in accordance with Article 51 of the Statutes; details are given in Section 5 below.

Assets (employment of resources)

The following table gives a breakdown of the balance-sheet asset items according to their nature.

BIS: Development of investments and other assets, by nature

Nature	Financial years ended 31st March				Movement	
	1994		1995			
	in millions of gold francs					
Sight assets						
Gold	4,338		4,373		+ 35	
Currencies	12	4,350	10	4,383	– 2	+ 33
Treasury bills		3,511		5,520		+ 2,009
Time deposits and advances						
Gold	580		542		– 38	
Currencies	41,370	41,950	42,479	43,021	+ 1,109	+ 1,071
Government and other securities at term		15,088		12,284		– 2,804
Miscellaneous		77		19		– 58
Total						
Gold	4,918		4,915		– 3	
Currencies	60,058	64,976	60,312	65,227	+ 254	+ 251

An examination of the table shows a slight contraction in assets in gold and an increase in those in currencies.

(a) Sight assets in gold GF 4,373,392,132

This compares with 4,338 million gold francs on 31st March 1994. The expansion of 35 million in this item was due to the decline in investments made on the market (see item (d)).

(b) Cash on hand and sight assets in currencies GF 9,758,370

On 31st March 1994 this item had stood at 12 million gold francs.

(c) Treasury bills GF 5,520,274,016

This compares with 3,511 million gold francs at the end of the previous financial year. Both the volume and the composition of this portfolio can fluctuate considerably. Purchases of Treasury bills are made on various markets.

(d) Time deposits and advances GF 43,020,540,883

On 31st March 1994 the total of this item, which comprises gold and currency transactions, had stood at 41,950 million gold francs, giving an increase of 1,071 million.

– Investments in gold GF 541,851,346

This compares with 580 million gold francs on 31st March 1994.

– Investments in currencies GF 42,478,689,537

This compares with 41,370 million gold francs on 31st March 1994.

(e) Government and other securities at term GF 12,284,320,336

The value of this portfolio, which had stood at 15,088 million gold francs on 31st March 1994, varied appreciably during the financial year. It consists principally of Treasury securities purchased on various markets.

It should be noted that, in parallel with the development of resources, holdings in US dollars recorded a marked contraction, while continuing to represent the largest item in the Bank's assets. These investments are followed by those in Deutsche Mark and, for considerably smaller amounts, those in Japanese yen, Canadian dollars, ECUs, pounds sterling and Swiss francs.

Assets in gold decreased by 3 million gold francs, while liabilities increased by 96 million. The difference of 99 million gold francs corresponds to the decline in forward gold operations, referred to below.

The following table gives a breakdown according to residual term to maturity of investments in time deposits and advances (in gold and currencies) and in government and other securities at term.

BIS: Time deposits and advances and government and other securities at term, by term to maturity

Term	Financial years ended 31st March		Movement
	1994	1995	
	in millions of gold francs		
Not exceeding 3 months	43,704	42,357	–1,347
Over 3 months	13,334	12,948	– 386
Total	57,038	55,305	–1,733

The total of investments at term decreased by 1,733 million, or 3%.

With regard to relative shares, deposits with a maximum maturity of three months account for 76.6% of total investments and those at over three months 23.4%. From this point of view, the distribution of investments remains the same as that recorded at the end of the preceding financial year.

(f) Miscellaneous GF 19,235,741

This item had stood at 76.6 million gold francs on 31st March 1994.

Forward gold operations

These operations are mentioned in Note 2 to the Balance Sheet and show a negative balance of GF 96,391,648

There was a marked decrease in these transactions. At the end of the previous financial year they had shown a negative balance of 195 million gold francs.

5. Net profits and their distribution

The accounts for the sixty-fifth financial year ended 31st March 1995 show a net operating surplus of 170,539,274 gold francs, compared with 145,227,801 gold francs for the preceding financial year. The increase in the net operating surplus mainly reflects the higher level of the Bank's balance sheet during much of the year under review. In addition, the rise in interest rates for the major currencies in the course of 1994/95 generated increased earnings on the Bank's own funds held in currencies and also led to improved trading margins on its borrowed funds operations.

