BANK FOR INTERNATIONAL SETTLEMENTS

64th ANNUAL REPORT

1st APRIL 1993–31st MARCH 1994

BASLE, 13th JUNE 1994

Bank for International Settlements

64th Annual Report

1st April 1993–31st March 1994 Basle, 13th June 1994

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64th Annual Report

submitted to the Annual General Meeting
of the Bank for International Settlements
held in Basle on 13th June 1994

Ladies and Gentlemen,

I have the honour to submit herewith the sixty-fourth Annual Report of the Bank for International Settlements for the financial year which began on 1st April 1993 and ended on 31st March 1994.

The net profit for the year amounted to 138,085,797 gold francs, after transfer of 3,274,041 gold francs to the Provision for Exceptional Costs of Administration and 3,867,963 gold francs to the Provision for Modernisation of Premises and Renewal of Equipment. This compares with a net profit for the preceding year of 139,895,417 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 41,085,797 gold francs in payment of a dividend of 240 Swiss francs per share.

The Board further recommends that 29,100,000 gold francs be transferred to the General Reserve Fund, 3,000,000 gold francs to the Special Dividend Reserve Fund and the remainder of 64,900,000 gold francs to the Free Reserve Fund.

If these proposals are approved, the Bank's dividend for the financial year 1993/94 will be payable to shareholders on 1st July 1994.

I. Wide divergences in the world economy

1993 was a year of contrasting developments among countries and regions. In the industrial world, expansion gathered pace in the United States and got under way in Canada, the United Kingdom and Australia, while Japan and much of continental Europe remained stuck in recession. Among developing countries and the countries in transition the differences were, if anything, even more pronounced, with the vigorous growth again recorded in East and South-East Asia standing in marked contrast to the deepening economic crisis in the former Soviet Union.

Financial developments, too, exhibited important divergences. With the exception of Japan, the health of financial institutions and of the corporate sector has improved. This trend was most evident in the United States, where banks again generated substantial profits and the position of non-financial firms strengthened considerably. The behaviour of financial markets, on the other hand, has been unpredictable. Renewed turbulence in the ERM led to a dramatic widening of fluctuation bands, though subsequently foreign exchange markets became strikingly calm. Later, bond markets in a number of countries suffered a sharp reversal, after a sustained period of rising prices, leaving many observers puzzled about the sequence of what seemed to be minor causes and major effects. While systemic risks did not actually surface in the process, these events added to concern that serious losses can arise from risks that may not be adequately evaluated by financial market participants.

Despite the strengthening of activity in the United States, growth in the industrial countries as a whole remained weak, with total employment stagnating or declining for the third successive year. Unemployment has become the dominant social problem, particularly in Europe, where in a number of countries joblessness rose to levels not seen since the 1930s. However, the disappointing overall picture in 1993 once again concealed a marked divergence in the cyclical position of the main groups of countries. Growth accelerated in the United States, while recovery also became established in the United Kingdom, Canada, Australia and New Zealand (see the table overleaf). Activity in all these countries has been stimulated by low interest rates and real exchange rates which appear quite competitive when compared with long-term averages. Most continental European countries, on the other hand, suffered output declines and there were few signs that the cyclical turning-point might have been reached until late in the year. For Sweden and Finland it was the third year of declining output, Finland being the hardest hit among the industrial countries.

World output growth[1]

Country groups and regions	1984–86 GDP	1983–88 average	1989	1990	1991	1992	1993
	as % of total	percentage changes in real GDP					
Countries cyclically ahead[2]	39.5	4.0	2.5	1.0	– 1.0	2.0	2.8
Other industrial countries[3]	34.4	3.4	4.0	4.0	2.8	1.3	–0.3
Developing countries	19.7	4.1	3.9	3.6	3.3	4.6	4.3
Africa	2.5	2.8	3.6	2.3	1.5	1.0	0.6
Middle East	3.9	–0.6	4.8	5.1	0.9	5.6	3.0
Asia	7.5	7.7	5.7	5.6	5.3	7.0	7.2
Latin America	5.8	2.9	1.1	0.7	3.0	2.3	3.0
Eastern Europe	6.4	2.6	1.6	–4.9	–14.0	–15.5	–9.1
World	100.0	3.6	3.4	2.4	0.6	1.2	1.1
Memorandum item:							
World, excl. eastern Europe	*93.6*	*3.7*	*3.5*	*2.9*	*1.6*	*2.2*	*1.7*

[1] Average growth rates for industrial countries are calculated using 1991 GDP weights and exchange rates and, for eastern Europe, using 1990–91 GDP and exchange rates, including eastern Germany up to 1991. Other averages are based on 1984–86 GDP weights and exchange rates and comprise all countries with 1985 GDP of at least US$ 100 million. [2] United States, Canada, United Kingdom, Australia and New Zealand. [3] Including Israel, Turkey and Malta.

Sources: IMF World Economic Outlook, OECD National Accounts, UN Yearbook, World Bank World Tables, national data and BIS estimates.

The economic performance of developing countries has for some years past depended more on the success of internal reform efforts than on cyclical conditions in the world economy. 1993 was no exception. There was once again vigorous growth in the increasing number of newly industrialising economies, apparently relatively untouched by developments in Europe and Japan. Apart from the familiar examples in East and South-East Asia, the strong performance of China, Vietnam, India, Argentina, Chile and some other Latin American countries may be noted. A few of these countries were even confronted with problems of overheating. On a regional basis, Asia once again turned in the strongest performance. The pace of expansion slowed in the Middle East and Africa, but appears to have picked up slightly in Latin America. In eastern Europe and the former Soviet Union, there was a marked contrast between the economic performance of those countries which are beginning to reap the fruits of reform, such as Poland, the Czech Republic, Hungary and Slovenia, and much of the former Soviet Union, where reforms to tackle structural and macroeconomic imbalances have barely begun and output continues to decline.

The difficulties experienced by the industrial countries during the recession have naturally given rise to intensive macroeconomic policy debate at both national and international level. There have been the usual differences between policy-makers who advocate activist macroeconomic policies and those who have serious reservations in that respect. On this occasion, however, there is a shared recognition of the constraints within which macroeconomic policies must be designed. Where budget deficits are high

and the debt/GDP ratio is rising, governments have little option but to undertake measures aimed at credible consolidation in the fiscal balance, whatever the short-term cyclical position. To do otherwise would undermine confidence in the longer term and quite possibly bring about a counter-productive rise in bond yields.

In the realm of monetary policy, too, there are major constraints. In the first place, central banks directly control only the level of very short-term money market interest rates. These are not necessarily closely related with movements in the longer-term rates that, in many countries, are more important for investment decisions. Indeed, inappropriate reductions in short rates could be associated with increases in long rates if market participants see them as a sign that longer-term anti-inflation discipline is weakening.

Nonetheless, despite a shared recognition of the constraints facing policy-makers, and a common commitment to the ultimate goal of price stability, there remain differences in emphasis among central banks about how monetary policy should be implemented in a period of weak economic activity. These differences are reflected in the willingness of the Japanese and US authorities to bring rates down to quite low levels (and in the case of the United States, to keep them there even when recovery got under way), while European countries have remained reluctant to accelerate the pace of monetary easing so long as inflation remained above levels that were acceptable in the longer term, or exchange rates remained vulnerable.

The difference between these two approaches to the implementation of monetary policy probably has its roots less in differences of emphasis with respect to the objectives of monetary policy than in different views about the nature of the transmission mechanism. Those who favour the relatively rapid easing of monetary policy when demand is weak generally believe that low interest rates can and should be used to stimulate economic activity while any attendant inflationary risks will be kept in check by excess capacity in factor and product markets. Those who favour more cautious easing believe that the lags with which monetary policy operates are such that the short-term effect on output is problematic while the longer-term risks for the credibility of monetary policy are substantial.

The differences should not, of course, be exaggerated. Few would dispute that, circumstances permitting, short-term interest rates should be fairly low when the economy is weak. It is therefore worth looking a little more closely at the circumstances which, apart from any inflation concerns, may have caused central banks to keep short-term interest rates higher than the weakness of their economies might have suggested.

Within the European exchange rate mechanism, as in any fixed but adjustable exchange rate system, narrow margins left most central banks with little leeway for independent action on short-term money market rates. The decision on 2nd August 1993 to widen substantially the fluctuation margins in the ERM (except between the Deutsche Mark and the Dutch guilder) has changed this situation only in principle, since participating central banks have clearly not abandoned their objective of keeping their

currencies close to their central parities. Chapter VII discusses the reasoning behind this policy and the advantages which were nevertheless gained by widening the band.

For floating currencies, too, exchange rate considerations may be important in the setting of short-term interest rates. Even minor shifts in currency preferences can have sizable cumulative exchange rate effects, with initial changes feeding into expectations and thus triggering further changes. These exchange rate effects are in turn a major channel for the generation and propagation of inflationary impulses. Interest rate changes have potentially important effects on exchange rates not just through their direct impact on yield differentials on short-term assets but also because they affect market participants' expectations about the future course of monetary policy.

Money supply developments and deviations from targets, which for some central banks have in the past provided a powerful argument against an anticyclical short-term interest rate policy, do not seem to have been a major factor in guiding policy developments recently. Even a massive overshooting of the intermediate target variable M_3 in Germany was not allowed to exert a dominant influence on policy, attributable as it was to a whole range of special factors. Concerns as to whether very low short-term interest rates might trigger another asset price cycle have also not played a major role in short-term interest rate management. In the United States and the United Kingdom, the recovery of financial asset prices was seen as a welcome contribution to the strengthening of balance sheets, while in Japan most asset prices remain at relatively depressed levels.

Decisions with respect to money market interest rates should, in principle, be influenced by the manner in which short-term interest rates are linked to other financial asset prices and hence to decisions affecting the real economy. These linkages – the "transmission mechanism" of monetary policy – may well differ over time and between countries. Such differences – the globalisation of financial markets notwithstanding – seem to be firmly embedded in national financial structures and relate to the relative importance of short and long-term interest rates, and fixed and variable rates, in financial contracts. However, the major easing of monetary policy in Europe over the last year or so is likely to have a substantial impact on activity irrespective of such differences in financial structure, as the reduction in short-term interest rates has by and large gone hand in hand with a similar decline in long-term rates. Chapter VI discusses these questions in some detail.

The issue facing the United States, as the country most advanced in the recovery process, is whether timely rises in short-term interest rates, by dampening inflation expectations, can limit upward pressures on long-term interest rates. The action by the Federal Reserve in the early months of 1994, which may in part have counted on effects of this kind, did little to confirm such assumptions – at least in the context of an unexpectedly strong economy. It did, however, bring into play another factor of great importance for long-term interest rates, namely the sometimes almost

mechanical international linkage between bond markets. Just as long-term rates in different currencies had for some time declined together, largely irrespective of national levels and movements of short-term money market rates, in the early months of 1994 they tended to follow the lead of the United States in the opposite direction. These linkages seem to be particularly close during periods of market disturbance. When markets are calmer, however, differences in cyclical positions and associated developments in monetary policies seem to be compatible with greater divergences in bond market trends.

Important though appropriate macroeconomic policies are, many of the most pressing economic problems facing the industrial countries require, in addition, determined efforts to deal with structural rigidities and to improve the flexibility of markets. In the process of adapting to increased competitive pressures, industrial firms have reacted, as might be expected in a market economy, by making every effort to cut costs and shed labour. The challenge facing the industrial countries is to improve the capacity of their economies to absorb redundant labour into new activities. This requires action both on the demand side of the labour market, to increase firms' incentive to take on additional workers, and on the supply side, to ensure that labour has the requisite characteristics and is willing to accept employment at a market-clearing wage. Chapter II examines why some economies are more afflicted by high and persistent unemployment than others. There are indications that attitudes in most of these countries have started to change. But some of the structural weaknesses revealed by the recession will take a long time to remedy.

Structural policies are also clearly of key importance in the developing countries. The task is not simply to provide increased employment opportunities, but to strengthen incentives to save and invest and to improve the allocation of resources. A gratifying feature of developments in the past several years has been the increasing number of countries that have taken decisive steps towards opening their economies and subjecting the allocation of resources to market disciplines. There is an accumulating body of evidence that such policies are effective in strengthening growth performance. The most spectacular examples of success are to be found in the newly industrialising economies of East and South-East Asia. Their ranks are now being joined by countries as geographically diverse as China, India, Pakistan, Mexico, Argentina and Poland, to cite only the larger economies in their respective regions. All of these countries have confounded the old accepted wisdom that developing countries could not achieve sustained growth while the industrial world was in recession. Their potential for success will be all the greater when the pace of activity in the industrial countries picks up.

The recent experience of developing countries also points to the benefits of macroeconomic stability. Although some countries (Brazil, for example) have from time to time combined high growth with inflation, the overwhelming evidence is that persistent high rates of price increase undermine the sustainability of output growth. The current situation of the

former Soviet Union, where extreme macroeconomic instability has been combined with continued structural distortion, illustrates the difficulty of reviving growth under such conditions.

While this Report goes into many of the issues just raised, it covers much wider ground. Among the topics discussed are the development of world trade, including structural shifts in the pattern of trade over the last two decades and the completion of the Uruguay Round (Chapter IV); recent trends in international banking, securities and derivatives business (Chapter V); the changing pattern of international capital flows and the growing attractiveness of "emerging markets" (Chapter VII); and the major developments that have taken place over the last decade or so in payment and settlement systems, with particular reference to safeguarding against systemic risk (Chapter VIII).

II. Developments in the industrial countries

Highlights

The business cycle in the industrial countries continued to be desynchronised last year. Led by the United States, a recovery gained momentum in the course of the year in the United Kingdom, Canada, Australia and New Zealand. However, output gaps increased further in Germany and other continental European countries while in Japan there were still few signs that the downturn had bottomed out, even after a series of stimulatory fiscal measures and reductions in interest rates.

Despite the divergence in real growth, and relatively large changes in nominal and real effective exchange rates, inflation rates continued to converge. At the end of last year the rise in consumer prices averaged 3% in the industrial countries, the lowest rate in thirty years apart from 1986, which was influenced by falling oil prices.

At the same time, and notwithstanding a marked decline in the United States, unemployment continued to rise last year and now affects over 33 million people in the industrial world. The problem is especially severe in the EU countries, where over 11% of the labour force is unemployed and about one-half of the jobless have been out of work for at least a year. Many workers have dropped out of the labour force, discouraged by the poor employment prospects, and a large proportion of those in work are only working part-time, some of them by choice but most because full-time jobs are not available.

Another aspect of the European unemployment problem is the high *persistence* of unemployment. With every business cycle trough since 1970 the number of unemployed has progressively ratcheted up, pointing to worsening structural problems in the European labour markets. These include regulatory or institutional arrangements which prevent real and relative wages from adjusting to changes in supply and demand, disincentives to work caused by social transfers and taxes, a lack of incentives and opportunities to improve skills and difficulties in adjusting to and benefiting from technological progress and increased trade with the developing countries. While most of the rise in unemployment since the onset of the recession is cyclical, solutions to the structural problems which do not jeopardise recent gains in the fight against inflation call, above all, for measures to increase flexibility and improve work incentives.

Cyclical as well as structural factors also contributed to the deterioration in fiscal balances and the acceleration of government debt accumulation. The rise in unemployment compensation and other forms of assistance was almost universal and was not confined to countries still in

recession, highlighting the unsustainability of certain transfer and pension systems in the medium term due to the ageing of the population. Fearing a further deterioration in medium-term sustainability, most high-debt countries last year made efforts to offset the automatic stabilisers by implementing austerity measures. Other countries were able to attenuate the downturn and yet maintain credibility by combining a deterioration in the primary balance with new medium-term consolidation programmes.

Main features of recent developments

Desynchronised business cycle

Growth below potential ...

The growth of output in the industrial countries in 1993, at just over 1%, was well below that of productive potential for the third consecutive year. Moreover, the business cycle continued to be highly desynchronised (see the graph below). Almost half of the countries recorded negative growth and, underlining the weakness of the recovery, only a few countries managed to reduce the gap between actual and potential output. As a result, the number of unemployed rose to over 33 million, with Europe accounting for more than half of this figure.

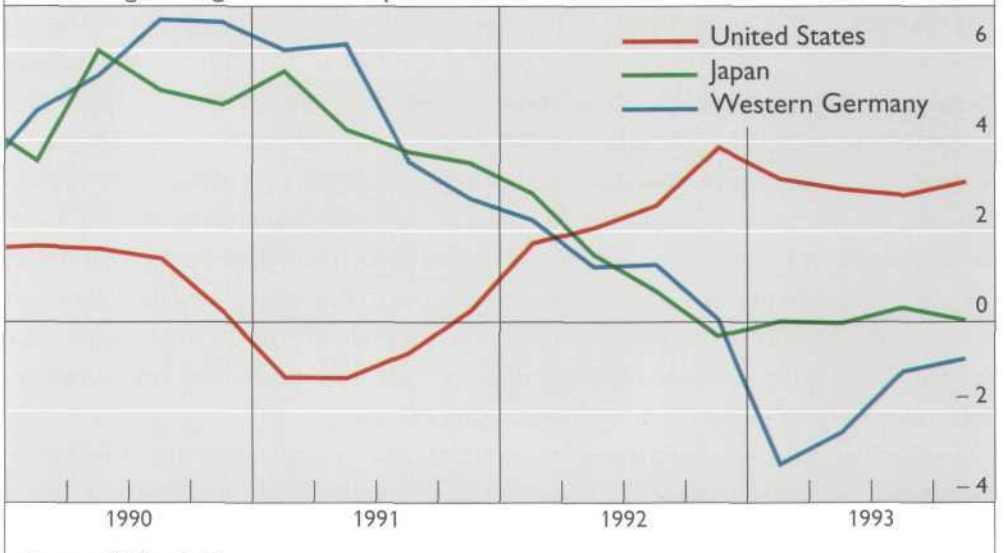
... despite US recovery

The US economy, which had been among the first to enter recession, has continued to lead the recovery, aided by low interest rates, a strengthening of balance sheets in the private sector and improved competitiveness in several key industries following restructuring and cost-cutting. The strengthening of US domestic demand contributed 1½–2% to aggregate GDP growth in the industrial countries and was by far the most significant factor in overall growth last year. In Japan, on the other hand, domestic demand remained subdued and the output gap widened further. Substan-

Widening output gaps in Japan ...

Real GDP in the three major industrial countries

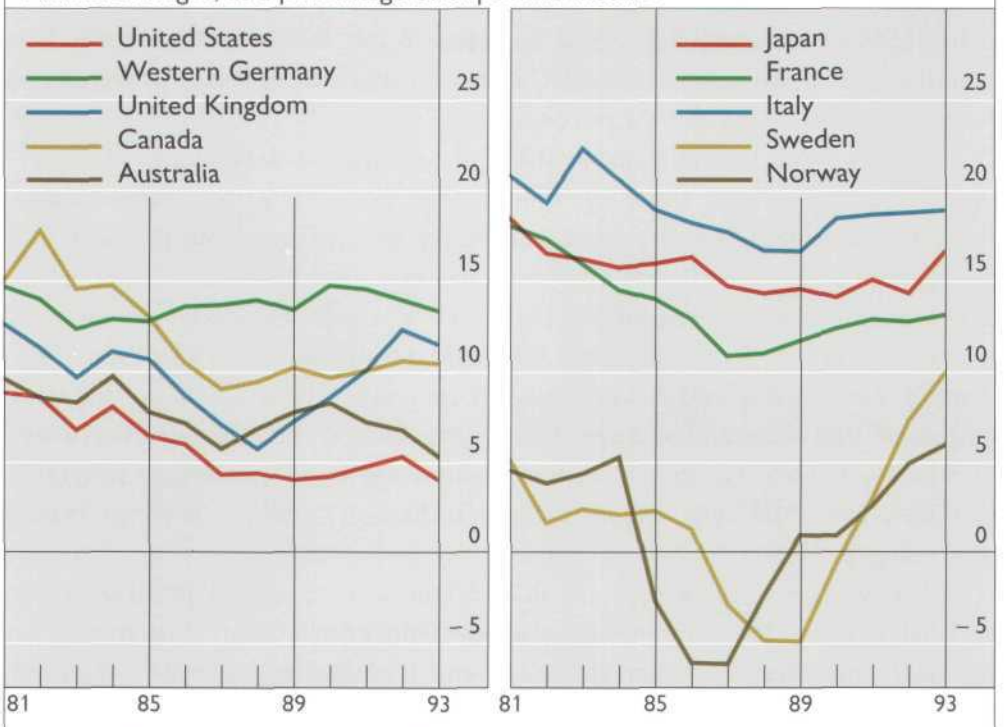
Percentage changes over four quarters



Source: National data.

Personal saving in selected countries*

Annual averages, as a percentage of disposable income



* For France, Italy and the United Kingdom, gross saving; for other countries, net saving. Figures for 1993 are partly estimated.

Sources: OECD Economic Outlook and national data.

tial increases in public spending and transfers over a period of eighteen months (see page 36) and lower interest rates were unable to offset fully a growing underlying weakness in private sector spending, in part because, unlike in the United States, the process of balance-sheet correction still has a long way to go. Moreover, the dampening effects of an appreciating currency on the export sector appear to have worked through very quickly while large terms-of-trade gains have not led to a corresponding increase in consumer spending. The output gap also rose in western Germany although it remained smaller than in previous recessions. In eastern Germany, on the other hand, output growth accelerated in the course of the year, spurred by construction and capital goods spending and activity in the services sector. Signs of internal or autonomous sources of growth can also be observed, though transfers from western Germany have remained very high.

... and Germany

Apart from the United States, recovery was evident in several other countries that had entered the recession relatively early. In Canada net export growth provided a significant contribution owing to the strength of the US economy. More generally, however, the recovery can be related to an improvement in household and business confidence, especially pronounced towards the end of the year, reflecting the combined effect of low interest rates and stronger financial balances of both households and enterprises.

Improved household and business confidence ...

A typical feature seen in all countries in the early phase of recovery was a decline in household saving rates, in marked contrast to those countries that are still in recession (see the graph on page 11), where household consumption remained depressed by fears of job losses and generally low confidence. In Germany, however, a fall in the saving rate prevented a further deepening of the recession.

... stimulating spending on durable goods in some countries ...

The improved confidence in the United States was reflected in investment and household spending on durable goods. In fact, fixed capital formation was easily the most buoyant component of aggregate demand. The strength of spending on consumer durables underlines the stronger balance-sheet position of the household sector as a whole. However, an element of some concern is the relatively high debt service/income ratio of middle-income households, which have been most adversely affected by the stagnation of real wages (see page 25). In the United Kingdom the recovery was led by private consumption, whereas private fixed investment remained well below its 1989 peak, despite a sharp reduction in debt interest payments and rising profits.

... but not in others

The weakness of investment in continental Europe and Japan was less surprising given the continuing recession. The contraction in spending on business equipment in Japan, Germany and Italy reduced overall output by 1½–2%. The decline in Japan was particularly steep as the effects of previous overinvestment and distorted balance sheets were reinforced by falling profits in many export industries due to the appreciation of the yen. Expenditure on consumer durables, notably automobiles, was also weak in Japan and most of Europe. Residential investment, on the other hand, was relatively well maintained in Japan and Germany owing to, respectively, the availability of housing loans at low interest rates and excess demand as a result of immigration.

Incipient recovery in commercial real estate markets

A slightly different cycle can be observed in the commercial real estate market. Business has started to revive in the United States and the United Kingdom, but not yet in Canada and Australia. Last year, for the first time since 1987, total financial returns on US commercial real estate were positive. In Japan, by contrast, commercial property prices have continued to fall, in Tokyo by almost 40% since their peak. Because real estate loans in Japan account for about one-quarter of banks' total loan stock, the continuing slump has contributed to a marked rise in non-performing loans and has heightened banks' reluctance to lend.