This year's result is shown after deduction of 58,739,784 gold francs in respect of costs of administration, representing a 16.4% increase over the previous year's figure of 50,450,402 gold francs. A much smaller increase would have been recorded but for the effect of valuation changes, in particular the substantial rise in the value of the Swiss franc against the gold franc in the course of the year. In terms of Swiss francs, in which currency most of the Bank's expenditure is incurred, the increase in costs amounted to about 3%.

The Board of Directors has decided to transfer 3,389,388 gold francs to the Provision for Exceptional Costs of Administration and 4,741,170 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 162,408,716 gold francs, against 138,085,797 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 162,408,716 gold francs be applied by the General Meeting in the following manner:

(i) an amount of 53,408,716 gold francs in payment of a dividend of 250 Swiss francs per share;

(ii) an amount of 32,700,000 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 73,300,000 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 1995 to the shareholders whose names are contained in the Bank's share register on 20th June 1995.

The Balance Sheet, the Profit and Loss Account and a summary statement showing the movements in the Bank's reserves during the financial year 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 give, on the basis described in Note 1, a true and fair view of the state of the Bank's affairs at 31st March 1995 and of its profit for the year ended on that date. Price Waterhouse's report is appended at the foot of the Balance Sheet.

6. Changes in the Board of Directors and in the Management

Lamberto Dini relinquished his seat on the Board on 31st May 1994 and therefore his position as Vice-Chairman of the Board. At its meeting on 12th July 1994 the Board elected Carlo Azeglio Ciampi, who had been appointed by Antonio Fazio as a member of the Board from 1st July 1994, as Vice-Chairman of the Board of Directors for a period of three years.

At its meeting on 12th July 1994 the Board took note of, and welcomed, the intention of the Federal Reserve System of the United States of America to occupy the two seats on the Board of Directors to which the central bank of the United States had been entitled since 1930. An Extraordinary General Meeting was convened on 13th September 1994 to approve a minor change in the Statutes of the Bank to take account of the evolution of the Federal Reserve System to its present structure. Alan Greenspan, Chairman of the Board of Governors of the Federal Reserve System, became an ex officio member of the Board on 13th September 1994 and appointed William J. McDonough, President of the Federal Reserve Bank of New York, as a member of the Board for a period of three years from 13th September 1994. It was also decided to elect Gordon G. Thiessen, Governor of the Bank of Canada, and Yasushi Mieno, Governor of the Bank of Japan, as members of the Board from 13th September 1994 for three years. At the meeting of the Board on 13th March 1995 Markus Lusser, Chairman of the Governing Board of the Swiss National Bank, was re-elected as a member of the Board for a further period of three years expiring on 31st March 1998.

Bernard Clappier's term of office expired on 27th November 1994 and he retired from the Board. In his place Jean-Claude Trichet, Governor of the Bank of France, appointed Hervé Hannoun for a period of three years from 28th November 1994.

At its meeting on 12th December 1994 the Board elected Yasuo Matsushita as a member of the Board from 17th December 1994 to fill the vacancy caused by Yasushi Mieno's retirement from his position as Governor of the Bank of Japan.

In July 1994 Edward A. J. George, Governor of the Bank of England, appointed T. R. Smeeton as his Alternate in the absence of Alastair Clark, and in November 1994 he appointed Ian Plenderleith as his Alternate in

place of Alastair Clark. In September 1994 Hans Tietmeyer, President of the Deutsche Bundesbank, appointed Bernd Goos as his Alternate in the absence of Helmut Schieber. Alan Greenspan appointed Alan S. Blinder as his Alternate and Edwin M. Truman as his Alternate in the absence of Alan S. Blinder. In December 1994 Jean-Claude Trichet appointed André Robert as his Alternate and, in his absence, Armand Pujal.

As regards the Management of the Bank, Giampietro Morelli retired from his position as Secretary General at the end of August 1994. He was succeeded by Gunter D. Baer. Malcolm Gill was appointed Head of the Banking Department as from 1st April 1995. Horst Bockelmann retired from the Bank at the end of April 1995 and William R. White replaced him as Economic Adviser and Head of the Monetary and Economic Department. André Icard was appointed Manager as from August 1995. Jean Vallet, Deputy Secretary General and Deputy Manager, retired in January 1995. Günter Pleines was promoted to the rank of Deputy Manager in April 1995 and Zenta Nakajima was appointed at the rank of Deputy Manager as from June 1995.

The Bank learned with deep regret of the death of Per Åsbrink on 17th June 1994 and of Walter Schwegler on 17th November 1994. Both had been members of the Board, Per Åsbrink as Governor of the Bank of Sweden from December 1955 to October 1973 and Walter Schwegler as Chairman of the Governing Board of the Swiss National Bank from June 1956 to August 1966. The Bank, with deep regret, also learned of the death of Henri Guisan, who held the position of Legal Adviser from 1955 until his retirement in 1974, on 7th July 1994, and of Alberto Ferrari, its Secretary General from 1951 to 1961, on 12th September 1994.

Conclusion

If any doubts remained about the reach and pervasive influence of international financial markets, the events of the past year should have dispelled them. The large price movements in the bond and exchange markets of industrial countries, the Mexican crisis, and some well-publicised trading losses had reverberations which were felt in capital markets around the world. Underlying these developments was a sharpened market focus on longer-term considerations and a corresponding need to discriminate among borrowers on the basis of such fundamentals. This is all to the good, provided of course that the markets' judgements are themselves sound. Unfortunately, while this is normally the case, recent events have demonstrated that it is not necessarily so.

Long-term interest rates rose in 1994 in part because the market correctly foresaw that economic activity in the industrial countries would continue to strengthen. More recently they have fallen back as economic indicators have begun to weaken. Similarly, exchange rates changed at least partly in response to the accumulation of external assets and liabilities by Japan and the United States respectively. Mexico eventually encountered difficulties because of rising external debts associated with a loss of external competitiveness. Finally, the market prudently demanded an enhanced risk premium on loans made to private and sovereign borrowers deemed to be less creditworthy.

However, the evidence from the period under review also indicates that markets sometimes react too slowly to fundamentals, and can then adjust abruptly with attendant dangers. The rapid rise in bond yields in 1994 followed a year in which real rates (ex post) had fallen to unusually low levels, particularly in Europe. The speed and timing of the changes in the bilateral rate of the US dollar against the yen and the Deutsche Mark in the first few months of 1995 are likewise difficult to explain. In the case of Mexico, the market paid little attention to deteriorating external statistics for a long time before initiating a sharp withdrawal, which had implications not only for Mexico but also for many other developing economies. The fact that many weeks passed before other markets calmed down, and before the Mexican peso and Mexican security prices recovered somewhat from their worst levels, provides further evidence that financial markets may take time to converge on appropriate values.

The power exercised by financial markets, however it is viewed, is unlikely to diminish. Rather, all the signs are that the influence of markets will continue to increase, with advancing technology allowing more instruments to be traded in more places and among a growing range of participants. Nor will such markets be easily regulated, given the facility with which they can move from one

jurisdiction to another, and widespread concern that stricter regulation could well have more costs than benefits. The real, practical challenge for policy-makers is to use the influence they have to maximise the disciplinary powers of markets while minimising their excesses. In this regard, there are lessons to be learned with respect to the conduct of macroeconomic policy, the containment of systemic risk in a globalised financial market-place, and the strengthening of international financial cooperation.

The conduct of macroeconomic policy

Recent events indicate that markets eventually respond to economic fundamentals affecting risk and rates of return, but may do so in an abrupt and painful way. It would be better if policy-makers were themselves to recognise what adjustments were inevitable and to initiate them in a pre-emptive manner. While the recent focus of policy-makers on medium-term objectives – reducing inflation and containing government deficits – has been welcome, the market clearly feels that still more effective and timely action is needed. Greater policy awareness of cumulating stock imbalances is particularly necessary, the most important of these being government debt and associated debt service. When debt levels are high, increases in interest rates can raise debt service requirements sharply, bringing the credibility of even the strictest monetary authority into question. Ultimately, fears that debt might be monetised could lead to an accelerating pattern of higher risk premia, heavier costs of debt service, further increases in risk premia and growing constraints even on necessary kinds of government spending. Obviously, it would be better to deal with problems of debt accumulation in advance of such extreme developments.

In the same way that sound monetary policies can be undermined by excessive fiscal deficits, the stabilising effects of sound fiscal positions can also be undermined by inadequate private saving. The Mexican experience demonstrates that current account deficits can lead to severe problems even if they originate in the private sector; this is all the more likely if they are linked to relatively high levels of consumption as opposed to investment. It also illustrates how deregulation of the domestic financial system, in combination with increased internal and external confidence generated by successful reforms, can contribute to such an outcome by encouraging capital inflows and a sharp rise in consumer borrowing. In contrast to Mexico and a number of other Latin American countries, Chile and most of the emerging economies of South-East Asia have not, in recent years at least, experienced similar problems, largely because they have maintained, either by natural propensity or through policy incentives, a high domestic saving rate which more or less matched their high level of investment.