Relative cyclical positions and exchange rate effects

Forces affecting net export growth

Cyclical forces also influenced movements in net exports (see the table opposite). Generally, countries in a relatively weak cyclical position benefited from positive growth of net exports, especially those that had also experienced a marked real exchange rate depreciation. In several of these countries net export growth was the only source of stimulus. For example, in Italy and Finland net export growth contributed 4½% to GDP, and in Sweden and Spain 3%. By contrast, in Turkey the stimulus from domestic

Industrial countries: real GDP, domestic demand and net exports[1]

Countries and country groups	Real GDP			Domestic demand			Net exports[2]		
	1981–91	1992	1993	1981–91	1992	1993	1981–91	1992	1993
	annual percentage changes								
United States	2.4	2.6	3.0	2.5	2.9	3.9	−0.1	−0.3	−0.9
Japan	4.2	1.2	0.1	4.2	0.4	0.3	0.1	1.0	−0.3
Germany	2.7[3]	2.1	−1.2	2.4[3]	2.7	−1.4	0.5[3]	−0.6	0.2
France	2.3	1.2	−0.9	2.5	0.2	−1.9	−0.3	1.0	1.0
Italy	2.3	0.7	−0.7	2.6	0.8	−5.0	−0.4	−0.1	4.6
United Kingdom	2.6	−0.6	1.9	3.0	0.4	2.0	−0.4	−0.9	−0.2
Canada	2.4	0.7	2.4	2.5	0.0	1.8	−0.2	0.8	0.5
Group of Seven	*2.8*	*1.7*	*1.2*	*2.9*	*1.6*	*1.1*	*−0.1*	*0.1*	*0.1*
Australia	2.8	2.1	3.4	2.1	2.8	2.5	0.5	−0.3	0.5
Austria	2.5	1.5	−0.3	2.5	1.7	0.6	−0.1	−0.1	−0.9
Belgium	2.2	1.4	−1.3	2.2	2.5	−2.2	0.0	−1.1	1.0
Denmark	2.3	1.2	1.2	1.7	−0.6	0.4	0.7	1.8	0.8
Finland	2.3	−3.8	−2.6	2.7	−5.9	−7.3	−0.5	2.1	4.5
Greece	1.7	0.9	0.0	2.0	0.8	0.8	−1.1	0.0	−0.9
Ireland	3.6	4.6	2.5	1.2	−1.5	1.5	2.8	6.2	1.0
Israel	3.6	6.6	3.5	3.9	5.9	5.7	−1.1	−0.4	−3.2
Netherlands	2.2	1.4	0.2	2.2	1.4	−0.4	0.3	0.1	0.5
New Zealand	1.2[4]	−0.3	4.9	1.2[4]	3.1	6.4	−0.2[4]	−3.6	−2.0
Norway	2.6	3.4	2.3	1.2	1.9	2.3	1.4	1.8	−0.4
Portugal	2.8	1.1	−0.5	2.9	3.7	−0.9	−0.7	−3.2	0.5
Spain	3.2	0.8	−1.0	4.0	1.1	−3.6	−1.0	−0.4	2.8
Sweden	1.8	−1.9	−2.1	1.9	−2.2	−4.9	0.0	0.3	2.8
Switzerland	1.9	−0.1	−0.6	2.4	−3.0	−1.4	−0.5	3.2	0.8
Turkey[5]	5.0	6.4	7.2	4.5	8.2	16.0	0.2	−1.9	−9.2
Other industrial	*2.6*	*1.0*	*0.2*	*2.6*	*0.8*	*−0.7*	*−0.2*	*0.3*	*0.9*
All industrial	*2.8*	*1.6*	*1.1*	*2.9*	*1.5*	*0.8*	*−0.1*	*0.1*	*0.2*

[1] Demand components generally exclude the statistical discrepancy; figures for 1993 are partly preliminary or estimated. [2] Percentage point contribution to GDP growth. [3] Western Germany only. [4] Fiscal years beginning 1st April. [5] GNP.

Source: National data.

demand was entirely "lost" through a real appreciation of the currency and lower net exports.

In other cases exchange rate movements and relative cyclical positions influenced net exports in opposite directions. Despite a comparatively weak cyclical position, Japan recorded negative net export growth owing to a substantial real appreciation of the yen. On the other hand, notwithstanding the early onset of recovery, Canada showed positive net export growth, due to a favourable real exchange rate and a relatively weak domestic demand position compared with its major trading partner. Among the smaller economies, Australia benefited from its closeness to the booming Asian market and Ireland, like Canada, from a relatively weak cyclical position vis-à-vis its major trading partner. By contrast, in Austria even moderate domestic demand growth exceeded that of neighbouring countries.

Further progress in reducing inflation

Low and converging inflation rates ...

Average consumer price inflation in the industrial countries fell to only 3% last year, the lowest rate since the sharp oil price decline in 1986 (see the table below). There has been a significant convergence of inflation rates in the Group of Ten countries, which was further consolidated in 1993 and the early part of this year. Despite the recession and a marked reduction in the growth of nominal wages and unit labour costs, Germany's inflation rate remained above the average for the industrial countries, owing mainly to developments in the services sector and public tariffs. However, following recent settlements in wage-leading sectors, implying negative real wage growth and, through more flexible working hours, a widening of enterprises' scope for reducing costs, price inflation is generally expected to continue to decline this year, even allowing for the effect of higher indirect taxes.

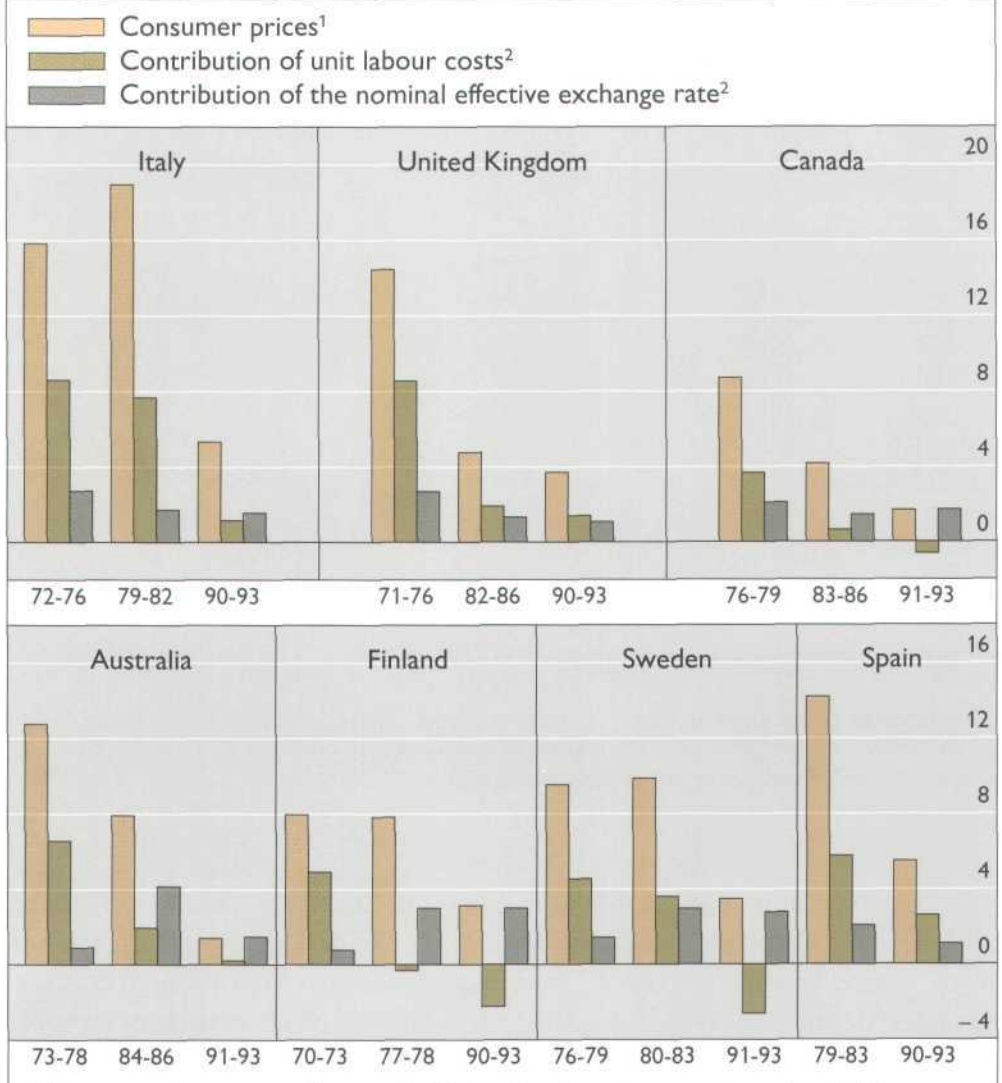
Another notable feature of the inflation picture is that convergence has taken place despite large divergences in nominal effective exchange rates. In particular, consumer price inflation has continued to fall in countries that over the last two to three years have experienced a substantial

Consumer price inflation

Countries	1982–90	1991	1992	1993				1994
				March	June	Sept.	Dec.	March
	annual percentage changes, based on end-of-period figures[1]							
United States	4.0	3.1	2.9	3.1	3.0	2.7	2.7	2.5
Japan	1.7	2.7	1.2	1.2	0.9	1.5	1.0	1.3
Germany	1.7[2]	6.1	3.6	4.7	4.7	4.5	4.3	3.2
France	4.4	3.1	1.9	2.2[3]	1.9	2.3	2.1	1.5
Italy	7.2	6.0	4.6	4.3	4.2	4.2	4.0	4.2
United Kingdom	5.8	4.5	2.6	1.9	1.2	1.8	1.9	2.3
Canada	4.4	3.8	2.1	1.9	1.6	1.9	1.7	0.2
Australia	7.3	1.5	0.2	1.2	1.9	2.2	2.0	1.4
Austria	2.8	3.1	4.2	3.9	3.6	3.4	3.5	3.1
Belgium	3.4	2.8	2.4	2.9	2.4	2.8	2.7	2.3
Denmark	4.4	2.3	1.5	1.1	0.9	1.2	1.5	1.7
Finland	5.5	4.2	2.3	2.7[3]	2.0	1.7	1.6	0.4
Greece	18.4	18.0	14.4	16.4	15.8	12.8	12.1	10.2
Ireland	4.7	3.6	2.3	1.9	0.9	1.4	1.5	1.7
Israel	78.8	18.0	9.4	10.8	11.2	10.4	11.3	9.6
Netherlands	1.5	3.7	2.3	2.5	2.3	2.8	2.6	2.9
New Zealand	9.0	1.0	1.3	1.0	1.3	1.5	1.4	1.3
Norway	6.1	2.9	2.2	2.5	2.3	2.2	1.8	1.0
Portugal	15.8	9.2	8.4	7.3	5.6	6.0	6.4	6.0
Spain	7.7	5.5	5.3	4.0	4.9	4.3	4.9	5.0
Sweden	6.8	8.1	2.0	4.9	4.8	4.2	4.1	1.8
Switzerland	2.8	5.2	3.4	3.6	3.1	3.4	2.5	1.3
Turkey	50.5	71.1	66.0	58.0	67.2	68.2	71.1	73.6
Average[4]	4.3	4.2	3.1	3.2	3.1	3.1	3.0	2.8

[1] Quarterly figures for Australia, Ireland and New Zealand. [2] Western Germany only. [3] New index.
[4] Weighted average, based on 1991 exchange rates and consumption weights.

Changes in consumer prices by contributing factor: selected periods and countries



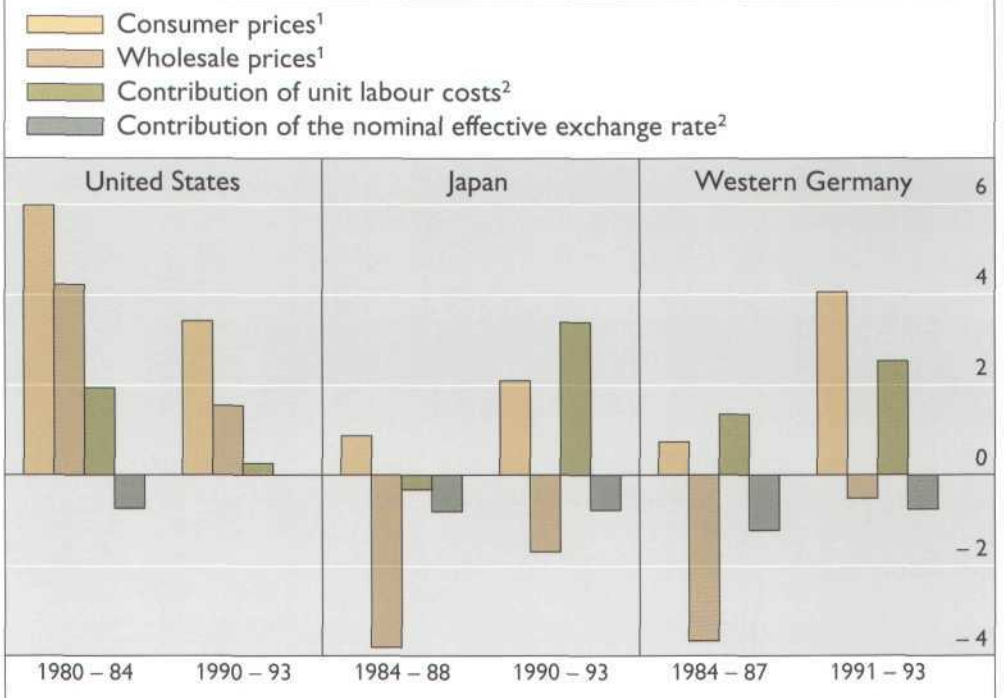
[1] Percentage changes, annual rates. [2] Calculated as the percentage change in unit labour costs (the nominal effective exchange rate) multiplied by the compensation (import) share in GDP.

Sources: OECD National Accounts and national data.

... despite large variations in exchange rates

depreciation of their currency, raising the question of whether the "pass-through" of exchange rate changes into retail prices is different from that in earlier periods. The graph above tentatively examines this issue for seven countries. In most cases consumer price inflation is significantly below the rates observed in earlier periods of currency depreciation. However, the lower rates of inflation can be attributed mainly to the simultaneous and marked reduction in unit labour cost increases whereas in several countries (Italy, Canada, Finland and Sweden) the estimated contributions of exchange rate changes in the 1990s are similar to those seen in periods when inflation was much higher. Indeed, in three of the countries unit labour costs have fallen during the period of depreciating exchange rates as a result of lower nominal wage increases, cuts in employers' social security contributions and significant one-time productivity gains.

Changes in consumer prices and wholesale prices by contributing factor: selected periods and countries



[1] Percentage changes, annual rates. [2] Calculated as the percentage change in unit labour costs (the nominal effective exchange rate) multiplied by the compensation (import) share in GDP.

Sources: OECD National Accounts and national data.

Inflation in the three major economies

The contributions of unit labour costs and exchange rates to consumer price inflation have been entirely different in the three largest economies, all of which, in effective terms, have experienced an appreciation of their currency during the 1990s (see the graph above). With stagnating output, Japan's tradition of lifetime employment has resulted in significant increases in unit labour costs; even allowing for the exchange rate effect in industries mainly serving the domestic market, profit margins have fallen. In Germany the reasons for the marked rise in consumer prices compared with the earlier period of appreciation are mainly to be found in the services sector and public tariffs, while in the tradables sector profit margins have been squeezed. Developments in the United States are more similar to those in the countries with depreciating currencies, as unit labour costs have fallen and have thus reinforced the effects of exchange rate movements.

The problem of high and persistent unemployment

Over 33 million jobless ...

With output growth generally expected to recover this year and inflation projected to remain low, the most serious problem facing policy-makers in the OECD countries is unemployment. Last year over 33 million workers, or 8.2% of the labour force, were "actively seeking work" and by the end of 1994 unemployment is expected to reach 35 million, or 8½% of the labour force. If those who have dropped out of the labour force because

of the poor job prospects ("discouraged workers") and workers in involuntary part-time employment are also included, the overall rate of unemployment last year might have been as high as 12½%, with Japan accounting for a substantial part of the 4-point difference. The figure would be even higher and more disturbing if those who are kept off the unemployment register through public training schemes, subsidised employment or early retirement were taken into account as well. In the OECD countries the average number of persons covered by such measures amounts to at least 2–3% of the labour force, but in some countries, notably in Europe, the number of workers benefiting from specific labour market measures in the early 1990s was equivalent to 50–75% of those registered as unemployed.

... with a large proportion of long-term unemployed ...

Unemployment is progressively becoming the dominant social problem in the industrial economies. In several continental European countries (see the table on page 26) about one-half of all unemployed have been out of work for twelve months or more, which suggests that they are being "dislodged" from the labour market because they have lost the skills sought by employers or have become demotivated and have reduced their search activities. Moreover, in contrast to the early 1980s unemployment is increasingly concentrated among prime age (25 to 44-year-old) male workers. Female workers have generally found it easier to obtain jobs in the services sector, though in many cases as involuntary part-time workers. While youth unemployment rates still tend to exceed average rates except in countries with apprenticeship systems (see page 27), they have fallen in some countries owing to specific employment and training measures. Elsewhere, notably in France and most of southern Europe, youth unemployment has remained around 25%, even though a high proportion of the young have left the labour force discouraged by the poor job prospects.

... and high youth unemployment

Different levels and adjustment patterns of unemployment across countries

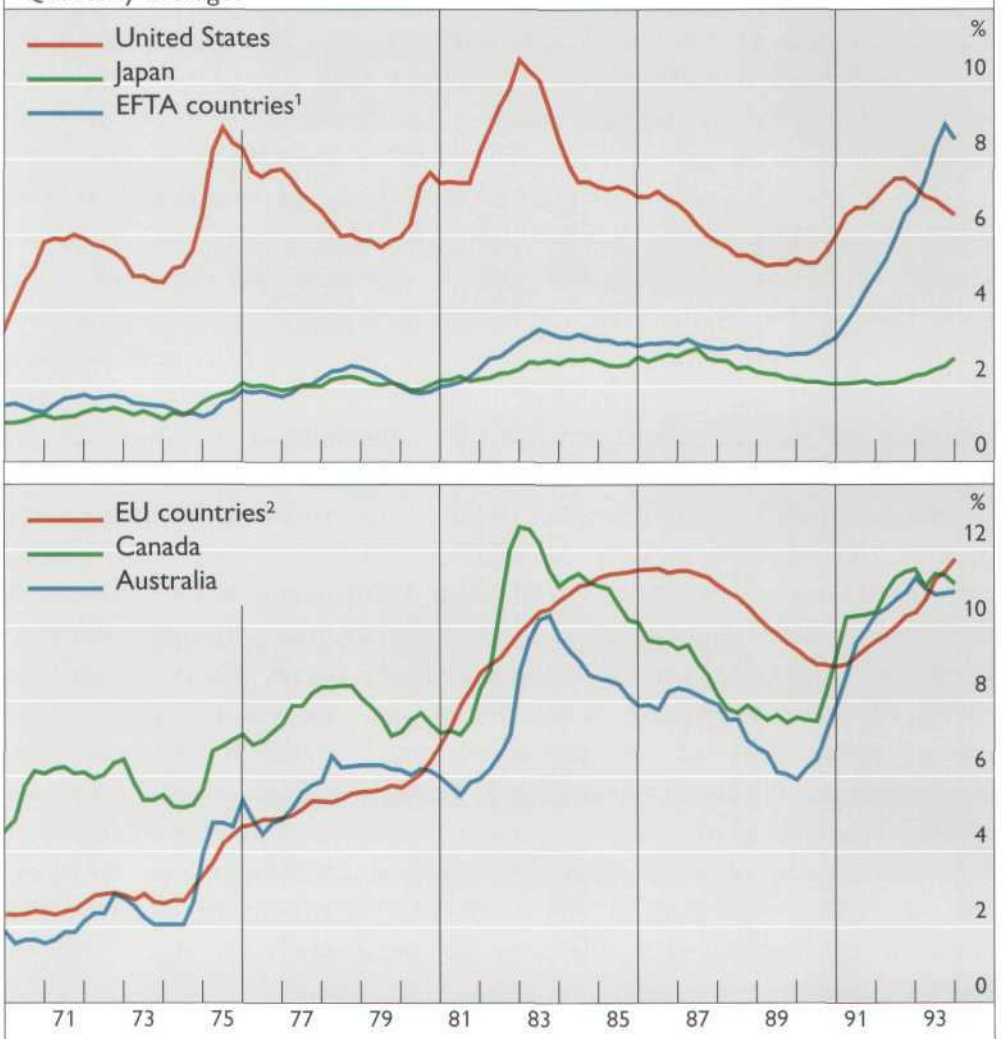
While high unemployment is a serious problem throughout most of the industrialised world, the level as well as the dynamic behaviour differ significantly between countries (see the graph overleaf). In the United States, unemployment is very sensitive to changes in output, partly due to the scope for temporary lay-offs. The rate of unemployment rose to almost 11% during the recession of the early 1980s, but fell to nearly 5% during the subsequent recovery and has since been significantly below the average for the European Union.

Low unemployment in Japan

In Japan, and similarly in Europe, temporary lay-offs are virtually unknown and temporary output fluctuations are frequently absorbed in reduced working time, in some countries partly financed by government contributions. Thus the average unemployment rate in Japan has remained in the 2–3% range during the last ten years, even though GDP growth has been as volatile as in the United States. Unemployment in the EFTA countries followed a pattern very similar to that in Japan until the late 1980s but then rose sharply in all countries except Austria. These increases were partly due to the depth of the recession. However, in some countries they also reflected a progressive erosion of international competitiveness during

Unemployment rates in selected countries and country groups

Quarterly averages



[1] Excluding Iceland and Liechtenstein. [2] Twelve member states.

Source: National data.

most of the previous decade as domestic demand growth had kept actual unemployment at an unsustainably low level.

Persistently high unemployment in EU countries ...

Unemployment is a particularly severe problem in the EU countries, Canada and Australia. First, the average levels are higher than in the United States, Japan and most of the EFTA countries. Secondly, unemployment has shown a much greater degree of *persistence*. With each output trough since the early 1970s unemployment has steadily increased because, unlike in the United States, cyclical recoveries have been accompanied by comparatively small employment gains (see the table on page 20). Moreover, the average *duration* of unemployment is much longer in Europe than in other countries while labour market "turnover", as measured by job losses and gains, is relatively small. Consequently, many observers have concluded that even though a recovery will help to reduce labour market slack, the rate of unemployment at which inflation will re-emerge is rising and is now considerably higher than in the 1970s.

The poor labour market performance of Europe, compared with the United States and Japan, is also evident from *employment rates* (see the graph overleaf), defined as the proportion of the population of working age which is employed. While employment rates in both the United States and Japan have increased over the last twenty-three years, they have fallen in EU as well as EFTA countries, in the former group to a level that is almost 20% below that of Japan. On this alternative measure, developments in Canada have been similar to those in the United States, while the employment rate in Australia has fallen, though by less than in the EU countries.

... and low employment rates

Possible causes of high and persistent unemployment

The problem of high and persistent unemployment is mainly concentrated in the EU countries. Labour force growth does not appear to have been the primary cause of the rise in unemployment in these countries. Rather, it can be related to the inflexibility of labour markets in the face of changes in economic conditions. The reasons for the particularly sluggish response and for the severity of the unemployment problem in the EU countries are not yet well understood, though wage rigidities and various institutional factors appear to play a major role.

Labour supply and job creation

Falling labour supply growth

The table below shows a decline in labour force growth during 1982–93 compared with the previous period except for Japan and Australia. The increase in the latter two countries is the result of rising participation rates, while in the United States and Canada the slowdown is mostly due to demographic factors. In Europe the decline in labour force growth can also be related to demographic factors, though participation rates fell in some countries as workers withdrew from the labour force because of poor job prospects or in response to measures encouraging early retirement. Consequently, Europe's unemployment problem cannot be ascribed to labour supply developments but has to be explained by the failure to create jobs.

Changes in the labour supply and the population of working age

Countries and country groups	1970–82		1982–93	
	Labour supply	Population of working age	Labour supply	Population of working age
	percentage changes, annual rates			
United States	2.3	1.6	1.3	0.8
Japan	0.9	0.9	1.1	0.8
EU countries*	0.7	0.8	0.5	0.7
Canada	2.9	2.0	1.4	1.0
Australia	1.9	1.9	2.0	1.6
EFTA countries	0.9	0.5	0.4	0.6

* Excluding eastern Germany.

Sources: OECD Labour Force Statistics and BIS estimates.

Changes in real output and employment

Countries and country groups	Periods[1]	Cumulative change in GDP	Cumulative change in employment	Ratio[2]	
				1980s	1970–93
United States	1982–90	30.0	18.5	0.60	0.65
Japan	1984–91	36.0	10.5	0.30	0.20
EFTA countries	1984–90	17.5	5.5	0.30	0.15
Australia	1983–90	30.5	24.5	0.80	0.40
Canada	1982–90	32.5	18.5	0.55	0.50
EU countries	1983–91	25.0	8.5	0.35	0.07
Western Germany	1983–91	29.5	10.0	0.35	0.06
France	1984–91	19.0	3.5	0.20	0.06
Italy	1982–91	25.0	5.0	0.20	0.07
Spain	1986–91	23.5	15.0	0.65	−0.05
United Kingdom	1983–90	25.0	14.0	0.55	0.02

[1] Periods chosen to include only years with positive employment growth; for Japan, initial and final years based on *changes* in employment growth. [2] Ratio of cumulative employment change to cumulative output change for the periods selected and for 1970–93.