Movements in the bilateral exchange rate between the United States and Japan over the last sixteen months also seem to reflect the build-up of external debts and assets respectively. The fundamental reason for these exchange rate shifts is not government fiscal positions as such, even if the US deficit remains too large, but rather the fact that overall rates of national saving are very high (by the standards of industrial countries) in Japan and very low in the United

States. In Japan, it would seem imperative to pursue deregulation that would encourage spending, particularly on housing and infrastructure which would be of lasting benefit. In the United States, further fiscal retrenchment would seem called for, as would an examination of other government policies affecting private saving. Domestic policy changes would help avoid market-driven pressures to resolve the imbalances through the blunt tool of exchange rate movements alone. Large and persistent budget deficits, combined with a build-up of debt, have also depressed a number of European exchange rates. A major exception to this has been Germany, which has taken significant corrective action, and in so doing has probably contributed to the strength of the Deutsche Mark.

Recent events also provide lessons with respect to the transparency and credibility of monetary policies. If markets are to judge effectively the soundness of policies, without surprises and abrupt reactions, they need adequate information not only about current developments but also about the ultimate goals, intermediate objectives and instruments of monetary policy. When allied with a decision-making framework that gives the monetary authority the powers to pursue its stated goals, such transparency can go a long way towards aiding stability and credibility. Transparency in this sense will also foster greater accuracy in the markets' ongoing assessment of developments and, in turn, improve the quality of market input (such as the expected rate of inflation embedded in bond yields) which can be useful in the policy-making process. Monetary authorities in many industrial countries, and in a growing number of emerging economies, have become increasingly open about their policy framework, including the rationale for changes in official interest rates and the uses of other instruments. The greater the number of countries that go in this direction, the more the force of example will persuade others to follow suit. This too should be welcomed.

It is, of course, well understood that such steps cannot substitute for the credibility deriving from an appropriate fiscal stance and a proven historical record in fighting inflation. When bond rates moved up in 1994 in anticipation of a faster global recovery, the pattern of changes in yield differentials across countries highlighted the importance attached by the market to these factors. The industrial countries that saw the highest rate increases all had poor records in both respects. In addition, many of them faced political uncertainties which implied that required changes in policies might be difficult to implement. Those emerging economies that have only a very short track record of policies directed towards liberalisation and stabilisation are also particularly vulnerable in this regard. The markets may be inclined to give them little room for manoeuvre for some years to come, and policy-makers would be well advised to take this into account.

Recent events also raise a number of questions about the management of exchange rate movements. In particular, the speed and size of the movements in the bilateral rates between the US dollar, the yen and the Deutsche Mark have led to calls for coordinated interest rate adjustments to help stabilise the markets. The contribution such policies might make should not be exaggerated, given that changes in short-term interest rate differentials were steadily more supportive of the US dollar in the course of 1993 and 1994, with little apparent effect.

More fundamentally, such suggestions should not be pursued at the expense of a clear focus on domestic price stability. Of course, to the extent that the exchange rate is an important variable affecting domestic prices, its level should be one of the indicators policy-makers look at when deciding whether to change interest rates with a view to ensuring domestic price stability.

Recognising the role of the exchange rate within a domestic monetary framework might also help improve the effectiveness of exchange market intervention. It is now generally agreed that intervention does not work only through changes in the relative supply of assets denominated in different currencies. Its effectiveness depends even more on the signal it sends about the authorities' readiness to take other action to influence the value of their currency. Acceptance of this signalling function would imply that the attitudes of authorities who bear responsibility for the other policy instruments also play a role in the effectiveness of intervention, and that intervention may be more successful if carried out sparingly, and in the context of clearly articulated macroeconomic policies.

Exchange rate tensions have of course not been confined to the major parities, and recurring pressures within the ERM have elicited various reactions. In some countries a depreciation was accepted, but in others market pressures were successfully resisted through a judicious mix of intervention and changes in short-term interest rates. In the latter cases, time should foster stability if underlying macroeconomic policies are supportive; successive and successful defences of a currency's value should build credibility and dissuade speculators. However, time can also allow gaps to widen in the underlying cost structures of countries linked together by a fixed exchange rate. The stability of exchange rates over the medium term will be encouraged to the extent that domestic labour markets can be made more flexible. More determined policies directed towards improving the efficiency of labour markets would also help address the crucial problem of high unemployment in Europe, which continues to be a matter of serious economic and social concern.

Exchange rate developments were also of major significance in a number of emerging economies. Perhaps the biggest lesson from the experience of several Latin American countries is that using the nominal exchange rate as an anchor to encourage lower inflation has merit but that it also has limitations and dangers. The resulting increase in the real exchange rate may eventually make the nominal peg unsustainable unless it is sufficiently supported by other domestic policies. Moreover, this danger will be exacerbated if capital inflows are short-term, essentially speculative and easily reversible. Such considerations imply that emerging economies should perhaps be more cautious in running external deficits and more prudent in dismantling controls on short-term capital inflows. It is noteworthy that the experience of most South-East Asian economies, where deregulation has been slower and the reliance on foreign direct investment greater, has been more satisfactory than that of a number of Latin American countries. Of course, this also reflects the more fundamental differences referred to above.

Containing risks in financial markets

Given the size, complexity and interdependence of financial markets around the world, it is not surprising that concerns have been expressed that essentially local events may now have disruptive implications for the international financial system as a whole. Highly volatile price movements, the failure of a large firm, illiquidity in an important market or problems arising in the legal framework or payment systems which underpin financial markets could all contribute to systemic problems. Although the financial shocks which characterised the period under review did not have wider consequences, they helped to identify the source of such concerns and to point the way to preventive action.

The volatility of prices in many financial markets rose sharply in early 1994 and for a time remained unusually high, especially in Europe. One danger of large price movements is that they can spark still larger ones through stop-loss orders and dynamic hedging strategies. In unsettled markets already tending in one direction, the market liquidity provided by dealers can, at least temporarily, dry up in the face of such hedging-related selling. Anecdotal evidence suggests that this may be part of the explanation for the steep fall in bond prices in Europe in the spring of 1994, and the large and at times disorderly changes in exchange rates this year. A consequence of experiences of this sort could be a weakening of market-making capacity and, as a result, less resilient markets over time. A further concern related to instances of sharp price movements is that risk management strategies based on the perceived stability of asset price covariances might underestimate the extent to which prices in different markets move together in times of stress, leaving firms more exposed than they intended to be. The solutions which offer themselves have both a macro and a micro component. At the macro level, credible policies with a medium-term orientation would help to stabilise market expectations and could reduce the likelihood of sharp price movements. At the micro level, firms need to pay increased attention to their capacity to adjust to unusually large and potentially correlated price changes in different markets.

The failure of Baring Brothers and the revelation of significant trading losses elsewhere both revived old issues and raised some new ones. They clearly underlined the importance of adequate internal controls and risk management procedures. They also raised questions about compensation arrangements for traders and fund managers, which often richly and immediately reward successful risk-takers while leaving the firm to absorb potential losses. While incentives are required to generate profits, these profits are of questionable quality if their pursuit puts the survival of the entity, and especially of integrated financial firms, at risk. The losses further underscored the need for supervisory authorities to ensure that capital is adequate in the light of the market risk exposures firms assume in trading activities. In this regard, the initiatives announced by the Basle Committee on Banking Supervision in April 1995, after a period of consultation, should prove very helpful.

As financial markets continue to grow and instruments become more complex, reliance on market discipline will become an increasingly important complement to the discipline imposed by supervisory bodies. Recognising that

market discipline must be based on adequate information, the authorities have recently been encouraging firms to disclose both their willingness to assume risk and their success in risk management. If the agreement by some firms to reveal such information is read by the market as a sign of strength, the first manifestation of market discipline will be that other firms are forced to do the same. And if this means that firms without appropriate risk assessment systems are obliged to develop them, this too will be a step forward.

Finally, a number of recent events have pointed to the need to improve communication between central banks and other supervisory authorities around the world, as well as the desirability of avoiding regulatory gaps and uneven regulatory playing-fields. As global competition in the provision of financial services intensifies, and as the structure of financial markets continues to evolve, adaptation of the regulatory apparatus to reflect these developments will become necessary. The growing convergence in the business functions of banks, securities houses and insurance companies is of particular significance in this connection.