Note: Regressing changes in employment on output changes for the United States and the EU countries respectively and allowing for a structural shift between the 1970s and 1980s, the following results were obtained:

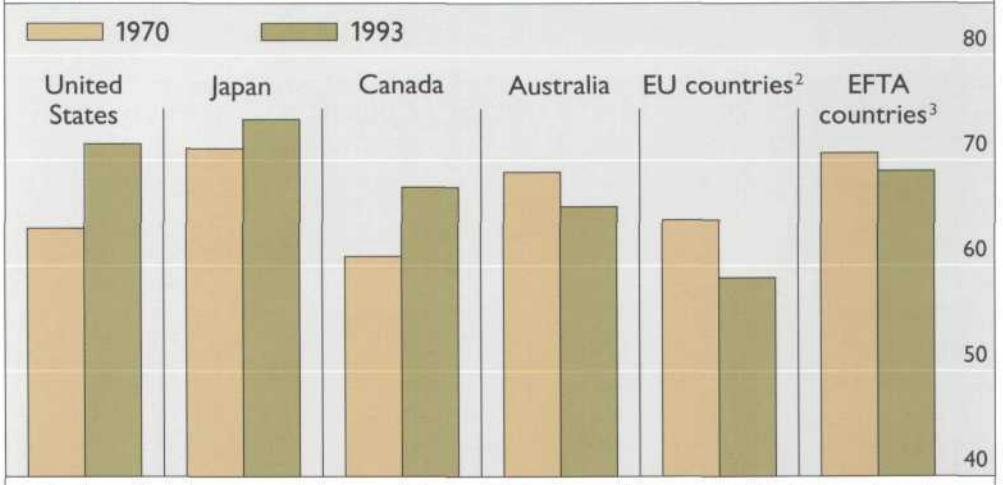
	1970–81		1982–93	
	Intercept	Elasticity	Intercept	Elasticity
United States	−0.00	0.85	−0.60	0.85
EU countries	−0.70	0.30	−1.35	0.85

Sources: OECD National Accounts and Labour Force Statistics.

Low rate of job creation in Europe

A low rate of job creation has been an almost perennial European problem (see the graph opposite): since 1970 employment in the EU countries has grown by only 5½% and in the EFTA countries by less than 10%, compared with 50% or more in the United States and Canada. Low employment growth in Europe cannot be simply explained by low output growth, as GDP in the EU countries has expanded as rapidly as in the United

Employment rates in selected countries and country groups[1]

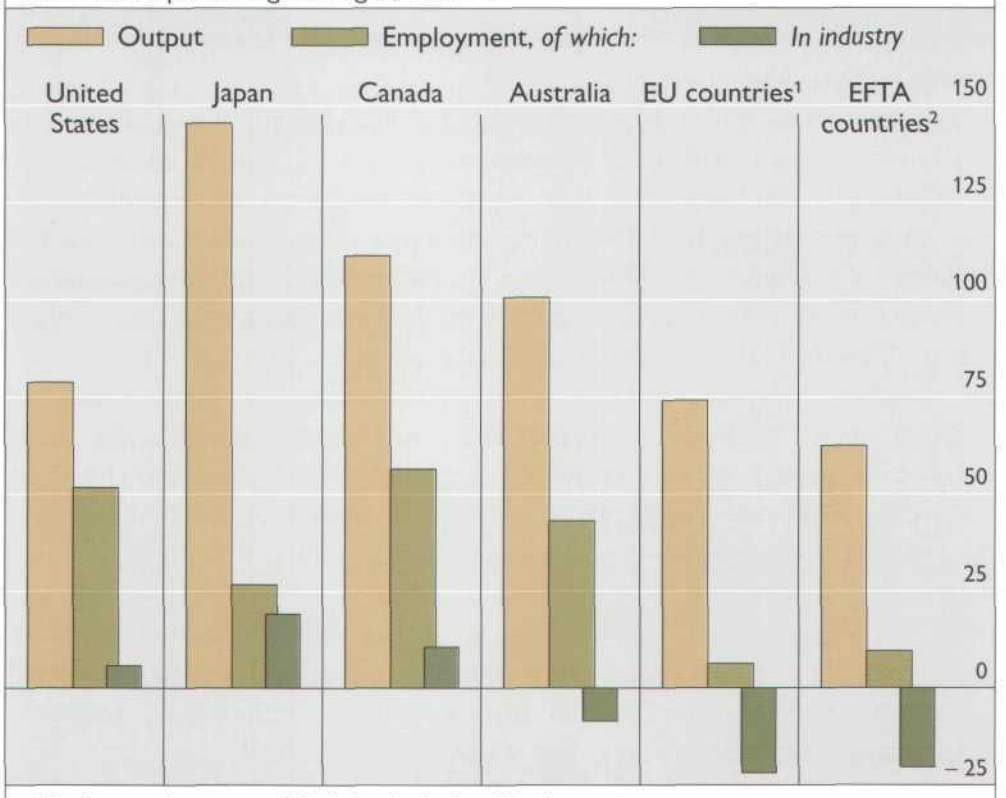


[1] Total employment as a percentage of the population of working age. [2] Twelve member states. [3] Excluding Iceland and Liechtenstein.

Source: OECD Labour Force Statistics.

Output and employment in selected countries and country groups

Cumulative percentage changes, 1970–93



[1] Twelve member states. [2] Excluding Iceland and Liechtenstein.

Source: OECD Labour Force Statistics.

States, though not as fast as in Japan, Australia and Canada. But output growth in Europe has been much less labour-intensive than in the United States (see the table opposite). The labour intensity of output growth is also relatively low in Japan, while the employment/output ratios observed for Canada and Australia are closer to the US ratio. A low rate of job creation per unit of output growth, of course, implies high growth of labour productivity, which is in general desirable. However, in order to reap the benefits of large productivity gains ways must be found to use productively the labour that is saved.

The response of nominal and real wages to exogenous changes

High and rising unemployment in the 1980s ...

In any event, the current unemployment problem in Europe does not appear to have been caused by *changes* in the labour intensity of output growth, since this has not declined (indeed it has risen) in recent years (see the note to the table opposite). The European unemployment problem, and in particular the *rise* in joblessness in the early 1980s, is more likely to be linked to real wages and to the way in which European labour markets react to exogenous developments. The table on page 23 considers the response of unemployment to two such developments: declines in inflation induced by the need to strengthen medium-term stability and terms-of-trade changes. These are rather crude measures of labour market responses,

in particular for the Nordic EFTA countries in the 1990s, when the principal policy objective was to correct imbalances that had built up during the 1980s. In addition, the earlier terms-of-trade improvements were absent and external shocks in the form of lower exports significantly affected labour market developments.

Nonetheless, the table clearly indicates that one important element of the unemployment problem in Europe, as well as in Canada and Australia, is the sluggish response of labour markets. The degree of disinflation and the associated strength of the policy measures taken in Europe were not significantly greater than in North America. Moreover, the European countries benefited from considerably larger terms-of-trade gains than the United States, Canada and Australia, though not as much as Japan. The reasons for the sluggish labour market response are not explored in the table, but there is ample evidence to suggest that real wage targets are far more entrenched among workers in the EU countries than in Japan and the EFTA countries, with real wage behaviour in the United States, Canada and Australia falling somewhere in between. Consequently, the rigidity of real wages in circumstances when adjustments are called for is probably the most important reason for the rise in EU unemployment in the 1980s. Finding ways to reduce real wage rigidity is also fundamental to preventing even higher unemployment, all the more so since a rise in the EU countries is far more difficult to reverse than elsewhere.

... due to real wage rigidities ...

The severity of the unemployment problem in the European Union

The second half of the 1980s was a period of cyclical recovery and falling unemployment in the OECD countries. However, the extent to which earlier and lower levels of unemployment were restored varied widely. In the United States, Canada and Australia the restoration rate was 100% or more and in Japan about two-thirds of the job losses were reversed. In the European countries, by contrast, the period of output recovery was shorter and the restoration rate was less than one-half. The lack of job creation was particularly serious in the EU countries as it meant that the downturn in the early 1990s started from an unemployment rate which was 3 percentage points higher than prior to the previous downturn. Moreover, even after the recovery more than one-half of the unemployed had been without a job for twelve months or more, a proportion only slightly less than at the peak unemployment level of 1986. In North America, on the other hand, the proportion of long-term unemployed was less than 7% and in the EFTA countries less than 10%.

... and lack of job creation during cyclical recovery

Capital shortages and high wage shares. The question then arises as to whether the recovery in Europe was curtailed because of capacity constraints and/or excessive labour costs relative to labour productivity. Business fixed investment was weak in the early 1980s and the shift towards labour-saving investment observed in many countries has raised fears that earlier and lower rates of unemployment can no longer be achieved, because the necessary output capacities are not available. Developments in capacity utilisation rates may provide some evidence of capital shortages even though

Risk of capacity constraints ...

Disinflation and changes in unemployment

Countries and country groups	Decline in the rate of inflation[1]		Change in the terms of trade[2]		Change in unemployment[3]		"Sacrifice" ratio[4]	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
United States	7.3	1.9	−1.0	−0.4	0.6	1.3	0.10	0.70
Japan	4.6	1.2	−3.0	−1.0	0.6	0.2	0.15	0.15
EU countries[5]	8.7	2.0	−1.6	−0.3	4.0	1.6	0.45	0.75
Australia	4.8	7.0	0.8	1.5	1.9	1.7	0.40	0.25
Canada	8.4	3.8	2.0	0.8	3.2	2.7	0.40	0.70
EFTA countries	5.1	3.6	−1.0	−0.2	0.7	3.2	0.15	0.90

[1] Decline in the rate of inflation measured by the GDP deflator over the following periods:

Column (a)
1981–86 (United States and Canada)
1980–87 (Japan and EU countries)
1982–85 (Australia)
1981–87 (EFTA countries)

Column (b)
1989–93 (United States and Canada)
1990–93 (Japan, EU and EFTA countries)
1988–93 (Australia)

[2] Change in the ratio of import to export deflators (scaled by the ratio of foreign trade to GDP) over the periods of disinflation. [3] Cumulative annual rise in unemployment over the periods of disinflation. [4] Measured as (e)/(a) and (f)/(b) respectively. [5] Excluding eastern Germany.

Source: OECD Economic Outlook.

recent changes in relative factor prices have meant that profitable output capacity may be higher than previously assumed. Prior to the latest recession three of the major EU countries recorded utilisation rates which were very close to earlier peaks, whereas in Canada, Australia and the United States less than 95% of earlier peak rates had been reached, even following output increases twice as large as those seen in Europe. Indicators of business fixed investment by sector point to a marked shift from industry to services, in line with the general decline of the share of industry in overall GDP.

... notably in services

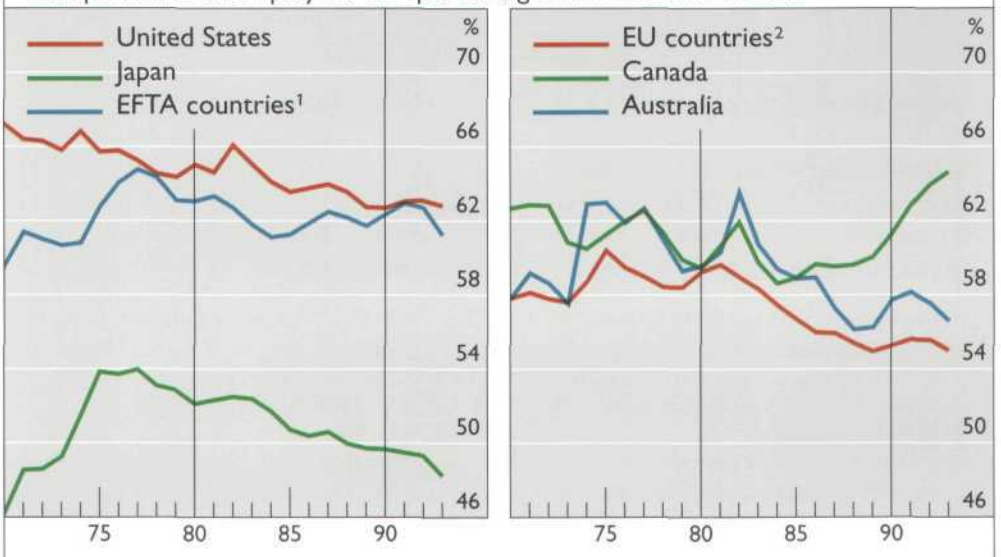
However, the growth of investment in the services sector has been comparatively modest in the EU countries, indicating a low capacity to generate new jobs in services and a possible source of the secular decline in the ratio of vacancies to the number of unemployed. As was shown in the graph on page 21, industrial employment relative to total employment has fallen in most countries, but while the United States has been able to create new jobs in the services sector, this has not been the case in the EU countries to the same extent.

Mostly stable or falling labour shares of income

The labour cost issue is examined in the graph overleaf, which shows developments in the labour share of income. The US labour market is characterised by highly stable factor income shares, whereas in Japan and the EU countries the wage share rose in the mid-1970s and again following the second oil shock but has since declined. In the EFTA countries there was a sharp rise in the 1970s, which may have been due to the high-employment policies pursued combined with marked increases in non-wage labour costs. During the current recession the wage share has fallen as real wage growth moderated and productivity growth was boosted by labour-shedding. In Canada and Australia, by contrast, the recession appears to have increased the labour share of income. In Australia, though, the wage share has remained well below earlier levels and actually declined

Wage shares in selected countries and country groups

Compensation of employees as a percentage of total factor income



[1] Excluding Iceland and Liechtenstein. [2] Twelve member states.

Sources: OECD National Accounts and Labour Force Statistics.

last year as the recovery gained momentum, whereas in Canada it is the highest for twenty-five years.

Yet labour costs may be too high ...

At first glance, the graph does not point to excessive labour cost growth as a cause of higher unemployment in the 1980s, except possibly in Canada. On closer examination, however, the following considerations cast a different light on the issue:

– the fall in the wage share could be due to an unemployment-induced moderation of real wage growth. Consequently, at lower rates of unemployment excessive labour shares of income might re-emerge unless the underlying behaviour of real wages has changed. On this question, however, the evidence is ambiguous. Econometric studies of wages and prices do not point to any changes in wage behaviour, except, possibly, for the United States. On the other hand, more intensive international competition together with institutional changes might imply that wage behaviour has moderated significantly and become more sensitive to the influence of market forces. The 1980s saw a general move towards decentralised bargaining, partly reflecting a lower degree of unionisation and partly as a result of the shift from industry to service employment. Most countries have abolished wage indexation or, as in France, replaced earlier systems based on *past* price changes with wage adjustments geared to the *expected* rate of inflation, thereby increasing the responsiveness of nominal wages to anti-inflation policies. Another significant change, most notable in the United States and the United Kingdom, is the decline in union density owing to shifts in employment towards sectors with low unionisation rates, a reduction in union membership in traditionally unionised sectors and policies curbing union power;

... unless wage behaviour has changed or ...

– although it might appear that firms' demand for labour should not be affected as long as real wages and labour costs increase in step with labour productivity, causality may also run the other way. Rising real wage costs in Europe could have induced firms to increase productivity through lay-offs or more capital-intensive investment, whereas in the United States employees seem to have scaled down their wage claims in step with the gradual decline in productivity growth. As was shown in the graph on page 21, there is a striking difference between the EU countries and the United States with respect to the ability to create new jobs. This is "matched" by an equally striking difference in the development of real wages, which have been virtually flat for thirty years in the United States compared with average growth of around 2% in the EU countries;

... real wages adjust to changes in productivity ...

– with growing international mobility of real capital and the increasing exposure of industrial countries to competition from lower-cost developing countries and reforming countries in eastern Europe, there are also grounds for including cost developments in other countries in calculating "warranted" real wage changes. In Australia and North America exposure to competitive pressures from the South-East Asian countries and Mexico respectively may have contributed to the recent rise in unemployment, notably in industries with a large share of unskilled workers. Unit labour costs in Europe are significantly higher than those in the newly industrialising economies (NIEs), but trade with these countries still accounts for only a fraction of total demand. On the other hand, since 1980 the EU countries' share in world trade of manufactured goods outside Europe has fallen from 22 to 17½%. In addition, more liberal trade with eastern Europe could in the future have implications for wage levels in sectors such as steel and textiles even if the initial changes in trade are likely to be rather modest.

... and international competition

High hiring and firing costs. A factor contributing to the persistence of unemployment and to the high proportion of long-term unemployed in the EU countries (see the table overleaf) is no doubt high hiring and redundancy costs. When redundancy payments equal several months' pay, required warning periods are long or lay-offs are subject to lengthy and difficult negotiations, enterprises will only reluctantly take on new employees, and only once a recovery of output is clearly evident. As the table on page 20 showed, the ratio of employment to output changes is low in the EU countries compared with Australia, the United States and Canada, owing mainly to developments in Germany, France and Italy. Even lower ratios are to be found for the EFTA countries and Japan. In the former case this is widely ascribed to high redundancy costs in some countries, while in Japan the main reason is the lifetime employment system prevalent in large manufacturing enterprises. Redundancies are particularly costly and complicated in Spain, which has contributed to a poor employment performance over the longer term. During the 1980s the ratio of employment to output growth increased significantly, but this can largely be explained by the rise in female part-time employment and, in particular, by a regulatory change allowing temporary work contracts; as a result, by the end of last year more than 30% of all employed workers were on temporary contracts.

The employment effects of high redundancy costs ...

Long-term unemployment:* selected years and countries					
Countries	1983	1985	1987	1989	1991
	as a percentage of total unemployment				
United States	13.3	9.5	8.1	5.7	6.3
Japan	12.9	12.9	18.9	18.7	17.9
Canada	9.9	10.3	9.4	6.8	7.2
Australia	27.5	30.9	28.6	23.0	24.9
Finland	19.8	21.1	19.0	6.9	9.1
Norway	6.3	10.2	5.0	11.6	20.2
EU countries	46.0	54.6	53.5	53.0	46.4
Western Germany	39.3	47.9	48.2	49.0	45.5
France	42.2	46.8	45.5	43.9	37.2
United Kingdom	47.0	48.6	45.9	40.8	28.1
Belgium	66.3	69.8	74.9	76.3	61.6

* Long-term unemployed defined as workers who have been without a job for twelve months or more.

Source: OECD Employment Outlook.

High taxes and the costs of the welfare state. In many European countries employers' social security contributions have been increased to finance government expenditure, notably the rising costs of the welfare state (see page 32 below). Together with other non-wage labour costs, these payments account for nearly 50% of total labour costs in several EU countries, compared with around 25% in the United States and Japan. Because social security contributions and other non-wage labour costs typically rise in periods of high unemployment, they tend to reduce the cyclical sensitivity of total labour costs and may thus help to explain the high "sacrifice" ratio observed in the table on page 23 and to some extent also the greater persistence of unemployment. Moreover, since most social security contributions paid by employers are subject to ceilings, the ratio of non-wage labour costs to wages tends to be higher for lower-paid workers, which may have contributed to the shift in labour demand towards skilled workers (see below). Finally, to the extent that social security contributions are used to finance high unemployment benefits they may create disincentive effects, boosting real wage growth as well as unemployment.

... and non-wage labour costs

Unemployment and the flexibility of wage structures. For a number of reasons the rather rigid wage structures observed in most continental European countries constitute part of the unemployment problem. The fall in union density in the United States and the United Kingdom may be partly responsible for the lower persistence of unemployment in these countries. In the United Kingdom unemployment had already started to decline last year, when the recovery of output was still very weak. By contrast, continued high union densities could be one of the reasons for the rigid wage structure and the persistently high unemployment rates in some of the Scandinavian countries and Germany. The large proportion of long-term unemployed in Europe, in particular among unskilled workers, can undoubtedly be related to inflexible relative wages in the face of

Rigid wage structures as a source of unemployment persistence ...

technology and trade-induced declines in the relative demand for unskilled labour. There is also evidence that large regional disparities in unemployment are not reflected in regional wage differentials. Even excluding the former GDR, regional unemployment disparities have widened in Germany while the corresponding wage differentials have narrowed. In Canada, where the degree of unemployment persistence is also relatively high, a similar development was observed during the second half of the 1980s. The problem is, however, most acute in Italy, where for decades unemployment in the South has been substantially higher than in the North without inducing any adjustment of relative earnings.

Yet the hypothesis that narrow and rigid wage differentials can be seen as a principal cause of high unemployment is subject to some important caveats. Differences in the growth of the skilled and highly educated workforce explain to a large extent why wage differentials related to education have been more stable in Germany than in the United States.

... though there are exceptions

Moreover, owing to the apprenticeship system German workers can better adjust to shifts in relative demand without any change in wages than their counterparts in the United States. In the United States many new entrants have very low or no skills, whereas new entrants in Germany have typically received theoretical as well as vocational and practical training, creating a high degree of substitutability between different groups of workers when changes in relative demand call for adjustments. Finally, while institutional and statutory arrangements have undoubtedly contributed to the stability of the wage structure, notably in Germany but also in other European countries, there is little firm evidence that this has been a direct cause of higher unemployment. For instance, the rise in unemployment among unskilled workers in Germany has been only marginally higher than that in total unemployment. Conversely, despite a high degree of flexibility unskilled workers in the United States and the United Kingdom have experienced difficulties in finding jobs and have either remained unemployed or left the labour force.

Concluding observations

No single cause

One general conclusion emerging from the preceding discussion is that there is no single explanation of the differences in labour market behaviour across countries nor any clear consensus as to how the unemployment problem can be solved. Measures that have led to positive results in some countries may not work in others. For instance, the levels as well as the changes over time of unemployment in Australia and Canada are strikingly similar to those seen in the EU countries. However, further analysis points to significant differences in the underlying behaviour of labour and product markets between those two countries and the EU countries, suggesting that the potential solutions would also differ.

Nonetheless, a few general observations can be made. First of all, the current unemployment rate of 11½% in the EU countries is partly cyclical and should decline as the recovery proceeds. Attempts to speed up the recovery are subject to risks as inflation is sensitive to both the *level* of

and *changes* in the output gap. Moreover, even on the most favourable estimates some 7–8% of *hard-core* or *structural* unemployment would remain after a cyclical recovery. According to most studies this component has gradually increased in Australia, Canada and, in particular, in the EU countries.

Reducing structural unemployment calls for:

Secondly, a principal condition for alleviating the structural unemployment problem in Europe is that measures are adopted and implemented which make real wages more sensitive to changing labour market conditions and thus attenuate the effects of future shocks and stabilisation policies.

sensitivity to change;

Thirdly, in attempting to reduce structural unemployment, it is also important to identify the exact causes:

– as a result of the lower growth of the capital stock and labour-saving investment, there is a risk that existing capacities will not be able to support a return to full employment unless incentives to substitute labour for capital are enhanced;

enhanced incentives and flexibility; and

– technological progress during the 1980s has been biased against labour and, in particular, against the unskilled. In the *long run* technological progress is the main source of real income growth and *not* a cause of unemployment, but in order to smooth the short-run adjustment it is crucial that aggregate real wages as well as wage structures should be flexible;

– in some countries competition from lower-cost developing countries may have reduced the demand for labour through trade, outsourcing or the relocation of production. So far, this effect has probably been small, but given the increased international mobility of real capital, progress in communications technology and rapid productivity growth in some developing countries it may become of more significance in the future, reinforcing the need for wage flexibility;

– the growing burden of employers' social security contributions and other non-wage labour costs may in some cases have constituted a disincentive to taking on labour. The best solution may be to scale back such contributions, especially where they are earmarked for expenditures that create disincentive effects and/or lessen real wage flexibility;

the removal of disincentives and obstacles to market forces

– the inflexibility of relative wages in conditions of large shifts in the relative demand for different groups of labour is no doubt an important source of structural unemployment, notably in Europe. To reduce it, it is essential that regulatory arrangements which hinder a smooth adjustment in labour markets should be eliminated and that wages should be determined by market forces rather than institutional practices.

Finally, while the elimination of the various causes of structural unemployment through supply-side or structural measures is a *necessary* condition for a non-inflationary reduction of unemployment it is not *sufficient*. In order to actually reduce structural unemployment such measures need to be complemented by policies that allow aggregate demand to grow at a pace sufficient to gradually absorb cyclical and other sources of slack. Moreover, provided that the necessary structural measures have been implemented a somewhat faster increase in demand should not jeopardise the improvements that have already been achieved in price and inflation performance.