Strengthening international financial cooperation

The deepening of global integration at all levels of economic activity implies a continuing need for policy-makers to exchange views regularly and to seek a consensus where possible on issues that bear on their countries' joint well-being. Such cooperation works in the main through country representatives agreeing on what needs to be done, relying on the moral force of such agreements to encourage any needed changes to national policies, legislation and regulation. Such a cooperative approach may at times seem slow and laborious but experience has shown that it can succeed and that the benefits warrant the effort invested.

Dialogue among policy-makers about macroeconomic issues is desirable even when domestic monetary policies are directed solely to domestic objectives. Given highly integrated capital markets, changes in domestic monetary policies can influence exchange rates, which may in turn have an impact on price levels in other countries. The fact that exchange markets can sometimes overshoot or fail to move in response to changing economic fundamentals should also be a source of international concern, prompting the question of how changes to underlying fiscal and structural policies might help alleviate potential exchange rate tensions. Finally, in view of the possibility of occasional market failure, some internationally agreed "prudent standards" regarding debt accumulation and the setting of other macroeconomic variables might prove useful in helping countries avoid becoming overextended in the first place.

Recent events have shown the need for all parties concerned, in mature and emerging economies alike, to work together to strengthen the resilience of international financial markets. Although central banks cannot themselves ensure that this happens, in many countries they are closely involved in the monitoring and analysis of market developments and increasingly rely on the use of market instruments to put their policies into effect. Efforts to ensure a level playing-field between domestic institutions competing internationally, and smooth interfaces

between national payment systems will also entail interaction in areas of traditional interest to central banks. This involvement means that the central banking community is well placed to make an ongoing contribution to ensuring that markets and financial infrastructures continue to function in ways that are conducive to international monetary and systemic stability. This, it is worth recalling, was one of the considerations that motivated those who drew up the mandate for this institution sixty-five years ago.

Basle, 24th May 1995

ANDREW CROCKETT
General Manager

Balance Sheet and Profit and Loss Account

at 31st March 1995

Balance Sheet at 31st March 1995

(in gold francs – see Note 1)

Assets		
Gold		4 373 392 132
Cash on hand and on sight account with banks		9 758 370
Treasury bills		5 520 274 016
Time deposits and advances		
Gold		
Not exceeding 3 months	282 781 538	
Over 3 months	259 069 808	
Currencies		
Not exceeding 3 months	36 127 056 275	
Over 3 months	6 351 633 262	
		43 020 540 883
Government and other securities at term		
Not exceeding 3 months	5 947 524 799	
Over 3 months	6 336 795 537	
		12 284 320 336
Miscellaneous		19 235 740
Land, buildings and equipment		1
		65 227 521 478

Note 1:
The gold franc is the equivalent of 0.290 322 58... grammes fine gold – Article 4 of the Statutes. Assets and liabilities in US dollars are converted at US$ 208 per fine ounce of gold (equivalent to 1 gold franc = US$ 1.941 49...), and all other items in currencies on the basis of market rates against the US dollar.

Note 2:
At 31st March 1995, gold payable against currencies on forward contracts amounted to 96 391 648 gold francs.

		Before allocation of the year's Net Profit	After
Liabilities			
Capital			
Authorised: 600 000 shares, each of 2 500 gold francs	1 500 000 000		
Issued: 473 125 shares	1 182 812 500		
of which 25% paid up		295 703 125	*295 703 125*
Reserves			
Legal Reserve Fund	30 070 313		*30 070 313*
General Reserve Fund	732 216 157		*764 916 157*
Special Dividend Reserve Fund	50 530 055		*53 530 055*
Free Reserve Fund	733 666 872		*806 966 872*
		1 546 483 397	*1 655 483 397*
Deposits (gold)			
Central banks			
Sight	4 042 312 303		
Not exceeding 3 months	63 254 613		
Over 3 months	51 403 302		
		4 156 970 218	*4 156 970 218*
Deposits (currencies)			
Central banks			
Sight	1 401 930 963		
Not exceeding 3 months	51 969 341 951		
Over 3 months	484 017 087		
Other depositors			
Sight	69 270 690		
Not exceeding 3 months	2 595 772 768		
Over 3 months	414 124 599		
		56 934 458 058	*56 934 458 058*
Staff Pension Scheme		271 008 944	*271 008 944*
Miscellaneous		1 860 489 020	*1 860 489 020*
Profit and Loss Account		162 408 716	—
Dividend payable on 1st July 1995		—	*53 408 716*
		65 227 521 478	*65 227 521 478*