Need for gradual demand growth

Government debt and the constraints on fiscal policy

Recent developments in government debt

Rapidly rising debt ratios ...

The use of fiscal policy to stimulate aggregate demand and alleviate unemployment has been severely constrained by the high levels of government debt with which most industrialised countries entered the current downturn. Nevertheless, the ratio of government debt to GDP continued to rise in 1993, reflecting both a cyclical and a structural deterioration in government budget balances. Only Japan and Ireland have managed to reduce their debt/GDP ratios over the last four years. In the seven major countries, excluding Japan, the debt/GDP ratio has increased on average by more than 10 percentage points since 1989. Overall, net debt in the OECD countries reached almost 40% of GDP in 1993, from about 32% in 1989.

Sources of general government debt accumulation

Countries	1989					1993				
	Net borrowing, of which			Growth effect	Net debt	Net borrowing, of which			Growth effect	Net debt
	Interest payments	Primary deficit				Interest payments	Primary deficit			
		Cyclical	Other				Cyclical	Other		
	as a percentage of GDP									
United States	2.0	−0.7	0.2	− 2.1	30.4	2.0	0.2	1.4	1.9	39.1
Japan	0.9	−0.2	−3.2	− 1.1	14.9	0.3	1.5	−0.8	− 0.0	6.0
Germany[1]	2.2	−0.1	−2.2	− 1.4	22.7	2.9	0.3	0.7	− 0.6	27.5
France	2.2	−0.2	−0.7	− 1.7	24.8	3.1	2.8	0.0	− 0.4	35.6
Italy	8.4	−0.5	2.0	− 7.9	96.1	10.9	1.8	−3.0	− 3.8	112.6
United Kingdom	2.4	−1.6	−1.7	− 3.0	30.1	2.6	2.3	3.2	− 1.4	41.9
Canada	4.9	−1.0	−0.9	− 2.5	40.2	5.3	2.6	−0.9	− 1.9	60.1
Australia	1.9	−0.4	−2.9	− 1.6	12.2	1.0	1.7	3.0	− 0.6	22.8
Austria	3.1	−0.1	−0.2	− 3.6	56.9	3.5	1.2	−1.8	− 1.7	57.1
Belgium	9.5	−0.8	−2.3	− 9.7	119.7	9.9	0.5	−3.5	− 2.1	129.0
Denmark	3.8	0.8	−4.0	− 1.2	26.1	3.1	2.8	−1.5	− 0.5	33.3
Finland	0.5	−2.5	−0.9	− 0.1	− 1.7	3.1	7.8	−1.8	− 0.1	3.1
Greece	8.1	−1.0	9.6	− 9.9	74.1	13.5	0.2	1.1	−11.1	94.8
Ireland	6.2	0.6	−5.8	−11.7	105.4	5.8	−1.0	−1.6	− 4.9	92.1
Netherlands	4.4	−0.3	0.6	− 3.0	54.9	4.8	0.0	−0.7	− 1.0	59.8
Norway	−2.5	0.1	0.9	1.3	−20.3	−0.6	1.5	2.2	0.6	−13.4
Portugal	7.1	−0.6	−3.5	−11.9	71.7	7.6	1.0	−0.5	− 3.2	67.6
Spain	3.1	−1.5	1.2	− 3.4	30.8	4.7	1.0	1.5	− 1.2	42.0
Sweden	0.4	−3.5	−2.2	− 0.1	− 4.8	1.8	2.9	10.0	0.0	17.7
Average[2]	2.6	−0.6	−0.9	− 2.4	31.9	2.9	1.2	0.5	0.0	38.0

Note: The change in the net debt ratio comprises the net interest payments ratio, a cyclical and a cyclically adjusted component of the primary deficit and the growth effect. The sum of the first three equals the net borrowing/GDP ratio of general government. The cyclically adjusted component of the primary deficit is calculated as primary expenditure as a percentage of trend GDP minus revenue as a percentage of GDP. The growth effect is calculated as $-g/(1 + g)$ times the net debt/GDP ratio at the end of the previous period, where g is the current growth rate of nominal GDP. A positive sign implies an increase in the debt ratio.

[1] 1989 data refer to western Germany only. [2] Weighted average based on 1991 GDP and exchange rates.

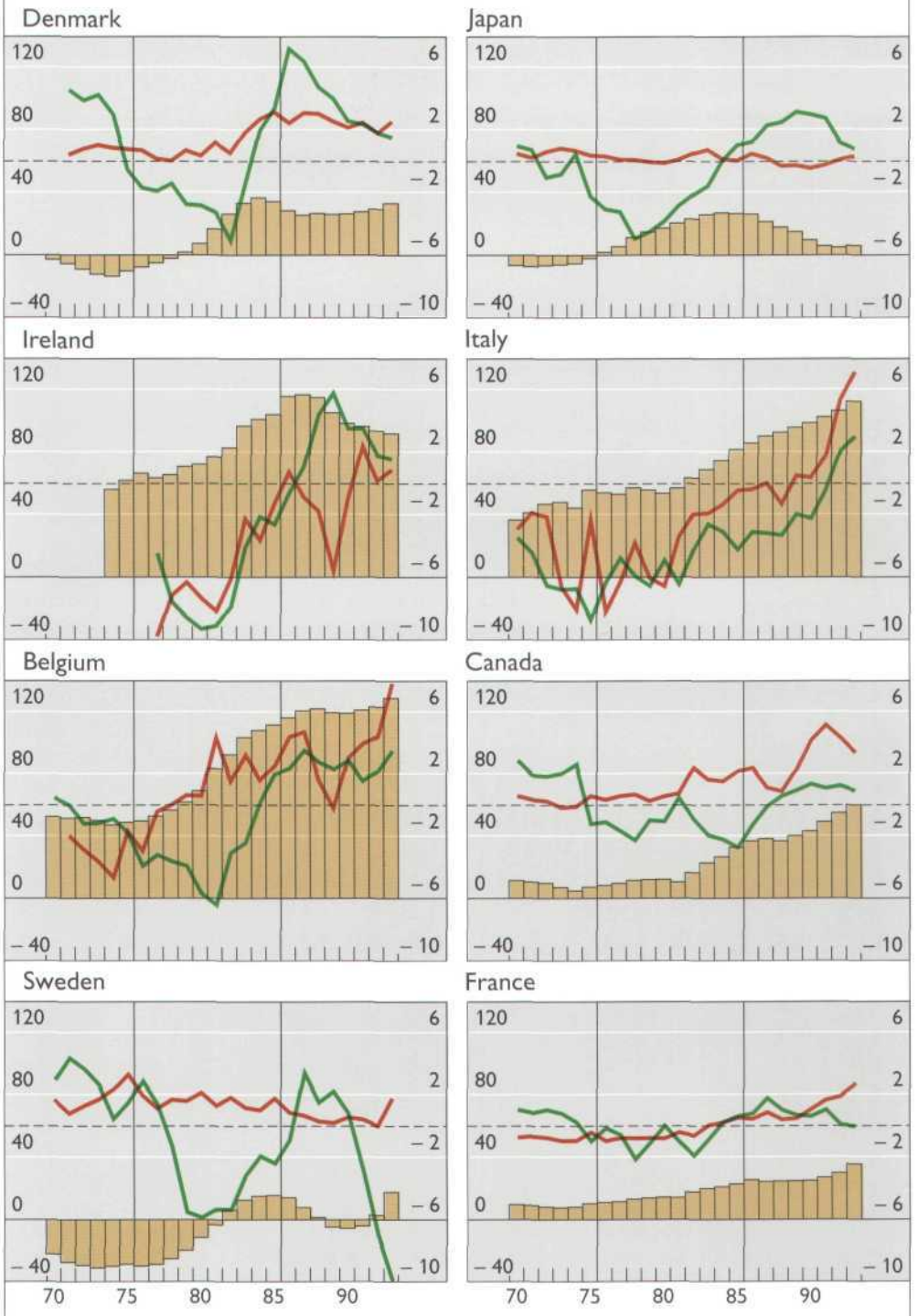
Sources: OECD Economic Outlook and BIS estimates.

Net debt, the interest burden and the cyclically adjusted primary balance

As a percentage of GDP

Left-hand scale: Net debt

Right-hand scale: Interest burden*; Cyclically adjusted primary balance*



* For an explanation, see the table on page 29. The interest burden is the sum of net interest payments as a percentage of GDP and the growth effect. A primary surplus exceeding the interest burden indicates a sustainable fiscal situation with falling debt ratios.

Sources: OECD Economic Outlook and BIS estimates.

... as progress in the 1980s due to consolidation programmes ...

During the middle and late 1980s sustained economic expansion, combined with medium-term fiscal stabilisation programmes, helped to slow down the spiral of rising government debt and interest payments. As cyclically adjusted primary surpluses caught up with rising interest burdens (see the graph opposite), government debt accumulation decelerated and was even reversed in some cases. Several countries (such as the United Kingdom, Germany, France, Denmark and Belgium) opted for a relatively quick and substantial turnround in the first half of the 1980s. In one of the most successful stabilisation programmes, the Danish Government managed to improve its cyclically adjusted primary balance by more than 10% of GDP in the four years following the adoption of stabilisation policies in 1982. Other countries took a more gradual approach (for example Japan and Austria) or had to wait for the economic boom of the late 1980s to consolidate their primary balances (for example Ireland, Sweden and Canada). Some (such as Italy) made little progress during the 1980s as interest payments continued to run ahead of primary balances.

... and buoyant economic growth ...

... is reversed in the early 1990s

As can be seen from the table, buoyant economic growth in the late 1980s contributed substantially to the reduction in debt/GDP ratios both by increasing the denominator and through its effect on the cyclical component of government budgets. In some countries these favourable cyclical developments concealed the fact that the improvement in the cyclically adjusted primary balance had come to a halt or had even been reversed, although further structural consolidation was necessary. The economic downturn since 1990 and the consequent cyclical deterioration in primary balances by an average 2% of GDP has exposed these weaknesses. Over the same period countries with net debt/GDP ratios of under 40% have experienced an average deterioration in their cyclically adjusted primary balances of 2% of GDP, in contrast to an average improvement of ½% of GDP in the high-debt countries. Consequently, debt/GDP ratios have again been rising very rapidly since 1989, with the most dramatic increases, of around 20 percentage points over the last four years, being recorded by Sweden, Greece and Canada.

Rising social security transfers and ageing populations

Rising social security transfers reflecting cyclical ...

One feature of the current deterioration in budget balances is the almost universal rise in the share of social security and other government transfers in GDP. Since 1989 these transfers have increased on average by more than 2% of GDP in the OECD countries, and in Sweden and Finland by about 7% and 10% of GDP respectively. To a considerable extent this is a cyclical phenomenon resulting from higher unemployment compensation and other income assistance programmes, but it is also indicative of a more structural shift in the composition of government spending. The table overleaf shows that, after rapid increases in the 1970s following the first oil crisis, the share of total government expenditure in GDP stabilised in many countries. However, there were quite diverse developments in the components of government expenditure. While the share of government consumption has on average decreased, the share of both debt interest

General government expenditure in the seven major countries

Items and years		United States	Japan	Western Germany	France	Italy	United Kingdom	Canada
		as a percentage of GDP						
Total expenditure	1970	30.8	19.0	38.3	38.5	33.0	36.7	33.5
	1980	31.8	32.0	47.9	46.1	41.9	43.0	38.8
	1990	33.3	31.7	45.1	49.8	53.2	39.9	45.8
		as a percentage of total expenditure						
Social security benefits and other transfers	1970	26.9	25.8	37.0	42.7	39.0	23.7	24.2
	1980	36.9	32.9	39.6	45.0	35.5	27.4	26.0
	1990	36.8	37.9	43.2	46.8	36.0	30.4	28.7
Government consumption	1970	68.3	39.2	41.2	39.0	40.2	47.5	55.0
	1980	58.9	30.7	42.2	40.0	35.7	49.2	49.2
	1990	56.7	28.8	40.6	36.5	33.2	50.1	44.0
Debt interest payments	1970	3.9	3.2	2.5	2.8	5.0	10.6	10.9
	1980	3.7	9.9	4.0	3.2	13.0	10.9	13.9
	1990	6.3	12.5	5.8	5.9	18.1	8.6	20.6
Memorandum items:								
*Public pensions**	*1990*	*15.2*	*16.9*	*15.3*	*18.0*	*21.1*	*17.3*	*8.5*
Public health	*1990*	*15.7*	*15.0*	*13.2*	*13.3*	*11.8*	*13.0*	*14.9*

* For the United States and Canada, 1990; for other countries, 1988.

Sources: OECD Economic Outlook, Pension Liabilities in the Seven Major Countries 1993 and New Orientations for Social Policy 1994.

payments and social security transfers has risen. The reason for the increase in debt service costs is obvious from the discussion above, but the rise in transfers has several causes. The table on page 34 examines the contribution of demographic and labour market developments. In most countries changes in employment and dependency ratios were factors making for a reduction in the ratio of social security benefits to GDP after 1983. However, in many cases these factors were more than offset by further increases in the per capita benefit level as a proportion of the average wage. This suggests that although in the 1980s some governments adjusted transfer conditions by abolishing indexation, lowering the ratio of benefits to wages and tightening eligibility criteria, there continued to be a substantial growth in real transfers per beneficiary, a broader take-up of entitlements and a widening of programme coverage.

... and structural factors

Demographic projections show that old age dependency ratios will rise substantially, and in some cases even double, as the "baby boom" generation reaches retirement age. This will place additional pressure on public health and pension expenditures, which, as the table above shows, are already among the largest government spending categories. Japan in particular is facing a rapid ageing of its population, which explains the Government's reluctance to rely too heavily on debt financing to help stimulate the economy. On the assumption of constant benefit levels per beneficiary, labour force participation and eligibility rates, the projected ratio of pension expenditure to GDP would double by 2040 from about 6% in 1990. In Italy the increase, from 11% in 1990 to 22% in 2040, would be even more

Future pressure on health and pension expenditures

worrying. According to OECD estimates the net discounted liabilities to which these largely unfunded pension entitlements give rise are equivalent to more than twice nominal GDP in Japan, France, Italy and Canada and more than one and a half times GDP in Germany and the United Kingdom. As the increases in contribution rates required to finance this rise in public pension expenditure would be crippling, many governments are turning to a combination of reduced pensions, higher retirement ages and the introduction of private pension funds to address the problem. In Italy measures have recently been taken to gradually raise the pensionable age to 65 for men and 60 for women, to lengthen the reference period for calculating pension entitlements from five to ten years and to increase the required number of years of contribution. In addition, contribution rates have been raised by 0.3% of gross earnings and the creation of private pension funds is being promoted. Similar measures have been taken or are being considered in most other industrialised countries.

Fiscal policy in the current cycle

Constraints on fiscal policy

The rapid rise in government debt combined with the substantial future pressure on government expenditure due to ageing populations has dominated the debate about the appropriate fiscal policy stance in the current cycle. The effectiveness of fiscal policy as an instrument to stabilise the economy has been in serious doubt since attempts at fiscal stimulus in the 1970s and early 1980s helped fuel inflation and resulted in rising debt/GDP ratios. High government debt has been associated with a fall in worldwide saving, increases in real interest rates, the crowding-out of interest-sensitive private investment projects and a slowing of growth. The medium-term goal of reducing government debt does not necessarily rule out a stabilisation role for fiscal policy in the short run. The current debate, however, is focused less on the use of fiscal policy as an active stabilisation instrument than on the extent to which the automatic stabilisers should be allowed to work and on when, how far and how fast an expansionary fiscal policy should be reversed. The answers to these questions depend on the sustainability, vulnerability and credibility of current fiscal policies.

The role of sustainability...

Sustainability relates to the ability to maintain current expenditure and revenue paths without permanently increasing government debt in relation to GDP and is a precondition for any flexible use of fiscal policy. Italy, which entered the worldwide downturn in 1990 with a primary deficit and a high debt/GDP ratio, has very little scope to allow the automatic stabilisers to operate. Despite a difficult economic and political environment successive Italian governments have managed to turn the primary deficit into a surplus. The revised convergence plan drawn up in July 1993 projects a gradual increase in the primary surplus to 3.6% of GDP in 1996. In contrast to previous budgets, the proposed deficit reduction for 1994 relies predominantly on savings in primary spending, resulting inter alia from reduced state pension payments and tighter control over health spending.

Normal cyclical variations in output should not endanger a sustainable fiscal policy, as only modest improvements in the structural primary surplus

Composition of the growth in the social security benefits/GDP ratio

Countries	1978–83					1986–91*				
	ΔSS	ΔDR	ΔER	ΔBW	ΔWS	ΔSS	ΔDR	ΔER	ΔBW	ΔWS
	as a percentage of GDP									
United States	2.04	−0.11	0.30	1.88	−0.05	−0.12	0.12	−1.39	1.18	−0.03
Japan	1.80	−0.05	−0.62	2.20	0.28	−0.26	−0.37	−1.00	1.24	−0.05
Western Germany	0.14	−1.00	0.82	0.38	−0.04	−2.19	−0.13	−0.92	−0.33	−0.84
France	3.04	−0.64	1.06	2.20	0.41	0.38	−0.16	−0.56	2.70	−1.55
Italy	2.48	−0.48	0.49	2.83	−0.38	1.00	−0.36	−0.48	2.58	−0.71
United Kingdom	2.49	−0.31	1.29	2.14	−0.62	−0.85	0.01	−0.37	−0.82	0.28
Canada	1.83	−0.20	0.07	2.17	−0.29	2.35	0.09	−0.85	2.65	0.40
Australia	1.43	−0.14	0.39	1.41	−0.20	0.85	−0.19	−0.70	2.17	−0.46
Austria	0.86	−0.71	0.85	1.40	−0.64	0.45	−0.19	−0.65	1.37	−0.06
Belgium	2.52	−0.49	1.59	2.10	−0.67	−2.27	0.01	−0.82	−0.06	−1.42
Denmark	2.54	−0.45	0.03	3.07	−0.11	0.87	−0.36	−0.80	2.54	−0.53
Finland	0.37	−0.08	−0.49	1.01	−0.70	−1.09	0.10	−0.18	−1.05	0.00
Greece	3.97	−0.21	−0.12	3.40	0.85	1.22	−0.39	−0.48	3.15	−1.01
Ireland	4.64	−0.20	0.60	3.95	0.39	−1.23	−0.59	0.49	−0.14	−1.03
Netherlands	1.65	−0.71	2.22	1.34	−1.16	−0.89	−0.37	−1.30	1.93	−1.12
Norway	0.49	−0.25	−0.17	3.51	−2.45	5.03	−0.23	0.02	4.64	0.67
Portugal	1.72	−0.23	−0.69	2.89	−0.20	2.78	−0.37	−0.88	5.04	−0.92
Spain	3.23	−0.27	2.20	1.88	−0.62	1.33	−0.68	−2.00	5.01	−0.83
Sweden	1.11	−0.17	−0.16	2.73	−1.24	2.03	0.12	−0.59	2.19	0.32

Note: The change in the ratio of social security benefits to GDP (ΔSS) is made up of four component changes due to the dependency ratio (ΔDR), the employment ratio (ΔER), the per capita benefit as a proportion of the average wage (ΔBW) and the share of wages in GDP (ΔWS). The dependency ratio is calculated as the ratio of the population aged under 15 or over 65 to the population aged 15 to 65.

* For Germany, 1983–90; for Finland, 1983–89.

Sources: OECD Economic Outlook and Annual Labour Force Statistics.

are required to stabilise the debt/GDP ratio in the medium term. Several countries have, however, experienced a protracted and very deep recession. This raises questions about the persistence of the unfavourable output developments and the corresponding deficits. Over the last four years average GDP growth in Canada has been close to zero, while real GDP in Sweden and Finland has been declining for three consecutive years. On the basis of most estimates of the cyclical sensitivity of the government budget, this can easily account for an increase in the debt/GDP ratio of at least 10 percentage points. Both Canada and Finland have managed to limit the cyclically adjusted deterioration in their non-interest government budget. In Sweden, on the other hand, the cyclically adjusted component has deteriorated by more than 10 percentage points since 1989, reflecting factors such as government financial support for the banking system and the lagged adjustment of transfer payments to lower inflation. Several packages concluded in 1992, aimed at reducing the generosity of welfare payments, did not prevent large budget overruns, forcing the Government to announce in April 1993 a programme of further consolidation for the period 1994–98. That sustainability is in jeopardy is evident from OECD

projections showing that without such measures the Swedish net debt/GDP ratio would very rapidly rise to 80% or more by the end of the decade.

... vulnerability...

High government debt also increases the vulnerability of the fiscal authorities to the business cycle through its effects on the interest burden. With a debt/GDP ratio of around 100%, every 1% increase in the differential between the average interest rate on the government debt and the nominal growth rate raises the interest burden by 1% of GDP. Typically, at the start of a downturn real interest rates are high, while growth rates fall rapidly. The substantial effects of this on debt accumulation can be seen in the cases of Belgium, Italy and Ireland. In Belgium, for example, the interest burden effect fluctuated from 2.5% of GDP in 1985 to −0.2% in 1989 and back to 7.8% in 1993 (see the graph on page 30). These swings overshadow all recent structural improvements in the primary surplus and have obliged the Government to take further austerity measures. The Belgian convergence plan drawn up in June 1992 and revised in April 1993 aims at reducing general government net borrowing to 3% of GDP in 1996. To counteract the negative effects of high real interest rates and slow growth several corrective measures have been taken, including the approval of a Global Plan in November 1993 which aims inter alia at restoring the financial balance of the social security system by means of measures in the areas of health care, pensions, family allowances and unemployment benefits.

The vulnerability of high-debt countries to interest rate rises can also impair the credibility of the monetary authorities. This was most obvious during the European currency turmoil in 1992 and 1993. In Italy around 65% of the government debt is either short-term or has been issued at floating interest rates, which makes the average interest cost highly sensitive to changes in short-term interest rates. In Belgium the average maturity of the government debt is longer, but more than a quarter has a maturity of less than one year. The interaction of monetary policy with government debt is also evident in Canada, where a deliberate disinflation policy, combined with a sustained risk premium over long-term rates in the United States, has led to unprecedented rises in the interest burden.

... and credibility

The credibility of the fiscal authorities and their budget plans plays a role in determining the effect of changes in fiscal policy. As medium-term budget plans affect future levels of government debt, spending and taxes, they also have an impact on expectations of future interest rates and output, which might lead to changes in current long-term interest rates. Such expectation effects can offset the direct demand effects of current changes in taxes and government expenditure. The French Government, for example, has placed recent stimulative fiscal measures within a framework of medium-term fiscal consolidation in order not to upset the financial and exchange markets and to avoid negative crowding-out effects. The proposed 1994 budget projects a deficit of Fr.fr. 300 billion (4.2% of GDP), but government expenditure is to grow by only 1.1% relative to the revised 1993 budget, which includes measures to support employment and to boost construction.

Some stimulus in France ...

... fiscal tightening in the United States, the United Kingdom and Germany ...

In the United Kingdom and the United States, on the other hand, the main concern has been to tighten fiscal policy without endangering an initially hesitant recovery. The announcement of a credible deficit reduction plan in which most of the adjustments are for delayed implementation has been a partial solution to this problem. The aim is to lessen the direct demand effects at the outset of the programme, while the expectation of future debt reductions can lead to an immediate fall in long-term interest rates and stimulate interest-sensitive demand components. In the United States the announcement and approval of the 1993 Omnibus Budget Reconciliation Act were followed by a decline in long-term bond yields. This package, which was recently reinforced by the 1994 budget proposal and an almost total freeze on discretionary spending for the next five years, is expected ultimately to reduce the federal deficit by 1¾% of GDP. Although in the United Kingdom the 1993 spring budget had little effect on the financial markets, the first unified autumn budget led to a significant rally in the bond markets. The combined direct effect of the two budgets is to increase tax revenues in 1994 by 1.3% of GDP and cut expenditure by 0.5%. Finally, in Germany, the approval in May 1993 of the Federal Consolidation Programme, which includes a 7.5% income tax surcharge from 1995 to finance the structural reform process in eastern Germany, triggered a further decline in long-term interest rates. This programme was supported in the 1994 budget by public spending cuts over the next three years, including a 3% reduction in unemployment benefits and social assistance payments.

... and strong expansion in Japan

An important element in the success of the strategies in these countries is the realisation that a tighter fiscal policy will make it easier for the monetary authorities to bring down interest rates and stimulate interest-sensitive spending without jeopardising progress against inflation. In Japan, on the other hand, three successive fiscal packages in August 1992 and April and September 1993, expanding government investment by an estimated 5.2% of GDP, have not yet resulted in a revival of economic growth. In February 1994 an additional fiscal package was therefore proposed, including a one-time reduction in income taxes and further increases in public investment.

Large overruns in the convergence programmes of EU countries

The desire to enhance credibility was one reason for the adoption of the Maastricht fiscal criteria by the EU countries. Convergence programmes were established, multilateral surveillance was strengthened, and definitions of fiscal concepts and objectives were harmonised. As a result of reduced growth prospects, the goal of reaching the 3% deficit target by 1996 became much more difficult. Almost all the initial convergence plans had to be revised. In Germany, for example, excluding additional borrowing of about 2% of GDP by the Treuhand Agency, the Federal Railways and the Federal Post Office, the initially projected deficit/GDP ratio was overshot by about 1 percentage point in 1993. Substantial overruns in 1993 also prompted the Spanish Government to propose a restrictive 1994 budget which aims at limiting the deficit to 5.7% of projected GDP and to announce a new three-year plan to cut the public deficit further last February. Under the

new Portuguese medium-term convergence programme, the Government plans to lower the general government deficit to just over 3% of GDP, stabilising the ratio of debt to GDP at 67% over the next four years.

Credibility will also benefit from concrete measures that address the structural problems in the government budget. In many continental European countries government revenues have reached more than 45% of GDP, and even more than 50% in the Nordic countries, leaving little scope for further tax increases. In these countries consolidation efforts must focus on containing and reducing government expenditure. The expected future decrease in the tax burden and in its distortive effects on output could bolster private sector confidence and offset direct negative demand effects. The most important factor in establishing credibility is, however, actual performance in government debt consolidation. Although many countries were able to stabilise their debt/GDP ratios at the end of the 1980s in conditions of above-average growth, only a few succeeded in substantially reducing them. In the light of the future pressure on government expenditure due to ageing populations, this has impaired the credibility of the fiscal authorities in the current downturn, leaving most governments with no choice but to tighten fiscal policy in order to prevent undesired effects on the financial markets.

III. The developing countries and eastern Europe

Highlights

Led by Asia, real growth in the developing world, at about 4½% last year, was significantly higher than in the industrial countries. Moreover, if Brazil is excluded, the rate of inflation declined. At the same time, owing to weak export demand and worsening terms of trade, the current account deficit of the developing countries (excluding the newly industrialising economies (NIEs)) increased to US$ 91 billion. Even though this was easily financed by abundant capital inflows (see also Chapter VII), the increases in foreign debt recently recorded by some countries, notably in Latin America, need to be carefully monitored if they are not to pose problems in the future.

The favourable output and inflation performance and the differences observed between various groups of developing countries owe much to the policies pursued. The NIEs have for many years achieved rapid growth through policies promoting exports of manufactured goods. Similar policies are now stimulating growth in other South-East Asian countries, such as Indonesia, Malaysia and Thailand. Structural reforms and resolute stabilisation policies in a number of Latin American countries have succeeded in reducing inflation and reviving real growth. In South Asia, India and Pakistan have also adopted pro-market reforms, and similar trends may be observed in parts of the Middle East and in some countries in Africa.

Yet the effects of growth-oriented policies have been most dramatic among those Asian countries that are in transition towards market economies. Over the last two years China has recorded average GDP growth of more than 13%. Relatively high growth has also been seen in Vietnam, Laos and Cambodia. At the same time, because China's reform policies have placed a greater burden on macroeconomic control instruments and the effectiveness of these instruments has progressively weakened, there is a growing risk of excess demand pressures and rising inflation.

The striking contrast in economic performance last year between eastern Europe and the members of the Commonwealth of Independent States (CIS) provided a further illustration of the importance of appropriately designed economic policies. Consistent reform efforts and determined stabilisation policies in many eastern European countries have laid the foundation for a resumption of growth. They were rewarded with a bottoming-out of output last year, and in some cases with the first signs of recovery. In stark contrast, the failure of the CIS economies to solve the basic issues of economic cooperation in the region and to redress macroeconomic

imbalances resulted in another year of falling output and high inflation. The opportunity to pursue individual stabilisation policies provided by the collapse of the rouble zone was not utilised.

While the stabilisation of output in eastern Europe raised hopes that recovery may be within reach, achieving sustainable growth remains a challenge. Much has to be done to raise investment from its present level and to strengthen current balance-of-payments positions. The continuing weakness of investment underscores the urgent need to increase domestic saving if a sustainable balance of payments and higher growth are to be attained.

Recent developments and policies in the developing countries

Continuing high growth with lower inflation

Real output growth in the developing countries last year, at about 4½%, was largely unchanged from 1992 and for the third consecutive year significantly higher than that in the industrial countries, this time by an even wider margin (see the table on page 4). Growth in Asia continued to be rapid while stronger growth in Latin America offset weaker trends in the Middle East and Africa. 1993 also saw a further decline in the rate of inflation to just over 15% (excluding Brazil). Most of the decline can be ascribed to developments in Latin America, as inflation did not change significantly in other regions.

Policy-induced differences in performance

There were again, however, large differences in the performance of individual countries, highlighting, in particular, the effects of the different policies pursued. The NIEs (Hong Kong, Singapore, South Korea and Taiwan) further developed their growth strategy based on export promotion and stable macroeconomic policies, and this strategy was successfully applied by several other South-East Asian countries. The growth performance of Asia also reflected the reform policies implemented in China and more recently in other Asian countries in transition which have adopted the "Chinese reform model". Pro-market policies, including deregulation, trade liberalisation and privatisation, have also been introduced in Pakistan, Sri Lanka and, most notably, India in recent years with favourable effects on these countries' output performance. In Latin America the determined pursuit of stabilisation policies and structural reforms has reversed earlier trends of declining output and accelerating inflation. Africa, however, confronted with worsening terms of trade, unfavourable weather conditions and, in some countries, civil strife, recorded a further fall in per capita income. A major policy event in early 1994 was the currency devaluation in the countries belonging to the CFA franc zone, a change that is likely to have a profound impact on future economic trends. The Middle East and North Africa presented a picture of marked contrasts last year. Growth was low or negative in the oil-exporting countries owing to weak demand for oil and falling prices and was sluggish in countries such as Algeria and Egypt, of which the former was adversely affected by social unrest. On the other hand, Jordan and Syria, benefiting from reform policies, recorded growth rates of 5–6%.

Growth policies in South-East Asia

High and self-contained growth

Over the last twenty-five years, output growth in South-East Asia (the seven countries included in the table below) has averaged 7¾% and aggregate GDP has more than sextupled. A marked rise in intra-regional trade has increasingly shielded these countries from the world business cycle.

Common features within different economic structures...

The policies pursued by the seven countries have a number of common features, including the promotion of saving, investment in education, stable fiscal, monetary and exchange rate policies, low inflation and export-led growth based on the manufacturing sector. However, the differences in economic structures and growth strategies are equally marked. In Taiwan the manufacturing sector consists of a large number of small to medium-sized enterprises, while in South Korea large conglomerates have played the dominant role. Malaysia and Indonesia, and to a lesser extent Thailand, have a rich natural resource base and a principal component of their growth strategies has been the development of industry in order to reduce their dependence on exports of raw materials and consequent exposure to volatile terms of trade. Hong Kong and Singapore are city states and, in addition to exports of manufactured goods, their high growth can be attributed to the development of internationally competitive services sectors, in particular in the financial area.

... and continuous adaptation of growth strategies

The policy measures applied have also differed. Singapore and Hong Kong have followed a liberal and non-interventionist strategy, while Taiwan and South Korea have relied on more interventionist approaches. The other three South-East Asian economies (Indonesia, Malaysia and Thailand) are progressively implementing policies of deregulation and liberalisation. Overall, the achievements of the seven countries have not only depended on the initial conditions and targets but have also been the outcome of a dynamic process in which policies are continuously adjusted to external as well as internal changes and impulses. Thus, in response to the maturing of their

South-East Asia: indicators of economic development

Countries	Real GDP			Consumer prices			Real earnings[1]		
	1970–80	1981–90	1991–93	1970–80	1981–90	1991–93	1970–80	1981–90	1991–93
	percentage changes, annual rates								
Hong Kong	9.4	6.7	5.0	8.6	8.1	9.8	6.3	4.2	3.4
Singapore	9.0	7.0	7.4	7.1	2.3	2.7	3.0	5.0	2.1
South Korea	8.2	9.3	6.4	16.3	6.3	6.8	9.9	6.2	6.4
Taiwan	9.7	8.0	6.3	10.4	3.1	3.7	7.8	7.5	6.1
Average[2]	*8.9*	*8.3*	*6.2*	*12.7*	*5.3*	*6.1*	*8.1*	*6.1*	*5.5*
Indonesia	8.0	5.5	6.6	17.0	8.6	8.8	5.0	5.9	*n.a.*
Malaysia	8.0	6.0	8.4	5.9	3.2	4.2	2.0	3.2	6.4
Thailand	6.8	7.8	7.7	9.8	4.4	4.5	1.0	6.4	5.0
Average[2]	*7.6*	*6.3*	*7.2*	*13.2*	*6.5*	*6.8*	*3.3*	*5.6*	*n.a.*

[1] Hourly earnings in manufacturing industry deflated by consumer prices. [2] Weighted average, based on 1990 PPP weights.

Sources: World Bank World Tables, IMF International Financial Statistics, Asian Development Bank Asian Development Outlook and national data.

economies and a deteriorating competitive position vis-à-vis other Asian countries, the NIEs are currently undergoing a process of industrial restructuring. Recently they have experienced growth rates below those of the other three South-East Asian countries. This pattern was especially marked last year, when, despite an unexpectedly sharp expansion of almost 10% in Singapore, GDP growth in the NIEs averaged "only" 6%, compared with 7½% in the rest of the region.

Growth "fundamentals" and policy influences

Broadly speaking, economic growth is determined by three fundamental factors: the volume of real capital formation, the efficiency with which capital and other resources are used and technological progress. In all three respects the policies pursued in South-East Asia have played a decisive role.

High rates of saving and investment

All seven countries have enjoyed high and for the most part rising national saving and domestic investment rates (see the table overleaf). To a large extent these have been "self-generated" as rapid growth stimulated household and enterprise saving and prevented an accumulation of public sector deficits. Policies have contributed through generally low inflation and a conservative fiscal stance with high government saving. In some countries public pension or insurance funds have underpinned capital formation (Singapore) or served as an instrument for financing government deficits (Malaysia).

Flexible labour markets with large employment and productivity gains

Most of the South-East Asian countries have benefited from aggregate productivity gains as rural workers, made redundant by strong output increases induced by agricultural reforms, have been absorbed in industry or services. These sectoral shifts have taken place with only transitory increases in unemployment and, on average, real wage growth has not exceeded productivity growth. A typical feature of South-East Asian labour markets is that wages are highly sensitive to unemployment. On the whole, this has facilitated adjustment, though in periods of excess demand for labour real wage gains have tended to erode profit margins and weaken international competitiveness. In some cases interventionist policies, such as the incomes policies adopted in Singapore or "wage guidance" in other countries, have been applied. Overall, however, the unusually high growth of employment without excessive wage pressures owes much to investment in primary and secondary education, which has ensured an ample supply of skilled workers and helped to prevent large changes in relative incomes. Indeed, in contrast to most other developing countries, income distribution in South-East Asian economies has become more equal and the proportion of the population living in poverty has fallen dramatically.

Interventionist policies used to different degrees and...

To varying degrees the South-East Asian countries have attempted to encourage capital formation through interest subsidies or tax incentives and have influenced the allocation of capital through directed loans. "Infant industries" have been protected while exports have been promoted through subsidies. Close cooperation between governments and private business or the creation of public enterprises in sectors with high start-up costs and/or externalities have been additional components of the industrial growth

South-East Asia: structural indicators

Countries	1991 per capita GNP	Budget balance			Gross national saving			Merchandise exports			Unemployment	
		1971–80	1981–90	1991–93	1971–80	1981–90	1991–93	1970	1980	1992	1980	1993
	in US$	as a percentage of GDP, annual averages									as % of the labour force	
Hong Kong	13,200	6.2	–0.6	2.7	28.5	31.0	31.1	69.7	71.8	123.8	3.9	2.0
Singapore	12,890	0.4	5.8	11.8	29.0	42.0	47.5	76.3	155.3	133.8	3.5	2.7*
South Korea	6,340	– 2.2	–1.0	–0.5	22.0	31.0	36.0	10.1	27.5	25.3	5.2	2.8
Taiwan	9,070	0.0	–0.1	–1.7	31.8	33.5	29.0	26.0	47.3	39.1	1.2	1.4
Indonesia	610	– 2.4	–3.0	–4.4	24.5	28.5	35.0	12.8	30.1	25.7	1.7	2.2*
Malaysia	2,490	–13.3	–6.1	–1.6	27.0	29.0	29.0	41.3	52.6	68.8	5.6	3.0
Thailand	1,580	– 4.9	–0.1	3.6	22.2	22.7	34.0	9.7	20.0	30.4	0.9	3.6

* 1992.

Sources: World Bank World Tables, IMF International Financial Statistics, Asian Development Bank Asian Development Outlook and national data.

strategy. Interventionist policies of this kind have been pursued most intensively in South Korea and Taiwan, while Singapore and especially Hong Kong have rarely resorted to such measures. Indonesia, Malaysia and Thailand have also relied less on interventionist policies, owing to international pressures against protectionism and, in particular, the difficulties of using credit and interest rate controls at a time when financial markets are becoming increasingly integrated. Overall, the main features and net effects of these policies can be summarised in three points:

... subject to strict performance criteria

– rigorous screening and monitoring criteria, usually based on export performance, have been applied in deciding whether certain sectors or enterprises should continue to receive support;

– interventionist policies have never been allowed to interfere with the macroeconomic targets of low inflation and small budget deficits;

– as a result, the return on investment and capital has generally been higher than in most other developing countries and also higher than in the industrial countries.

Sources of technological progress

By welcoming foreign direct investment or seeking licensing arrangements the South-East Asian countries have complemented their own already rapid technological progress. This catching-up process and the adaptation of foreign technologies to domestic production have been significantly aided by the existence of a highly educated labour force. Their infrastructure is also more advanced than that in most other developing countries, but because of their rapid growth all seven countries have recently been forced to devote a rising share of public expenditure to strengthening infrastructural development.

Dynamic aspects of the growth process

Industrial adjustment in the NIEs...

As the four NIEs have gradually caught up with the technologies of the industrial countries and their economies have matured, excess demand and inflationary pressures in labour markets combined with currency apprecia-

tion have caused them to lose competitiveness, in particular against emerging rivals in the region. They have countered the problem in two ways: by upgrading their manufacturing sectors, shifting from labour-intensive products to "high-tech" consumer and investment goods, and by relocating or outsourcing production to other South-East Asian countries with lower labour costs. This adjustment process is especially evident in Hong Kong and Singapore. The former has shifted most of its manufacturing production to the southern provinces of China while the redundant labour force has been absorbed by the services sector. Singapore has also invested in neighbouring countries while at the same time upgrading its domestic industry. As a result, its manufactured exports now come largely from the computer-related electronics industry, which last year accounted for most of the unexpectedly rapid expansion of overall GDP.

... benefiting other countries in the region

The other South-East Asian countries have greatly benefited from this process. Until they were recently overtaken by China, they had been the main recipients of foreign direct investment from the NIEs. Direct investment inflows to these countries have provided a stimulus to growth and served as a major source of finance, accounting in some periods for nearly 25% of total investment in the case of Malaysia. Thus a "virtuous" circle has gradually evolved whereby direct investment, taking advantage of shifting cost structures and the upgrading of technology, has reinforced the expansion in intra-regional trade (see Chapter IV) and helped to internalise growth in the region. Combined with surging exports to China this process has helped to shelter South-East Asia from the business cycle in the industrial world.

Changing sensitivities to movements of the yen

This development has also changed the relative vulnerability to real exchange rate movements. The real appreciation of the yen following the Plaza Agreement brought benefits to the four NIEs in the form of improved competitiveness and direct investment inflows from Japan, while most other South-East Asian countries suffered terms-of-trade losses and rising external debt. By contrast, the appreciation of the yen during the second half of 1993 appears to have mainly benefited the three emerging economies in terms of increased competitiveness and foreign direct investment inflows. The NIEs, notably South Korea and Taiwan, have profited less than previously as the range of products in which they compete with Japan is largely confined to capital and technology-intensive products and direct investment inflows have been much smaller.

Macroeconomic stabilisation and structural reforms in Latin America

Dismal performance in the 1980s...

During the 1980s real per capita income in Latin America declined by an estimated 9% and annual inflation was in many countries often in triple digits or even higher. There were several reasons for this dismal picture of a "lost decade": the debt crisis that erupted in 1982, real income losses due to large net interest payments abroad and substantial terms-of-trade deteriorations, and natural disasters in several countries. Most importantly, however, the poor performance was due to slowness in correcting the

macroeconomic imbalances that had built up earlier and triggered the debt crisis and to difficulties in counteracting previous inappropriate policies.

Notwithstanding continuing terms-of-trade losses and a slowdown in growth outside Brazil last year (see the table below), output growth averaged nearly 3% during 1990–93, restoring more than one-third of the earlier decline in per capita income. This reversal, which was accompanied by a remarkable fall in the average rate of inflation (excluding Brazil) to 18% last year, can be ascribed to a growing recognition of the need for reforms and to a determined effort to implement policies aimed at macroeconomic stabilisation and structural adjustment. As a result, the region has seen a revival of business fixed investment and a resumption of capital inflows, providing rather strong evidence that confidence is being re-established among domestic as well as foreign investors.

... followed by a marked reversal of policies

The timing of the policy shift has varied. Chile embarked on a new course already in the 1970s, Mexico in 1987 and Argentina and Peru only in 1991–92, while Brazil, until 1993, had still not found the consensus necessary for credible reform. These differences, which are also evident in the nature and scope of the measures taken, have had a profound impact on recent performance. Some countries, such as Chile, Mexico, Bolivia and Argentina, have consolidated earlier gains but, except for Chile, have not yet reaped all the benefits of the transition from stabilisation to sustainable growth with low inflation; others, including Ecuador, Peru, Uruguay and Venezuela, are in a state of volatile real growth and mostly high rates of inflation; and Brazil still suffers from chronically high inflation, fuelled by large nominal budget deficits (see note 4 to the table opposite) and, in particular, widespread indexation. Nonetheless, after two years with no growth, Brazil was among the fastest-growing countries in the region in 1993, though the recovery started to falter in the second half of the year. The Government has recently proposed another stabilisation plan including a more restrictive fiscal policy and, as a novel feature, the introduction of

Varied timing of the policy shift

Recent measures in Brazil

Latin America: real output and inflation

Countries	Real GDP				*Memo item: 1993 per capita income*[1]	Consumer prices				*Memo item: Peak rate*[2]
	1980–85	1986–90	1991–92	1993		1980–85	1986–90	1991–92	1993	
	percentage changes, annual rates									
Chile	–0.4	6.5	8.2	6.0	*130.2*	21.3	19.3	18.6	12.7	*505 (1974)*
Bolivia	–1.9	1.7	3.7	3.2	*82.0*	611.0	46.5	16.7	8.5	*11,750 (1985)*
Mexico	1.9	1.4	3.1	0.4	*94.3*	60.8	69.6	19.1	9.8	*132 (1987)*
Argentina	–2.1	0.3	8.8	6.0	*100.8*	322.5	584.0	84.2	10.5	*3,080 (1989)*
Brazil	1.1	2.0	0.0	5.0	*94.3*	149.0	657.5	656.0	1,933	*3,118 (1990)*
Average[3]	*0.5*	*1.9*	*2.5*	*3.0*	*95.4*	*118.5*	*519.0*	*281.0*	*737.0*	*1,578 (1990)*
Excl. Brazil	*0.1*	*1.8*	*3.9*	*2.0*	*96.4*	*99.0*	*277.5*	*42.0*	*18.0*	*652 (1990)*

[1] Index, 1980 = 100. [2] Since 1970; year of peak rate in brackets. [3] Weighted average for Latin America and the Caribbean, using 1990 PPP weights.

Sources: IMF International Financial Statistics, ECLAC Overview of the economy of Latin America and the Caribbean and national data.

Latin America: budget balances and gross investment

Countries	Budget balance[1]				Gross investment			
	1981–85	1986–90	1991–92	1993[2]	1981–85	1986–90	1991–92	1993[2]
	as a percentage of GDP, annual averages							
Chile	– 1.6	3.0	2.2	0.1	14.2	17.8	20.0	26.0
Bolivia	–13.4	–5.1	–5.8	–6.0	13.1	11.7	18.6	18.5
Mexico[3]	–11.5	–9.4	3.5	1.2	23.7	20.4	22.5	22.5
Argentina[3]	–11.8	–4.5	–0.8	–1.0	20.5	17.2	15.7	18.0
Brazil[4]	– 4.5	–4.0	–1.0	–2.0	18.5	22.1	19.0	17.5
Average[5]	*– 4.4*	*–4.6*	*–0.1*	*–1.3*	*20.9*	*19.5*	*21.0*	*22.5*
Excluding Brazil	–	–	–	–	*22.3*	*18.1*	*22.1*	*25.3*

[1] Non-financial public sector. [2] Preliminary. [3] Including privatisation receipts. [4] Nominal budget balance less inflation component of interest payments; if the inflation component is included, the deficit in 1991–92 would have amounted to around 35% of GDP. [5] Weighted average for Latin America and the Caribbean, using 1990 PPP weights; budget balance refers to central government.

Sources: Inter-American Development Bank and those listed in the table on the previous page.

a contemporaneous price index linked to the US dollar. The index is to be used as a unit of account for adjusting public sector wages and, from 1st July this year, is to form the basis for a new currency. Together with the recent agreement restructuring Brazil's $49 billion foreign commercial bank debt these measures could herald the start of progress towards stabilisation.

Questions to be considered

Against this background three questions are of relevance. First, what was the nature of the policy measures taken and what were the principal elements of success or failure? Secondly, why have most countries preferred an exchange-rate-based nominal anchor to one based on a monetary target? Finally, what are the post-reform problems and what further reforms are needed? The following discussion draws on the experience of Chile, Bolivia, Mexico and Argentina, which in many ways is typical of the wide-ranging stabilisation and reform measures undertaken and of the problems encountered. Their experience can also offer policy lessons for countries in which the reform process has just started or has yet to take root.

The nature of the reform measures and immediate post-reform developments

Main features of new policies

The successfully reforming countries have generally applied a three-pronged strategy: restrictive fiscal and monetary policies to restore macroeconomic balance and reduce inflation; the use of nominal anchors to break inflation "inertia" and stabilise expectations; and a series of structural measures, including the liberalisation of foreign trade, tax reform, privatisation, the deregulation of output and labour markets, financial sector reform and the partial or complete removal of foreign exchange controls. In most cases the first two steps were introduced early in the reform process while the third was implemented only partially at first but was subsequently extended to include a wider range of areas and sectors.

First stage of reforms in Chile...

Chile has undertaken reforms in two stages. Following record inflation and a change in the political regime in 1974, measures incorporating all the above-mentioned components were introduced in 1975–76. Initially, the

programme relied on a very tight monetary policy as the key element in the efforts to reduce inflation and this was combined with an exchange rate policy based on a crawling peg against the US dollar. However, from 1979 onwards a completely fixed rate was adopted while monetary policy became somewhat less restrictive. Despite a relatively quick resumption of real growth and continued fiscal discipline, the policy package eventually failed, mainly because wage indexation based on past price changes sustained a high degree of inflation inertia, resulting in an accelerating real appreciation of the exchange rate and a widening external imbalance.

... with crucial policy lessons

The difficulties encountered in its earlier programme may seem irrelevant in view of Chile's recent performance, which has included average growth of 7½% during 1990–93, a fall in the rate of inflation to less than 13% and a marked rise in the investment/GDP ratio (see the tables on pages 44 and 45). However, it provided two crucial lessons both for Chile's subsequent reforms and for the exchange-rate-based programmes adopted in other countries: first, the *combination* of a fixed nominal exchange rate with ex post wage indexation is likely to be unsustainable; and secondly, fiscal discipline is a *necessary but not sufficient* condition for reducing inflation.