Report of the Auditors to the Board of Directors and to the General Meeting of the Bank for International Settlements, Basle

In our opinion the Balance Sheet and the Profit and Loss Account, including the notes thereon, give, on the basis described in Note 1, a true and fair view of the state of the Bank's affairs at 31st March 1995 and of its profit for the year ended on that date. We have obtained all the information and explanations which we have required. The Bank has kept proper books, and the Balance Sheet and the Profit and Loss Account are in agreement with them and with the information and explanations given us.

Basle, 27th April 1995 PRICE WATERHOUSE

Profit and Loss Account

for the financial year ended 31st March 1995

(in gold francs)

Net interest and other operating income		229 279 058
Less: Costs of administration		
Board of Directors	1 167 611	
Management and staff	40 207 740	
Office and other expenses	17 364 433	58 739 784
Net operating surplus		170 539 274
Less: Amounts transferred to		
Provision for Exceptional Costs of Administration	3 389 388	
Provision for Modernisation of Premises and Renewal of Equipment	4 741 170	8 130 558
Net Profit for the financial year ended 31st March 1995		162 408 716

The Board of Directors recommends to the Annual General Meeting that the Net Profit should be allocated in accordance with Article 51 of the Statutes as follows:

Dividend: 250 Swiss francs per share on 473 125 shares		53 408 716
		109 000 000
Transfer to General Reserve Fund		32 700 000
		76 300 000
Transfer to Special Dividend Reserve Fund		3 000 000
		73 300 000
Transfer to Free Reserve Fund		73 300 000
		—

Movements in the Bank's Reserves

during the financial year ended 31st March 1995

(in gold francs)

I. Development of the Reserve Funds resulting from allocations for the financial year 1994/95

	Legal Reserve Fund	General Reserve Fund	Special Dividend Reserve Fund	Free Reserve Fund
Balances at 1st April 1994, after allocation of Net Profit for the financial year 1993/94	30 070 313	732 216 157	50 530 055	733 666 872
Add: Allocations for the financial year 1994/95	—	32 700 000	3 000 000	73 300 000
Balances at 31st March 1995 as per Balance Sheet	30 070 313	764 916 157	53 530 055	806 966 872

II. Paid-up Capital and Reserve Funds at 31st March 1995 (after allocation) were represented by:

	Paid-up Capital	Reserves	Total
Net assets in			
Gold	295 703 125	366 178 487	661 881 612
Currencies	—	1 289 304 910	1 289 304 910
	295 703 125	1 655 483 397	1 951 186 522

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
Markus Lusser, Zurich
William J. McDonough, New York
Yasuo Matsushita, Tokyo
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

Alan S. Blinder or
Edwin M. Truman, Washington
Ian Plenderleith or
T. R. Smeeton, London
Jean-Jacques Rey, Brussels
André Robert or
Armand Pujal, Paris
Carlo Santini or
Stefano Lo Faso, Rome
Helmut Schieber or
Bernd Goos, Frankfurt a/M.

Management

Andrew Crockett	General Manager
Rémi Gros	Assistant General Manager
Gunter D. Baer	Secretary General, Head of Department
Malcolm Gill	Head of the Banking Department, Manager
William R. White	Economic Adviser, Head of the Monetary and Economic Department
Marten de Boer	Manager, Internal Audit, Accounting and Budgeting
Renato Filosa	Manager, Monetary and Economic Department
Mario Giovanoli	Legal Adviser, Manager
Guy Noppen	Manager, General Secretariat
André Bascoul	Deputy Manager, General Secretariat
Joseph R. Bisignano	Deputy Manager, Monetary and Economic Department
Zenta Nakajima	Deputy Manager, Monetary and Economic Department (as from 1st June 1995)
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
Jean-Claude Dagassan	Assistant Manager, ECU Clearing Agent
Yukio Iura	Assistant Manager, Banking Department
Daniel Lefort	Assistant Manager, Legal Service
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