Second stage of reforms

The second stage of reforms started with a large devaluation after the debt crisis. This was followed by the introduction of restrictive fiscal and monetary policies in 1984–85 and subsequently by further structural measures, including the creation of an independent central bank and, last year, a major capital market reform. In contrast to the first stage, the authorities abandoned the exchange-rate-based nominal anchor and attempted to reduce the external imbalance by means of a series of nominal devaluations. Because wage indexation had been abolished and unemployment was high at the start of the programme, these devaluations had only a moderate effect on nominal wages. Consequently, the rate of price inflation, real wages and the real effective exchange rate declined during the second half of the 1980s (see the table below), while export growth accelerated. At the same time, improved profit shares led to a marked increase in private capital formation despite high real lending rates (see the table opposite).

Latin America:
current account balances and real effective exchange rates

Countries	Current account balance				Real effective exchange rate[1]				
	1981–85	1986–90	1991–92	1993[2]	1979–81	1982–84	1986	1990	1993[2]
	as a percentage of GDP, annual averages				indices, 1985 = 100				
Chile	−10.0	−3.5	−0.5	− 5.0	143	133	81	71	76
Bolivia	− 3.9	−6.2	−8.5	−10.0	73	93	73	51	41
Mexico	− 0.9	−0.9	−5.9	− 5.7	122	92	72	92	118
Argentina	− 2.2	−1.6	−2.6	− 3.0	145	96	93	88	137
Brazil	− 2.8	−0.4	0.6	0.1	126	116	94	154	133

[1] Nominal effective rates deflated by relative consumer prices; increase (decrease) indicates appreciation (depreciation). [2] Preliminary.

Sources: See the tables on pages 44 and 45.

Latin America: real interest rates

Countries	Deposit rates[1]					Lending rates[2]				
	1980	1983	1986	1990	1993[3]	1980	1983	1986	1990	1993[3]
	in percentages per annum									
Chile	2.4	0.6	– 0.5	14.3	5.5	7.5	– 2.7	6.5	27.0	15.8
Bolivia	–29.0	–10.6[4]	– 8.5[4]	6.7	13.7	–21.3	–13.5[4]	7.0[4]	21.8	51.0
Mexico	– 5.8	–47.0	– 1.5	4.5	5.8	– 3.8	–50.7	– 7.5	13.8	9.5
Argentina	–20.0	–63.0	5.0	–17.5[4]	0.5	10.9	13.9[4]	71.0	n.a.	4.4
Brazil	32.1	12.5	–36.2	41.5[4]	25.0[4]	–13.0	25.6	–51.0	–27.0[4]	35.0[4]

[1] Deposit rates less changes in consumer prices. [2] Lending rates (for Brazil, Bank rate) less changes in wholesale prices. [3] Preliminary. [4] Monthly rate.

Sources: See the tables on pages 44 and 45.

Features of Bolivian reform...

Bolivia's reform programme was introduced in 1985 against the background of one of the highest inflation rates ever recorded in the region. It contained all the components mentioned above, including the unification of the informal and official exchange rates, which entailed a devaluation of the latter to only a fraction of its previous value. Although the initial objective of introducing a currency board and using the US dollar as a nominal anchor was not achieved (indeed the currency depreciated by a further 25% over the next two years) the target of bringing down inflation was met within a short period and by 1987 the rate of price increase had fallen below 15%. Real output recovered more slowly. As a result of the restrictive policies and a series of large terms-of-trade losses real output did not return to its 1980 level until 1991, and per capita GDP in 1993 was still below its 1980 level. One reason for the slow recovery of output was the weakness of investment, which by the end of the 1980s had declined to less than 10% of GDP. Hence, one lesson to be drawn from Bolivia's experience is that in the absence of complementary policy measures and a change in expectations, stabilisation policies cannot restore economic growth. Slow growth also complicates the maintenance of fiscal balance because of the associated loss of tax revenue. Thus, after the initial consolidation, Bolivia's budget balance soon moved back into deficit, and last year the shortfall reached 6% of GDP.

... and a further policy lesson

Features of Mexican reform and its results

A three-pronged policy programme was adopted in *Mexico* in 1987 following record levels of inflation. During the next six years the programme underwent continuous adjustments and extensions, including the abolition of interest rate and credit controls in 1989 and legislative changes to create an independent central bank with effect from early this year. A key element of the Mexican reform and stabilisation policies has been a nominal anchor based on a pre-announced annual devaluation (or fluctuation band) against the US dollar, combined with a comprehensive incomes policy programme to stabilise expectations and break the inflation inertia entrenched in the earlier system of wage indexation. Owing to the gradualist nature of the programme, inflation has come down only slowly, though last year a single-digit rate was recorded for the first time since 1972. Real GDP has expanded at a moderate pace, but growth fell below 1% last year as tight policies

Latin America: indicators of monetary policy										
Countries	Credit to the private sector					M_2				
	1980	1985	1990	1992	1993*	1980	1985	1990	1992	1993*
	as a percentage of GDP									
Chile	43.4	70.1	50.2	51.2	44.5	25.9	41.1	40.6	39.0	37.0
Bolivia	11.6	10.1	18.9	30.3	31.5	18.8	10.0	21.6	30.4	35.0
Mexico	15.6	10.9	20.6	32.7	35.5	29.1	25.2	24.0	29.4	28.5
Argentina	25.4	17.4	15.7	15.2	15.5	21.4	15.9	10.4	13.7	16.0
Brazil	22.4	18.1	7.2	10.7	10.9	11.9	18.8	15.9	30.8	25.3

* Estimated.

Sources: See the table on page 45.

were maintained in order to hold inflation down and defend the exchange rate. Despite sluggish growth Mexico has managed to keep urban unemployment low. However, even following some strengthening since 1988 average real wages are still below their 1980 level. Moreover, poverty and underemployment are widespread in rural areas and recently this has caused some political and social unrest. The external deficit has widened to nearly 6% of GDP as a result of surging imports following extensive trade liberalisation and a real appreciation of the peso. However, the current account deficit has been more than financed by capital inflows attracted by a favourable interest rate differential as strong growth of private credit demand (see the table above) against the background of a tight monetary policy has kept real lending rates high.

Earlier stabilisation programmes in Argentina...

Argentina's reform programme was introduced in 1991 and followed several unsuccessful stabilisation measures during the 1980s, the most well-known of which was the Austral Plan of 1985. This plan, like the contemporaneous Cruzado Plan in Brazil, had attempted to break the inflation spiral by means of an exchange-rate-based nominal anchor, but it eventually broke down mainly because fiscal discipline was not maintained. Partly as a result of the failure of past stabilisation efforts, confidence in the political authorities was eroded and during the 1980s Argentina's real output fell by an average 1% a year while inflation was in triple digits.

... and a new reform plan in 1991

A principal element in the stabilisation plan of March 1991 was the "Convertibility Act", which established a monetary system with two essential features: a nominal anchor based on a fixed nominal exchange rate against the US dollar and a rule which limited the monetary base to the level of international reserves, thereby abolishing the discretionary power of the central bank to expand domestic credit. The immediate consequence of the plan was a dramatic change in expectations, leading to a sharp drop in inflation and a resumption of real output growth. During 1991–93 the fall in per capita income over the previous decade was completely reversed and by April this year the twelve-month rate of inflation had slowed to only 4¼%. Moreover, under the influence of the Convertibility Act, backed up by an extensive tax reform and privatisation receipts amounting to 2–3% of GDP, the budget of the non-financial public sector was close to balance

in 1992–93. However, as in Mexico, the use of the exchange rate as a nominal anchor caused a marked real appreciation of the currency. Together with wide-ranging trade liberalisation measures this led to a deterioration in the trade and current account balances.

The choice of nominal anchor

A feature common to virtually all stabilisation programmes in Latin America has been the reliance on a fixed nominal exchange rate rather than a monetary target as the nominal anchor. There appear to have been three principal reasons for this choice:

Reasons for adopting exchange-rate-based nominal anchors

– in order to strengthen credibility governments have found it helpful to link their currencies to that of a country with a better inflation performance, usually the United States. To further strengthen credibility, in particular during the initial phase of reform, they have generally preferred pegging to a single currency rather than to a trade-weighted currency basket, although the latter might perhaps have had a less distortive effect on trade flows;

– a fixed nominal exchange rate provides a clear signal to the general public as well as to employers and trade unions owing to the large weight of tradable goods in consumer prices;

– the relationship between the monetary aggregates and nominal income tends to become unstable in periods of disinflation because the demand for real money balances increases, thus making aggregate targets unreliable as a guide for monetary policy.

Post-stabilisation issues and the need for further reforms

Despite the immediate success of the policies implemented and the consolidation of inflation gains, most countries undertaking stabilisation and structural reforms face a number of problems which need to be tackled if further progress is to be made:

– countries relying on a fixed nominal exchange rate as the principal nominal anchor have experienced a marked real appreciation of their currencies and a worsening of the external current account balance. Thanks to large capital inflows (see Chapter VII) financing the current account deficits has generally not been a problem; in fact, inflows in excess of the deficit have in several instances made it more difficult to maintain monetary stability. Several countries also devalued their currencies prior to fixing the exchange rate, suggesting that profit margins may still be relatively comfortable. Moreover, private investment has increased in most countries, more or less offsetting the fall in public investment. Nonetheless, given the loss of market shares, in particular in domestic markets, there is a need for further restructuring of domestic industries in order to create the conditions required for maintaining the nominal anchor and, at the same time, improving the external balance;

Real currency appreciation and deteriorating trade balances

– most countries have experienced a marked rise in real interest rates as a result of restrictive monetary policies. Real lending rates have been particularly high, due in part to a widening of interest margins and in part

High real interest rates

to a more rapid deceleration in wholesale prices than in consumer prices. While the emergence of positive real deposit rates should eventually boost domestic saving, the very high real lending rates could weaken business fixed investment and hence the prospects of achieving more rapid and sustainable real growth. Last year, however, the average investment/GDP ratio for Latin America, excluding Brazil, rose to nearly 25%;

The transition from high inflation ...

– in Bolivia, hyperinflation was eliminated in less than one year with relatively low output losses because the monetary system and economic institutions had effectively ceased to function. In other countries, too, initial reductions in inflation were achieved without large declines in output growth. It has been more difficult to reduce inflation once it had fallen to the 10–15% range, possibly indicating that forces of inertia were still present and/or that inflation expectations had not declined in line with the actual rate;

... to sustained growth

– Chile has managed the transition from stabilisation to sustainable growth, while most other countries have succeeded in creating the conditions required for higher growth but have not yet experienced a period of strong and sustained expansion. Output in Bolivia has recovered only very slowly and last year Mexico recorded the lowest growth rate for seven years.

The need to reform public expenditure ...

A number of reforms are still pending. First, while most countries have reformed their tax systems, the expenditure side has not yet been restructured and reductions were made mainly with a view to eliminating the fiscal deficit. Capital spending has been cut by more than current spending and expenditure on education, health and welfare has also been reduced. Consequently, many countries face an urgent need to upgrade their infrastructure and improve their education and health care systems. Some countries may also have to raise taxes to meet pension payments or, as has recently been done in Chile, establish private pension schemes.

... relieve poverty...

Secondly, because the faster rate of growth has so far mainly benefited those in the upper income brackets, poverty has become a serious problem in the region. On average the poorest 20% of the population receives well under 5% of total income and in several cases, including Argentina and Mexico, heightened social tensions have started to affect confidence and economic activity. Moreover, despite the revival of output growth unemployment has increased, as previously "discouraged" workers have rejoined the labour force. Against this background, Chile and Mexico introduced social reforms during 1992–93 and other countries may have to take similar measures.

... and strengthen financial sectors

Thirdly, most countries need to strengthen and reform their financial sectors. The wide margin between deposit and lending rates may be a sign of high risk premia but could also indicate that competition is limited. Because money and capital markets remain underdeveloped several countries have experienced difficulties in offsetting the domestic liquidity effects of large capital inflows. Particularly those that have liberalised capital transactions before deregulating their domestic financial markets may face a risk of financial instability if capital inflows are suddenly reversed (see also Chapter VII).

Nonetheless, considering that several failed stabilisation attempts had severely impaired the authorities' credibility and that, with the exception of the fall in US interest rates, external developments (worsening terms of trade and weak export demand) have been unfavourable, the results achieved so far are impressive and should not be underestimated because of the problems and the need for further reforms. Most Latin American countries have successfully broken the earlier inflation cycle and are starting to create the conditions necessary for sustained growth.

Asian economies in transition

Economic developments and reforms in China

China's performance compared with other economies in transition

Real output in China has grown by 13% in each of the last two years, raising total GDP to almost four times its 1978 level (see the table below). This stands in sharp contrast to both eastern Europe and the CIS economies, which recorded positive, albeit rather low, growth until 1989 but have since suffered large declines in output. It is also markedly different from the situation in Mongolia, whose economic system prior to reform was very similar to those of the European countries and where developments have followed a similar pattern. This contrast between the economic performance of China and that of other former centrally planned economies raises questions about the reform and transition policies adopted. Some argue that China's unique performance is the result of more appropriate policies, while others see the main reason in the initial conditions, in particular the fact that China was still a rural, underdeveloped economy when the reform process started. Both factors have been important; in fact, it is difficult to separate the two because the reform policies adopted in China were a natural outcome of the country's economic and organisational structure, notably a high degree of decentralisation along regional lines.

Initial and structural conditions

While eastern Europe and the former Soviet Union ended the last decade with large macroeconomic imbalances that required rigorous

Economies in transition: indicators of economic development

Countries and country groups	Real GDP		Consumer prices		M_2/GDP		
	1978–89	1990–93	1978–89	1990–93	1978	1985	1992[1]
	percentage changes, annual rates				in percentages		
China	9.2	9.5	7.5	5.4	25.0	57.0	101.5
Vietnam	4.1	6.8	217.5[2]	39.0	n.a.	28.4	33.5
Mongolia	6.1	– 5.0	4.6	20.5	35.8	47.1	52.2
India	4.8	3.8	8.3	10.5	35.5	43.0	48.0
Eastern Europe	2.9	–10.0	36.9	144.7	58.5	57.6	56.2
Former Soviet Union	3.1	–10.3	1.3	316.5	n.a.	48.5	65.2[3]

[1] Preliminary. [2] 1986–89. [3] 1989.

Sources: Asian Development Bank Asian Development Outlook and Key Economic Indicators, IMF Occasional Papers and national data.

stabilisation policies as a first step, China did not suffer from such imbalances when the process of policy changes started in 1978. Pressures for reform stemmed more from a desire to improve the effectiveness of resource allocation and relieve poverty, especially in rural areas. The first set of reform policies focused on liberalising the agricultural sector, which immediately triggered a favourable output response, in sharp contrast to the decline in real income in eastern Europe.

Absence of macroeconomic imbalances and a strong supply response

The share of agriculture in output and employment in China was relatively high prior to the reforms (see the table below). A substantial share of production also originated in industry, with state-owned enterprises (SOEs) accounting for over 75% of industrial output. While the existence of "surplus labour" at low wages in agriculture was an advantage not enjoyed by eastern Europe and the CIS economies, China's performance owes much to the supply response released in non-state industry.

Unlike the highly centralised and concentrated economic structure in eastern Europe and the CIS economies, with very large production units and a high degree of regional interdependence, the structure in China was decentralised and based on relatively small production units. Moreover, the provinces had historically enjoyed considerable autonomy. This organisational and regional structure fostered the development of markets and competition between regions and has provided a suitable environment for the economic experiments that have played an important role in China's reform policies. On the other hand, it also created duplication and, owing to the lack of macroeconomic instruments of control, regional competition has periodically generated excess demand pressures.

Decentralised structure with autonomous regions

Another aspect of the country's economic structure was that each region was largely self-contained and self-sufficient and that at the start of the reform period China was a relatively closed economy. The dependence on trade with the former CMEA countries was therefore limited, which shielded China from the terms-of-trade shocks suffered by the eastern European countries and Mongolia when the CMEA was dissolved. Moreover,

The influence of foreign trade...

Economies in transition: structural and basic indicators

Countries and country groups	1985 per capita GDP	GDP, by sector[1]		Employment, by sector[1]		Investment/ GDP[2]	Exports/ GDP[2]	Destination of exports[2]		
		Agriculture	Industry	Agriculture	Industry			OECD	Asia	CMEA
	in US$	in percentages								
China	225	25.6	51.7	68.9	15.8	35.0	9.4	41.4	38.8	8.3
Vietnam	115	42.7	26.3	70.0	10.6	10.9	11.9	18.5	34.0	36.0[3]
Mongolia	665	17.4	33.3	39.7	16.0	40.2	22.4	3.2	0.3	92.0
India	285	39.6	24.4	75.0[4]	25.0[4]	23.9	5.7	48.0	9.2	21.0
Eastern Europe	3,050	14.7	54.9	24.9	34.9	30.0	29.0	28.2	3.7	67.8
Former Soviet Union	3,350	14.9	51.5	20.3	29.4	20.8	4.4	25.6	7.4	55.4

[1] 1980. [2] 1985. [3] Calculated on the basis of Rb. 2.4 = US$ 1. [4] Proportion of total population living in rural and urban areas respectively.

Sources: See the previous table.

with the gradual opening of its economy (see below), China's geographical location has enabled it to benefit from trade with the dynamic South-East Asian economies.

... and of the overseas communities

The large overseas Chinese communities have no doubt also influenced China's performance, especially since the economy was opened up to foreign trade and direct investment. The close financial and commercial relations with Hong Kong have been particularly important, not least for the southern provinces, which over the last three years have recorded average annual growth of 20%.

Main features of the reforms

Some features of the Chinese reform process

China's reform process was not based on a comprehensive plan but has been gradual, experimental and partial in nature. It has involved a number of areas and sectors and developed certain features not observed in eastern Europe. In particular, from the very beginning the reforms were helped by strong output growth which enhanced the sustainability of the process and prevented the "reform fatigue" seen in other countries. Moreover, even though the reforms were accompanied by large changes in the regional and sectoral distribution of income, the supply response meant that the distributional distortions associated with large contractions in output were avoided.

The agricultural reform...

The principal agricultural reform measures adopted in 1978 contained increases in procurement prices and a return to household farming, including the right for farmers to sell part of their output on the free market. The improved incentives elicited a strong supply response and an unexpectedly large rise in household saving which, together with the release of labour made redundant by productivity gains, provided inputs and incentives for the development of industries in rural areas.

... and the rapid growth of the non-state industrial sector

As from 1984 local authorities were given greater autonomy, in particular permission to create township and village enterprises (TVEs) and to retain a large part of their profits. Spurred by high saving and the availability of excess labour from agriculture, the TVEs expanded rapidly and, together with other rural enterprises, they accounted for about one-quarter of total industrial output by 1990 (see the table overleaf). Similar rights were later granted to larger cities, with the result that by the same year the share of the SOEs in industrial output had fallen to 55%. The rapid expansion of the non-state sector is the single most important factor in China's growth performance. One major reason for this is probably that, unlike the SOEs, the non-state enterprises have been subject to a "hard budget constraint" as they have received no subsidies and have had to finance investment out of retained profits or through bank credits, which were frequently difficult to obtain because of the extent of lending to loss-making SOEs.

Measures promoting foreign trade

Whereas in 1978 exports accounted for less than 10% of China's GDP, various steps to liberalise exports combined with rapid growth in neighbouring countries, a large real currency depreciation and export subsidies have helped to raise the share of foreign trade in GDP to about one-third.

China: industrial developments and ownership

Ownership	Share of value added		Share of employment		Output
	1979	1990	1979	1990	1981–90
	in percentages				% change, annual rate
State-owned	78.5	54.6	72.0	53.7	7.5
Non-state-owned	21.5	45.4	28.0	46.3	21.5
of which: Rural	9.0	25.3	22.5	38.6	28.0

Sources: Qian, Y. and Xu, C., Discussion Paper No. 154, Centre for Economic Performance, London School of Economics and national data.

Imports of capital goods were encouraged and measures were taken to promote foreign direct investment. As a result, China last year recorded net direct investment inflows of about $15 billion, the largest in the developing world. Over the last ten years the technology and know-how acquired through direct investment have made a substantial contribution to growth.

The "two-track" price system

A principal feature of China's reform process has been the reliance on a "two-track" price system, whereby a predetermined share of output was subject to price control or "guidance" while output above the quota could be sold at market prices. This system distorted relative prices but had the advantage that supply shortages were relatively rare. Moreover, decisions "at the margin" were made at market-determined relative prices. However, the system also provided incentives for corruption and partly discriminated against non-state enterprises.

The need for further reforms

Regional autonomy and growing income disparities

While the macroeconomic effects of China's reform policies have no doubt been substantial, certain shortcomings are evident and there is a clear need for further reforms. As is discussed below, China has yet to establish a fully effective framework for macroeconomic policies. This problem is in part related to the high degree of regional autonomy and the partial and experimental nature of the reforms which, together with differences in resource endowment, have meant that rapid growth has been accompanied by widening regional divergences. Because inter-regional labour mobility is subject to administrative and economic obstacles and the declining revenue share of the central government constrains the possibilities for equalisation payments via the budget, there is a risk of income disparities widening still further. It is officially estimated that more than one-third of the labour force in agriculture may be redundant and the growing income gap vis-à-vis urban areas has already given rise to tensions. At first sight this appears paradoxical in view of the early success of rural reforms. However, the rapid productivity gains mainly reflected a once-for-all "catching-up" process and since the mid-1980s productivity growth in agriculture has stagnated due to soil erosion, a decline in the availability of fertile arable land and the small size of family units with their limited scope for economies of scale.

Potential sources of higher inflation

The two-track price system is a potential source of inflation as controlled prices are significantly lower than market prices. Subsidies, now accounting for about one-third of central government expenditure, have also been increased in order to moderate price rises. The unusually rapid growth of the M_2/GDP ratio (see the table on page 51) might be a source of future inflation or financial disturbances. Because of the impressive rise in household saving, partly a response to the authorities' attempts to keep real deposit rates positive, and the absence of supply shortages, China does not suffer from the "monetary overhang" problem previously seen in some of the eastern European countries. On the other hand, if consumer sentiment were to change adversely, large amounts of liquidity could quickly be released from savings accounts, generating pressure on goods markets and eliminating a non-inflationary source of finance for the fiscal deficit.

Loss-making state enterprises

Despite several attempts to improve the management and operation of the SOEs, they are not yet subject to hard budget constraints. Mounting losses have raised the fiscal imbalance or have been financed by bank credits, boosting money supply growth and burdening banks with a growing stock of non-performing loans.

The absence of macroeconomic instruments

Since 1978 China has gone through several cycles, as each set of reforms triggered a strong demand expansion which soon developed into a state of overheating and was then halted by administrative controls. This high cyclical volatility can be attributed to two interrelated factors which have left the central government without adequate means of fiscal and monetary control: the policy of decentralisation, and the absence, until recently, of comprehensive fiscal and financial reform. Since 1978 both the ratio of taxes to GDP and the share of the central government in total revenue have fallen (see the table overleaf) owing to a regressive tax system and a revenue distribution scheme which has raised the share of taxes retained by the regional and local authorities. The financial sector has remained largely underdeveloped despite the creation of a two-tier banking system in 1984, the opening of two equity markets and some initial steps towards establishing a capital market. Directed credits have been common and indirect instruments for controlling monetary and credit developments are ineffective.

Some recent policy measures...

Late last year steps were taken towards giving the central bank greater independence, creating commercial banks and transferring policy loans to the budget. The official and swap market exchange rates were unified early this year, entailing a devaluation of the former by about one-third against the US dollar. Decisions have also been taken to reform the fiscal system starting this year, including the introduction of a uniform 33% corporate tax, a value added tax and a capital gains tax as well as a restructuring of the tax-sharing system in order to increase the share of the central government. Finally, a set of measures is aimed at reviving the ailing state enterprise sector and making management more independent and accountable. One hundred of the largest enterprises will be transformed into joint stock companies and a state-financed social safety net is planned to take over the social services currently provided by the SOEs.

China: development of taxes and extrabudgetary revenue				
Items	1979	1982	1987	1990
	as a percentage of GNP			
Taxes	26.7	20.0	19.5	16.6
of which: Central government	n.a.	10.3	9.4	7.5
Extrabudgetary revenue	11.3	15.5	18.0	15.3
of which: Central government	n.a.	5.2	7.3	6.1
Total	38.0	35.5	37.5	31.9
of which: Central government	n.a.	15.5	16.7	13.6

Source: IMF Occasional Paper No.107.

It is still too early to say whether the planned reforms can be effectively implemented during the current cycle. Although capital spending contributed significantly to the high real growth recorded last year it was excessive in some areas, indicating a need to tighten credit policies. The rapid growth was accompanied by a marked acceleration of inflation even though excess demand pressures were in part absorbed by a steep rise in imports. However, the authorities face the dilemma that unemployment and underemployment are also rising. This will make it harder to impose stricter accountability on the SOEs and the budget for this year in fact foresees further tax relief. The most difficult task, however, is likely to be that of counterbalancing one of the effects of earlier policies of decentralisation and increasing the revenue share of the central government.

... and their effects on the current cycle

Economic developments and reforms in other Asian countries

During the last ten years economic reforms have also been adopted in other Asian countries making the transition towards a market economy, including Vietnam, Cambodia, Laos and Mongolia. Results have differed, with countries whose initial and structural conditions were similar to those in China standing in marked contrast to Mongolia, whose system was closer to that of the eastern European countries. In Vietnam growth has averaged over 6% annually since the start of the reforms, while Mongolia has suffered severe output losses following the removal of price controls and the abandonment of the previous central planning system.

The experience of Vietnam and Mongolia also differs in other respects. Unlike China in 1978, both countries faced macroeconomic imbalances when reforms were launched in 1986 and 1989 respectively. Mongolia tightened policies to counter the effects of price liberalisation and saw a sharp contraction in output as the impact of restrictive policies was compounded by deteriorating terms of trade and the loss of export markets following the dissolution of the CMEA trading system. Vietnam, by contrast, postponed stabilisation and inflation accelerated to a monthly rate of over 30%. This posed a serious threat to financial stability and further growth but after a price and currency reform and a severe tightening of fiscal and monetary policy in 1989 inflation was brought under control. Moreover, helped by structural conditions very similar to those in China, a positive supply

Reform policies in Vietnam and Mongolia

response in the agricultural sector, rising demand for oil and a relatively small trade share with the CMEA countries, Vietnam avoided any decline in output. On the other hand, attempts to open up foreign trade and attract foreign direct investment have so far yielded limited benefits on account of the US embargo in effect until early this year and the country's unsettled arrears with multilateral lending institutions. Another handicap has been the underdeveloped infrastructure and an investment/GDP ratio of barely 10%.

Market-oriented reforms in India...

India, with large agricultural and state-owned enterprise sectors and a per capita income similar to that of China, has also initiated significant market-oriented reforms. Following a foreign exchange crisis in 1991 action was taken to open the economy to foreign competition by liberalising foreign trade, eliminating the dual exchange rate system and deregulating the private sector. The initial reforms also included measures to reduce the budget deficit and the first steps towards privatising state-owned enterprises.

... with positive effects...

During the last two years output growth in India has averaged 4% and the external current account has improved substantially following a real currency depreciation of 25–30% and a marked rise in export earnings. Foreign exchange reserves have also been strengthened as a result of relatively large capital inflows reflecting net portfolio investment as well as recourse by Indian enterprises to international bond financing. Nevertheless, recent developments in the budget will need to be addressed if problems are to be avoided in the future. Following an initial consolidation the budget deficit widened last year to over 7% of GDP, compared with a target of less than 5%. Most of the deficit was financed by the banking system, which responded to stricter capital adequacy requirements by increasing government bond holdings while reducing credit to the private sector. Another area to which attention will have to be directed is the industrial sector where, in contrast to agriculture, output has stagnated, hampered by an inflexible labour market and inefficient state-owned enterprises.

... but also a need for further attention

Eastern Europe and the Commonwealth of Independent States

There was a striking contrast in economic performance last year between eastern European countries and the members of the Commonwealth of Independent States (CIS), which provided a clear illustration that consistent reform efforts and resolute stabilisation policies are a prerequisite for the resumption of growth. In eastern Europe, the rapid output decline of previous years slowed down markedly and in several countries the first signs of growth appeared in the second half of the year – even in Estonia, which had started reforms under extremely difficult conditions. Other countries in the region seem to have followed the lead of those more advanced in the reform process. After expansionary policies had led to rapidly accelerating inflation, Romania embarked on a stabilisation programme in early 1994. Measures to stabilise the economy have also been taken by Croatia and the FYR of Macedonia.

Output stabilises in eastern Europe...

In stark contrast, the CIS states again did not address basic economic problems. They continued to issue roubles in order to buy goods from each other, leading to rising trade deficits with Russia and rapid inflation. Matters came to a head in July, when the currency reform in Russia replaced the Soviet rouble with a Russian one, effectively putting an end to the rouble zone and forcing the other states to introduce their own currencies. While this might have provided them with an opportunity to pursue individual stabilisation policies, they proved unable to bring their budget deficits and credit expansion under control. Inflation in the region remained in the range of 20% a month and hyperinflation took hold in Ukraine. The output slump continued unabated.

... but continued contraction in the CIS

Amid welcome signs of a resumption of growth in eastern Europe, two problems came to the fore to which attention must be given if the growth process is to be placed on a sustainable basis. First, investment remained low in most countries. Secondly, current account balances deteriorated as consumption rose and exports to western countries declined. This underscores the relevance of the eastern European requests for "trade, not aid" in the form of better access to western markets, in particular in so-called "sensitive" areas where restrictions remain pervasive. Without scope to expand exports, growth will remain circumscribed by external financing constraints. But the current account deterioration also highlights the need to increase domestic saving through reduced budget deficits and improved incentives to save.

Developments and policies in eastern Europe

Determined reform efforts yield results...

After several years of declining output, production in eastern Europe stabilised in 1993. Positive growth rates for the year as a whole were recorded by Albania, Croatia, Estonia, Poland, Romania and Slovenia (see the table opposite). Signs of recovery also emerged in the Czech Republic, Hungary and Latvia in the second half of the year. All these countries, with the exception of Romania, have pursued determined reform and stabilisation policies. Three common elements can be discerned. First, the growth in credit to state enterprises has been brought under control. Secondly, incomes policies have been applied to ensure that rises in earnings are consistent with the objectives of the stabilisation programme. Thirdly, fiscal deficits have been contained and, in the stabilisation programmes in the Baltic states and Croatia, have been reduced substantially or even eliminated. Experience in Hungary and Poland, however, points to the difficulty of containing budget deficits over a longer period.

... even under difficult circumstances

Reforms began under very difficult external circumstances in the Baltic states. Exports to the other former Soviet republics accounted for about two-thirds of output, making these countries particularly vulnerable to the collapse of trade in the region. Heavy economic dependence on Russia took its toll when huge energy price rises led to a terms-of-trade loss well in excess of 10% of income in 1992. This was an important factor in the fall in GDP of one-third and an even sharper decline in industrial production (see the graph on page 60). By the autumn of 1992 the Baltic states

Developments in real GDP[1]					
Countries	1989	1990	1991	1992	1993[2]
	percentage changes				
Albania	9.8	–10.0	–27.7	– 9.7	11.0
Bulgaria	–1.9	– 9.1	–11.7	– 5.4	– 4.2
Czech Republic	4.5	– 1.2	–14.2	– 6.6	– 0.3
Hungary	0.7	– 3.5	–11.9	– 4.5	– 1.0
Poland	0.2	–11.6	– 7.6	2.6	4.0
Romania	–5.8	– 7.4	–15.1	–13.6	1.0
Slovak Republic	1.2	– 2.5	–11.2	– 6.1	– 4.1
Croatia	–4.4	– 9.3	–28.7	–23.6	1.4
FYR Macedonia	1.9	– 9.5	–10.7	–13.4	–15.2
Slovenia	–1.8	– 4.7	– 9.3	– 6.0	1.0
Yugoslavia[3]	1.9	– 8.4	–11.0	–27.0	–30.0
Average[4]	–0.2	– 7.6	–12.5	– 8.6	– 3.0
Former Soviet Union[4]	2.5	– 2.3	–13.0	–19.1	–12.2
Estonia	*3.3*	*– 4.0*	*–11.3*	*–19.3*	*3.0*
Latvia	*6.8*	*2.9*	*– 8.3*	*–40.0*	*– 3.5*
Lithuania	*1.5*	*– 5.0*	*–13.1*	*–35.2*	*–16.2*
Russia	*2.0*	*– 2.0*	*–15.0*	*–19.0*	*–12.0*
Ukraine	*4.1*	*– 3.4*	*–11.9*	*–17.0*	*–14.0*
Overall average[4]	1.6	– 4.1	–12.8	–15.5	– 9.1

[1] For the FYR of Macedonia, gross material product (GMP); for Croatia, GMP prior to 1993; for Yugoslavia, GMP prior to 1992; for most states of the former Soviet Union, net material product (NMP) prior to 1991 (for Russia, NMP prior to 1990). [2] Partly estimated. [3] Serbia and Montenegro. [4] Weighted average, based on 1990–91 GDP and exchange rates.

Sources: National data, IMF and EBRD.

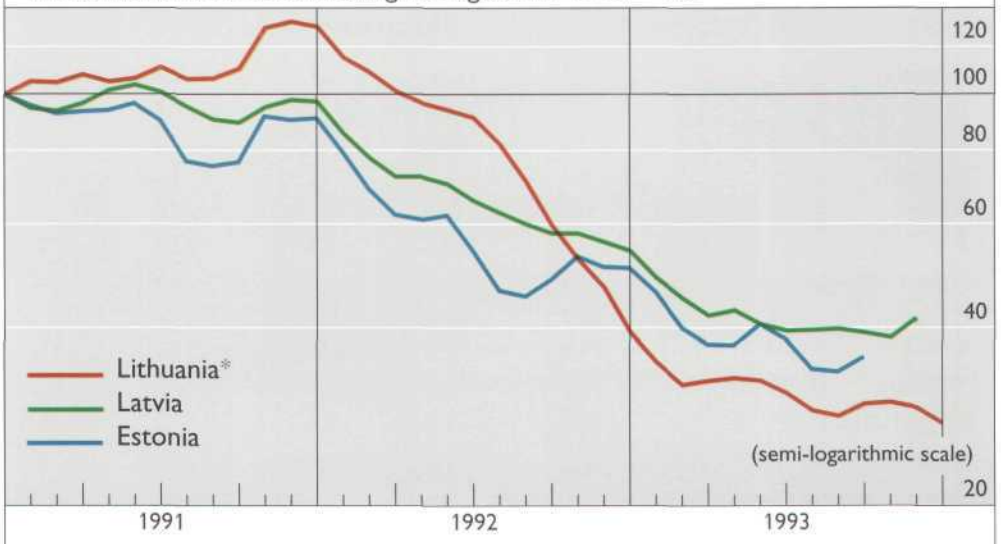
had introduced their own currencies, preparing the ground for the pursuit of independent macroeconomic policies. They managed to broadly balance their budgets in both 1992 and 1993, despite the large drop in output. A tight monetary policy stance brought inflation down to annual rates in the 35–45% range in Estonia and Latvia. Monetary control in Estonia was achieved through a currency board arrangement, tying the expansion of the money supply to the inflow of foreign exchange. Latvia pursued a tight monetary policy and kept its nominal exchange rate broadly unchanged. Although Lithuania, too, managed to balance its budget, monetary policy was less tight and inflation remained higher. Industrial production stabilised last year and Estonia actually recorded positive output growth.

A number of other countries in the region seem to have concluded that without macroeconomic stabilisation sustained growth is unlikely to be achieved. These countries include Romania, Croatia and the FYR of Macedonia. Romania had pursued an expansionary monetary policy during the first three quarters of 1993 which was reflected in large negative real interest rates, leading to a further acceleration of inflation. The authorities recognised that this policy stance was unsustainable, tightened monetary policy and agreed with the IMF on a stabilisation programme in May 1994.

The adjustment programme adopted in Croatia has demonstrated that high inflation can be reduced quickly through rigorous stabilisation policies

Industrial production in the Baltic states

Three-month uncentred moving averages, end-1990 = 100



* Manufacturing.

Source: National data.

without affecting output. Monthly price rises there had accelerated to 39% by October last year, when the Government embarked on a stabilisation programme which relied on tight fiscal and monetary policies as well as restrictions on wage increases. Inflation declined almost immediately and prices actually fell in the first quarter of 1994.

The pattern of growth in 1993 came as a surprise to many. The first signs of a bottoming-out of the decline in output had been observed in the second half of 1992 as a result of a rapid increase in exports to OECD countries. But expectations of export-led growth were disappointed when the expansion of exports faltered in the first half of 1993. Instead, the resumption of growth was driven by rising domestic demand, in particular private consumption. In the Czech Republic, Hungary and Slovenia rising real wages, due to a combination of rapid private sector growth, low unemployment (Czech Republic) and weak corporate governance (Slovenia) were the main cause. Elsewhere higher consumption does not appear to have been attributable to an increase in recorded earnings, suggesting substantial unreported income.

Growth is led by consumption...

The stabilisation of output and rapid private sector growth were reflected in a moderation of the increase in unemployment, as shown in the graph opposite. The low unemployment rate of only 3½% in the Czech Republic, compared with rates of 10–15% in other countries, can be largely explained by three factors. First, the participation rate in the Czech Republic had been exceptionally high at the start of the reform process, but by 1992 it had declined substantially. Secondly, booming tourism and rapid growth of the services sector absorbed a large number of workers. Thirdly, many workers have been employed across the border in Germany. Since 1990 industrial employment has declined by one-third and

... while the increase in unemployment moderates ...

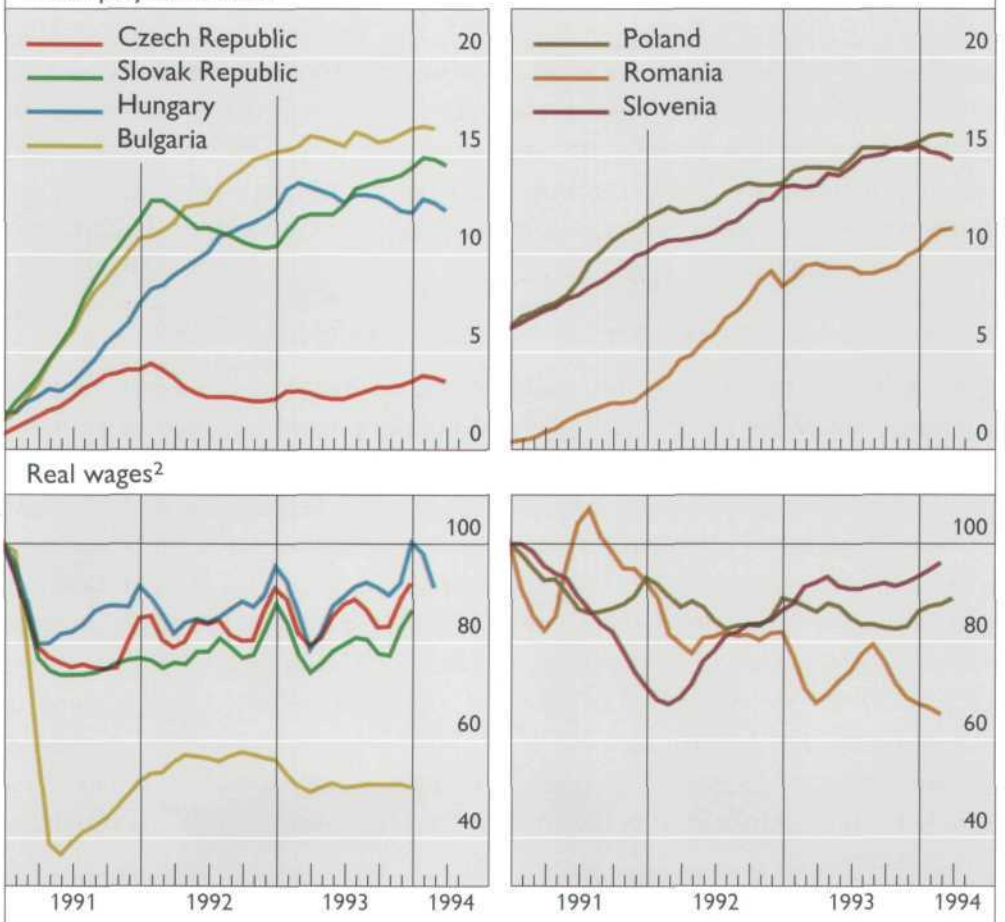
agricultural employment by two-fifths, adjustments comparable to or even exceeding those in other countries in the region. Moreover, the average duration of unemployment is short and turnover of the unemployed high, indicating rapid adjustment.

... and inflation declines

Inflation declined in most countries. The annual inflation rates shown in the table overleaf do not, however, adequately reflect underlying inflation on account of one-time price jumps related to the introduction or raising of value added taxes. In several countries inflation seems to have stabilised in the 20–40% range, although lower rates of price increase were recorded in the Czech and Slovak republics and Hungary and much higher ones in Bulgaria, Romania and Lithuania.

Even though recent experience has demonstrated that effective stabilisation can bring inflation under control and lay the foundations for a resumption of output growth, this is clearly only the first step. Corporate governance must be strengthened through privatisation, commercial banking skills have to be developed and the legal system has to be improved, to mention just a few of the tasks lying ahead. Inevitably, this process will

Unemployment rates and real wages



[1] In percentages. [2] Three-month uncentred moving averages of nominal earnings deflated by consumer prices, end-1990 = 100.

Source: National data.

Consumer price inflation						
Countries	1989	1990	1991	1992	1993	1994 QI
	year-on-year percentage changes, based on period averages					
Albania	0.0	0.0	35.5	226	85.2	22.9
Bulgaria	5.6	23.8	339	91.3	72.8	59.8
Czech Republic	1.4	9.7	56.7	11.1	20.8	10.0
Hungary	17.0	28.9	35.0	23.0	22.5	16.8
Poland	251	586	70.3	43.0	35.3	30.8
Romania	0.8	5.1	166	210	256	265
Slovak Republic	1.2	10.4	61.2	10.0	23.2	15.5
Croatia	1,200	610	123	666	1,518	629
FYR Macedonia	2,763[1]	608	115	1,691	335	
Slovenia	1,306	550	118	201	32.3	19.9
Yugoslavia[2]	1,265	580	122	8,926	116,540[3]	
Estonia	4.7	17.2	211	1,069	89.8	44.1
Latvia	4.7	10.5	124	951	110	36.2
Lithuania	2.1	8.4	225	1,020	410	148
Russia	2.4	5.6	160	1,534	912	737
Ukraine	4.7	10.5	172	926	3,850	4,751

[1] December to December. [2] Serbia and Montenegro. [3] Billion per cent.
Sources: National data, IMF and EBRD.

take time. Meanwhile, demands on governments to grant subsidies and to protect enterprises from import competition are increasing, and wages in the state sector are tending to rise regardless of productivity. These and other pressures are mounting but will have to be resisted if the short-term stabilisation gains are to be consolidated and economic transformation is to succeed.

But pressures are mounting

Developments and policies in the Commonwealth of Independent States

1993 saw the collapse of the rouble zone as Russia introduced its own currency, finally ending the multiple and uncoordinated issuance of roubles. Over a period stretching back at least to 1991, the former Soviet republics had had an incentive to expand credit. The faster a republic expanded credit compared with the others the higher were its gains in the form of imports from other republics – but only at the cost of exporting excess demand and stoking inflation in the rest of the rouble zone. In order to control trade credits to the other republics, the Russian Government had therefore, in July 1992, obliged them to channel trade payments through clearing accounts at the Russian central bank. This first step did not, however, eliminate the inflationary bias since the Russian central bank continued to supply rouble notes and to grant interest-free "technical credits" to republics with trade deficits.

The rouble zone disintegrates...

The situation changed dramatically last year, when the Soviet roubles circulating in Russia were replaced with Russian roubles and technical credits were replaced by interest-bearing government loans. These moves presented the other republics with a stark choice between introducing their own

currencies and negotiating a new agreement with Russia in order to remain in the new rouble zone.

Initially, most of the republics chose the latter option, but they subsequently realised that the price was high. Russia demanded full control over credit growth in the other CIS states, a say in their public finances and the surrender of half of their foreign exchange and gold reserves to the Russian central bank as a guarantee that the agreements would be honoured. The ensuing discussions focused on the control of fiscal deficits and monetary expansion and the perceived need for some convergence of economic policies.

In the end, the other republics took the view that yielding economic sovereignty to a foreign state over whose decision-making they would have little influence was undesirable and all but Belarus and Tajikistan decided not to join the new rouble zone. This decision was reinforced by the fact that Russia raised the prices of its energy exports towards world market levels in the second half of 1993, thereby eliminating the attraction of continuing to benefit from hidden subsidies in the future. Even the two states which had initially opted to join the new rouble zone may not become permanent members. Russia started to print special roubles for Tajikistan in 1994, while in Belarus opposition to the implementation of the monetary agreement with Russia has been growing. The dates of introduction and the status of the currencies of the former Soviet republics are summarised in the table overleaf.

... and inflation remains high

Even though the introduction of new currencies removed a disincentive to the implementation of stabilisation policies, none of the republics successfully addressed the problem of macroeconomic imbalance. Budget deficits remained large and credit to state enterprises at negative real interest rates continued. Monthly inflation of the order of 20% or more was recorded throughout the region.

In Russia, macroeconomic stability again proved elusive. Directed credits at low interest rates and subsidies to loss-making firms continued on a large scale, weakening the incentive to adjust and fuelling inflation. An attempt at financial stabilisation was made in the second half of the year, supported by an IMF loan. The central bank raised its refinancing rate to almost 600% per annum by the end of the year, leading to high positive real interest rates. Moreover, sequestration of expenditure by the Ministry of Finance succeeded in limiting the fiscal deficit to 8% of GDP. The initial success of these measures was reflected in a decline in inflation to a monthly rate of about 13% by December and in a relatively stable rouble exchange rate. Following elections, concerns emerged that the new Government might attach less importance to stabilisation. These concerns were reflected in a sharp depreciation of the rouble from Rb. 1,231 to the US dollar in November to Rb. 1,830 in April this year, and a decline of secondary market prices for Russia's external debt by almost half. Contrary to widely held expectations, monetary and fiscal policies remained relatively tight during the first quarter of this year. After protracted negotiations, a stabilisation programme was agreed with the IMF in April which requires

Tighter policies in Russia ...

the maintenance of tight monetary policies, a reduction of the budget deficit to 6½% of GDP and a decline in inflation to 7% per month by the end of the year. However, additional efforts will be required if the policy targets under the programme are to be met.

Arresting the output slump has been the major policy goal of the Ukrainian authorities since November 1992, when Ukraine left the rouble zone. The main policy instruments used to this end have been the placing of state orders (as previously under central planning), price and exchange controls and the liberal injection of credit into state-owned agricultural and industrial enterprises. The results of these policies and the ensuing huge budget deficits have been disastrous. Hyperinflation gripped the country while output declined by 14% in 1992 and by a similar amount in 1993. The degree of financial instability is most clearly illustrated by the development of the karbovanets/rouble exchange rate implicit in the graph opposite. From par at its introduction in November 1992, the Ukrainian currency depreciated to about 6 to the rouble a year later, when the currency exchange in Kiev was closed by the authorities. In parallel markets the price of the rouble was up to four times higher.

... and hyperinflation in Ukraine

The failure of the CIS states to address the fundamental problems of internal macroeconomic stability and international trade and payments, and the ensuing collapse of trade, undoubtedly contributed to the decline in output, in the same way as the earlier breakdown of the CMEA trading system had reduced output in eastern Europe. The reduction of Russian subsidies and large terms-of-trade losses due to the increase in prices for

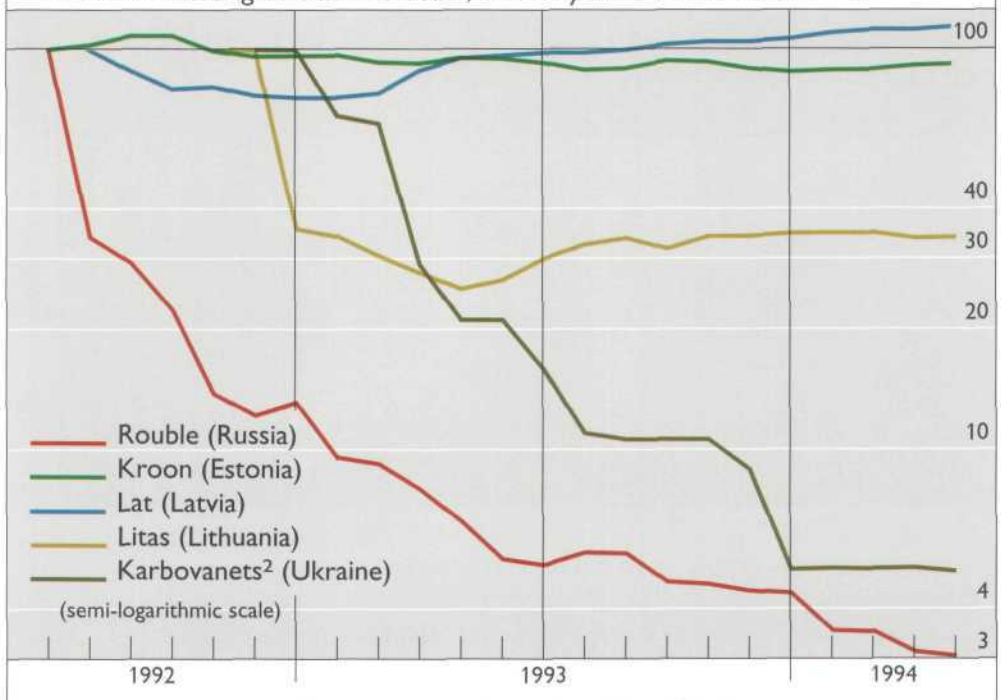
Currency regimes in the former Soviet Union

Countries	Currency	Introduction date	Present currency regime	Remarks
Estonia	Kroon	June 1992	Pegged to the DM	Currency board
Latvia	Lat	June 1993	Floating	Temporary currency (Latvian rouble), July 1992
Lithuania	Litas	July 1993	Pegged to the US dollar	Temporary currency (talonas), Oct. 1992; currency board, April 1994
Belarus	Belarussian rouble	Nov. 1992	Floating	Monetary agreement with Russia
Ukraine	Karbovanets	Nov. 1992	Multiple exchange rates	
Kirgizstan	Som	May 1993	Floating	
Georgia	Coupon	April 1993	Floating	Permanent currency under discussion
Russia	Russian rouble	July 1993	Floating	
Azerbaijan	Manat	Aug. 1993	Floating	Manat sole legal tender since Jan. 1994
Turkmenistan	Manat	Nov. 1993	Floating	Rate set in the interbank market
Kazakhstan	Tenge	Nov. 1993	Floating	Rate set at weekly auctions
Uzbekistan	Sum coupon	Nov. 1993	Floating	National currency planned for the second half of 1994
Armenia	Dram	Nov. 1993	Floating	Dram sole legal tender since March 1994
Moldova	Leu	Nov. 1993	Floating	Leu sole legal tender
Tajikistan	Russian rouble	Jan. 1994	Floating	Monetary agreement with Russia; Tajik rouble to be introduced

Sources: IMF and national data.

Exchange rate developments

End-month rates against the US dollar, currency introduction date[1] = 100



[1] See the table on page 64; for the Russian rouble, end-June 1992. [2] Official rate.

Sources: OECD and Financial Times.

supplies of Russian oil and gas will further depress income. The combined impact has been estimated at 15% of GDP. To cite only one example, the payment of world market prices for energy imports could swallow up the entire foreign currency earnings of Ukraine. Income losses are inevitable, but what can be avoided is the deleterious influence of the lack of effective stabilisation and the uncertainty created by inconsistency in the implementation of reforms. The sharp contrast with the experience of the Baltic states indicates that consistent reform efforts can yield positive results even in very difficult circumstances.

Constraints on growth in eastern Europe

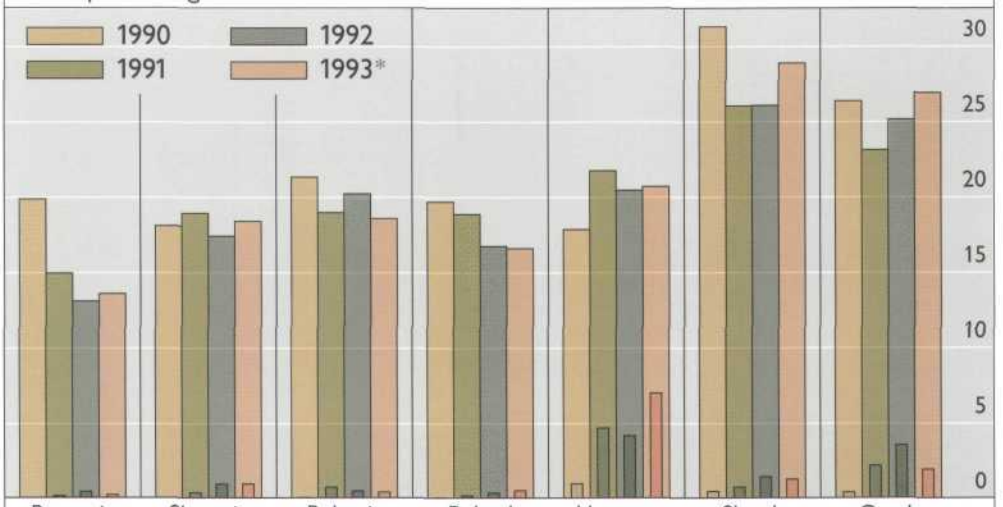
Putting growth on a durable basis remains a challenge

Despite the stabilisation of output in eastern Europe and signs of recovery in some countries, achieving sustainable growth remains a challenge. Two factors in particular require attention if growth is to be placed on a durable basis. First, fixed investment has to rise substantially, both in quality and in quantity. Secondly, widening current account deficits in some countries are seen as jeopardising creditworthiness and incompatible with available external financing.

The adequacy of present investment levels is increasingly being questioned. Given the poor condition of a large part of the existing capital stock and the recognised need to improve the infrastructure, present investment rates – except in the Czech and Slovak republics – appear insufficient to support sustained growth (see the graph overleaf), although the

Gross fixed capital formation and net foreign direct investment

As a percentage of GDP



Note: The narrow bars represent net foreign direct investment.

* Partly estimated.

Sources: IMF, Vienna Institute for Comparative Economic Studies and national data.

investment needs could be partly met through better maintenance and rehabilitation.

Why has investment remained weak? In addition to the general climate of economic and political uncertainty, four factors seem to have played a role in most countries. First, capital income is taxed heavily in eastern Europe. Secondly, government financing needs have absorbed much of household saving. Thirdly, bank lending to industry has declined sharply. Finally, foreign investment and financing remain of limited importance.

Investment must be supported through reduced taxation of capital income, ...

Effective marginal tax rates on capital income may be of the order of 80% or even above. These high rates stem from the interaction between high inflation and a tax system designed for an economy with more or less stable prices as nominal interest earnings and capital gains are taxed at the same rate as real earnings and gains. To the extent that the tax authorities have been able to limit the erosion of the real value of tax revenues due to inflation by requiring monthly payments, normal statutory rates of around 40% are transformed into high effective rates on real income, depressing retained earnings and expected returns, both key determinants of investment. High tax rates are to some degree inevitable in eastern Europe, owing to the elevated level of social protection in relation to GDP. Nonetheless, the negative consequences can be alleviated by reducing marginal rates and broadening the tax base, a process that is under way in most countries in the region.

... lower budget deficits...

Rising government financing needs have absorbed a sizable proportion of household saving. Large fiscal deficits have emerged everywhere except in the Baltic states, the Czech Republic and Slovenia, as can be seen from the table opposite. At the same time, the composition of state

General government budget balances					
Countries	1989	1990	1991	1992	1993
	as a percentage of GDP				
Albania	–5.5	– 3.7	–43.7	–21.8	–15.5
Bulgaria	–3.7	– 8.5	– 4.1	– 6.2	– 9.1
Including foreign debt interest arrears	*–1.4*	*–12.7*	*–14.7*	*–14.0*	*–13.5*
Czech Republic*		– 0.2	– 2.1	– 0.2	0.1
Hungary	–1.3	0.4	– 4.6	– 7.5	– 5.8
Poland	–7.4	3.5	– 6.2	– 6.8	– 4.1
Romania	8.4	1.0	0.6	– 5.5	– 4.6
Slovak Republic*	–0.6	– 0.2	– 3.8	– 3.1	– 6.9
Slovenia	0.3	– 0.3	2.6	0.3	0.5

* Central government.

Sources: National data, IMF and EBRD.

expenditure has also changed. Transfer payments have increased at the expense of capital spending, contributing directly to the sluggishness of investment demand.

... and bank recapitalisation

Bank lending to industry has declined dramatically in the last three years. Initially banks had lent to enterprises in distress because they were locked into a mutual dependency through non-performing loans. Thus, much household saving was channelled into loss-making enterprises. More recently, however, measures have been taken to break the inefficient link between banks and enterprises in the Czech Republic, Hungary, Poland, the Slovak Republic, Slovenia and also Bulgaria. Banks in these countries have been recapitalised, albeit to varying degrees, corporate governance has been strengthened through the establishment of supervisory boards and through privatisation, and bank regulation and supervision have been improved. Stricter accounting standards have brought the problem of non-performing loans into sharper focus and provisioning has been made mandatory, while new rules require banks gradually to conform to the Basle guidelines on capital adequacy. As a result of these measures, bank lending to enterprises has actually contracted in real terms (see the table overleaf).

In times of severe economic shocks and widespread uncertainty banks are likely to increase credit rationing. In the case of many eastern European banks, rationing behaviour may have been aggravated by the shortage of appraisal and monitoring skills, in particular as far as longer-term loans are concerned. Although economic growth will reduce uncertainty, bank lending is unlikely to pick up soon. The development of commercial banking skills will take time, as will the building-up of information on prospective borrowers. Lending to small and newly founded enterprises will be subject to even tighter limits. The high fixed costs of making such loans cannot be recovered through higher interest rates because this would increase the probability of default.

In Bulgaria and Romania continuing high inflation has eroded the real value of savings deposits and, together with households' reduced willingness

Real bank credit to non-financial enterprises[1]			
Countries	1991	1992	1993[2]
	percentage changes, end of period		
Bulgaria[3]	−51.6	−30.2	−10.1
Czech Republic	−19.7	2.9	0.3
Hungary	−11.0	−18.2	−14.3
Poland	− 2.9	−11.2	− 3.9
Romania[3]	−24.4	−55.2	−28.1
Slovak Republic	n.a.	4.9	−10.3
Slovenia	n.a.	−35.0	8.9

[1] Bank credit deflated by consumer prices. [2] Partly estimated. [3] Non-government sector.
Source: National data.

to hold financial assets with the domestic banking system, has led to a contraction of the real broad money supply. As a result, real credit to enterprises has declined further.

The potential contribution of foreign financing, and foreign direct investment in particular, to domestic investment was perhaps overestimated initially. In the last few years, foreign direct investment has played an important role only in Hungary, which recorded inflows of 7% of GDP in 1993, and in the Czech Republic. Both countries have also attracted increasing amounts of portfolio investment. Flows to the other countries in the region have been small, as can be seen from the graph on page 66. Arrears on external commercial bank debt have been an additional obstacle in Bulgaria and Poland, depressing the inflow of new private capital until the end of last year. Following years of negotiations, Bulgaria signed an agreement in principle with creditor banks in November last year, although the precise conditions have yet to be worked out. After an IMF agreement had paved the way for a 50% reduction in its official debt, Poland was granted a broadly similar reduction in March 1994 in its commercial bank debt of $13 billion, thereby greatly moderating the country's external debt problems and eliminating a major impediment to increased capital inflows.

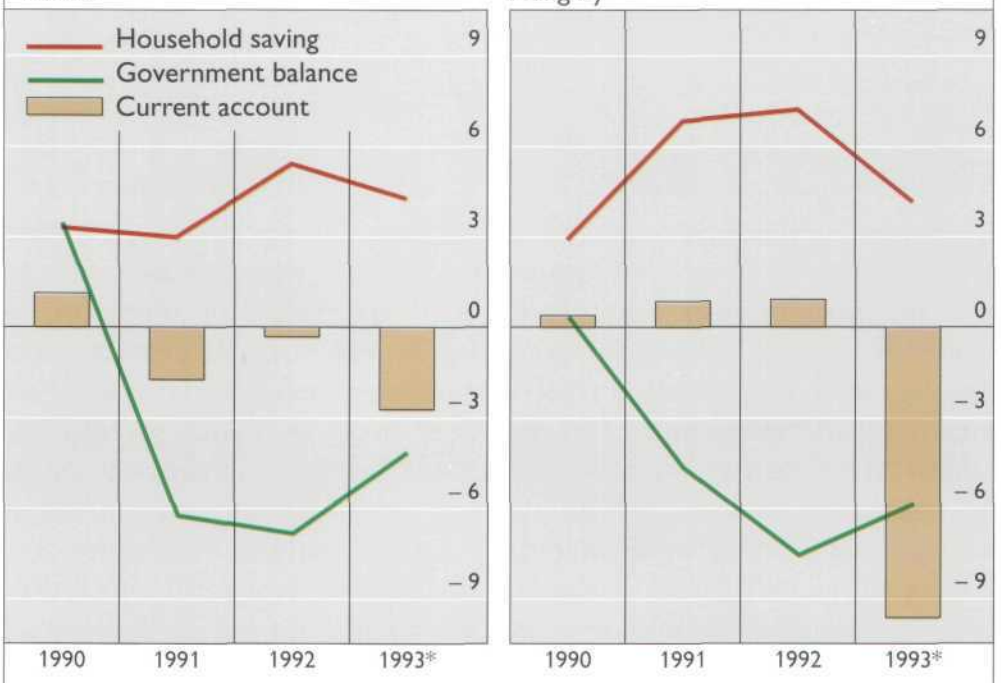
Deteriorating current accounts...

The general deterioration in current account balances in eastern Europe has been a further source of concern. In Hungary, in particular, the current account deficit, at 10% of GDP, has reached such proportions that a further widening could undermine investor confidence and could be difficult to finance. A more moderate deficit of 3% emerged in Poland. Both external and domestic factors contributed to these developments. On the external side, sluggish growth among major trading partners dampened foreign demand, but exports were also constrained by non-tariff barriers, which affect about half of eastern European exports.

On the domestic side, the reduction in government deficits was not enough to offset the effects of declining household saving and rising investment including inventories (see the graph opposite). Growing private demand, fuelled in part by a buoyant private sector, drew in imports and led to greater domestic consumption of exportable goods. Real currency

Internal and external balances in Poland and Hungary

As a percentage of GDP



* Partly estimated.

Source: National data.

appreciation and the consequent loss of competitiveness also contributed to the worsening of the trade balance, as described in more detail in Chapter IV.

... highlight the need to boost saving

The need to simultaneously raise the investment ratio and contain current account deficits suggests that a return to sustainable growth must be underpinned by policies to boost domestic saving. Avoiding confiscatory taxation of enterprise profits is one way to encourage private saving, and ensuring adequate returns on financial instruments is another. But the most effective policy contribution may consist in reducing budget deficits. The two countries which seem to be avoiding balance-of-payments constraints despite an incipient recovery and have seen credit to enterprises expand in real terms, namely the Czech Republic and Slovenia, have both maintained broadly balanced budgets.

IV. International trade

Highlights

The increasing globalisation of international trade was again much in evidence last year. Nowhere was this clearer than in Asia, where many countries that had played only a marginal role in world trade little more than a decade ago (often relying on agricultural or raw material exports) have become major and diversified traders. In particular, the integration of China into the world economy has proceeded at almost breakneck speed. India, whose involvement in international trade has lagged in the past, has implemented radical measures of liberalisation. Indeed the adoption of liberal trading policies in so much of the non-OECD world is little short of a revolution. In the course of the Uruguay Round negotiations more than sixty developing and transition economies notified the GATT of unilateral liberalisation measures. The Uruguay Round agreement that finally emerged this year is perhaps the most comprehensive accord ever and, provided it is implemented effectively, has the potential for substantially reducing government interference in trade.

International trade developments last year were dominated by the widening divergence in output growth not only among the major industrial countries but also between the industrial and the developing world. The increasing strength of the US recovery and the deepening recession in Japan led to a renewed rise in current account imbalances. By early 1993, the real effective value of the yen had reached new heights, and it continued to appreciate for much of the year. This is beginning to have a major impact on Japan's underlying surplus that is for the moment obscured by the deep recession and by "J-curve" effects.

While recovery got under way in the United Kingdom, continued weakness in continental Europe depressed trade last year. Export performance differed widely across Europe as exports of those countries whose currencies had depreciated significantly against the Deutsche Mark rose strongly while other countries' exports stagnated. Japanese exports have fallen, while exports of the rest of Asia – helped by depreciation against the yen – have continued to boom. Intra-Asian foreign direct investment has been a major vehicle for sustaining growth as enterprises in higher-income countries have invested heavily in countries where wages are much lower. Foreign direct investment and a competitive exchange rate have also stimulated Chinese exports, in the process integrating China more closely with the dynamic South-East Asian economy.

Heavy foreign investment in Latin America has sustained real exchange rates at a high level, contributing to large current account deficits.

A marked widening in the current account deficits of most eastern European countries has led to increased emphasis on maintaining competitiveness by adjusting the nominal exchange rate to compensate for relatively high inflation. A number of African countries sought to improve competitiveness through depreciation: the large devaluation of the CFA franc was the most notable case.

With the rouble zone breaking up, the widespread adoption of separate currencies has given Russia and the other countries responsibility for their own monetary policy and raises the possibility that a start can be made on putting trade within the Commonwealth of Independent States on a sound economic basis.

World trade

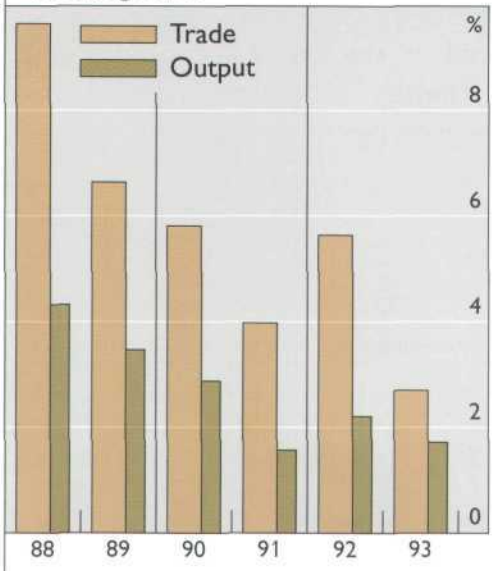
Developments

Weakness in continental Europe contrasts with buoyancy elsewhere

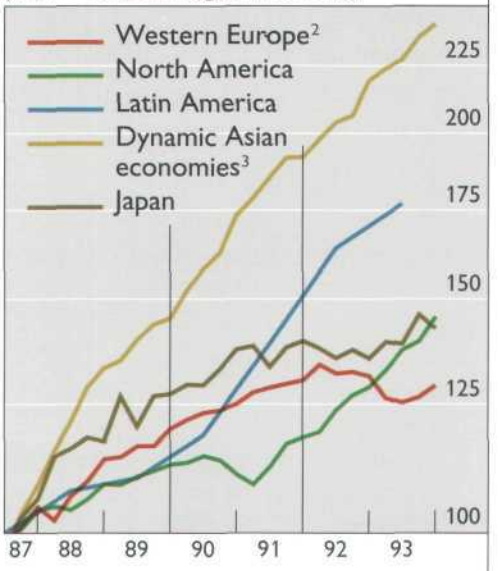
The rate of expansion in the volume of world trade last year was held back by a pronounced (if statistically overstated – see page 81) decline in continental European imports (see the graph below). Elsewhere in the industrial world, imports expanded strongly, boosted in North America and the United Kingdom by economic recovery and in Japan by the appreciation of the yen. The trade of developing countries also continued to grow strongly; as dependence on industrial country markets has lessened, trade has been increasingly driven by buoyant demand in other developing country markets, trade liberalisation and increased intra-regional investment. Trade

Indicators of world trade

World trade and output volume growth[1]



Import volumes (1987 = 100; semi-logarithmic scale)



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

in the Asian developing region has been particularly dynamic, with the Chinese economic boom providing a major stimulus. Despite weaker activity, Latin American import volumes still rose by about 8% last year (compared with 17–18% in the previous two years).

Trade prices fall

There was no growth in the dollar value of world merchandise trade last year. Slow economic growth in the industrial countries and a small rise in the effective rate of the dollar contributed to a 4% drop in the dollar prices of manufactured exports, the first significant decline since the mid-1980s. Sluggish demand conditions in industrial countries also explained in part the continued softening of non-oil commodity prices: for the fifth year in a row these prices fell – by almost 4%, taking the cumulative decline since 1988 to over 15%. The sharpest declines were recorded for metals and minerals. Oil prices fell from an average of over $18 per barrel in 1992 to about $13 per barrel by the end of 1993, the lowest level for five years. Weak demand, rising production in OPEC countries (where agreed output ceilings were exceeded for most of the year) and an expansion of North Sea supplies were the main influences. OPEC's decision in March 1994 to maintain, and not reduce, production ceilings until the end of 1994 kept oil prices weak in the early months of the year. These developments, if sustained, will have a major effect on trade balances: a one dollar decline in the oil price per barrel reduces industrial countries' imported energy bill by over $10 billion.

Commodity prices

Relative to the prices of manufactured exports, commodity prices have weakened steadily, falling to less than half their mid-1970s peak. The persistence of this trend over two decades – covering periods of both growth and recession – has undermined commodity agreements aimed at stabilising prices, and most of them have foundered in recent years. The secular slowdown of growth in industrial countries after 1973, combined with the lower intensity of raw material use in industrial output, has curbed the demand for commodities. At the same time, commodity output capacity has expanded strongly – partly as a result of the use of improved production technology but partly too as a reflection of the pressure on many countries to raise export earnings. A very recent example of increased

The composition of world exports

	1980	1985	1990	1991	1992	1993*
	as a percentage of total exports of goods and services					
Merchandise	75.4	70.2	66.1	65.6	65.7	65.7
Invisibles	24.6	29.8	33.9	34.4	34.3	34.3
Investment income	9.9	13.3	16.3	16.6	15.7	15.1
Commercial services	13.3	15.1	16.5	16.7	17.6	18.2
Transport	*4.7*	*5.1*	*4.7*	*4.6*	*4.6*	..
Travel	*3.9*	*4.2*	*5.0*	*4.9*	*5.2*	*5.5*
Other	*4.8*	*5.8*	*6.8*	7.2	*7.8*	..
Other services	1.4	1.4	1.1	1.1	1.0	1.0

* Partly estimated.

supply in world markets has been the growth of metals exports from the CIS, supplies which were previously absorbed at home by inefficient heavy industries. In agriculture a further factor depressing world trade prices has been industrial countries' agricultural policies, which have stimulated domestic output and created excess supplies that sought outlets on world markets.

Increasing importance of services

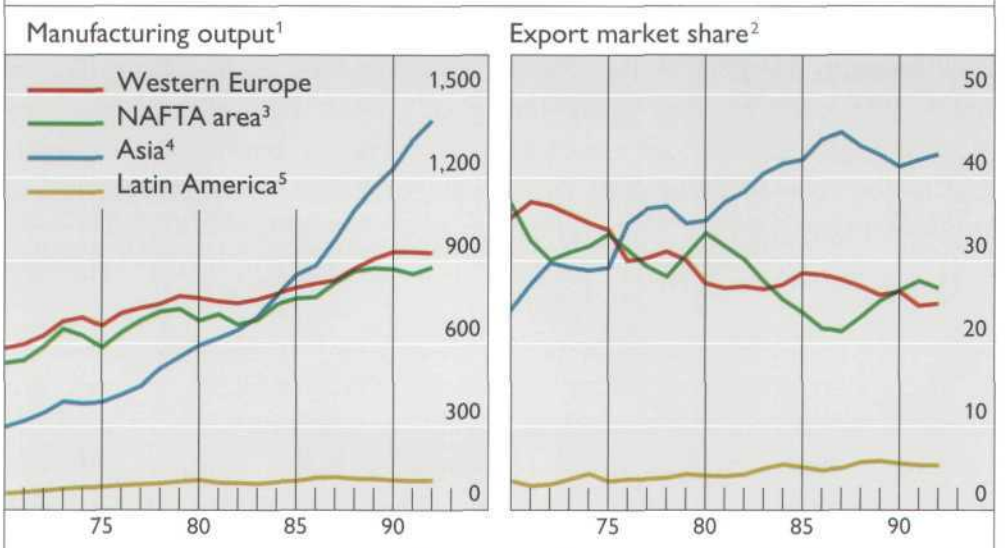
An important medium-term trend in international trade has been the growing share of non-merchandise transactions. Current account developments have increasingly reflected movements in net investment income and other service transactions. Such transactions now constitute over one-third of total trade in goods and services, compared with less than one-quarter in 1980. In particular, investment income has grown rapidly over the last decade as the globalisation of financial markets, deregulation and innovation have spurred cross-border financial transactions; however, declining interest rates in recent years have masked the underlying trend. The share of commercial services has risen to over 18% of total trade; the true figure may be even higher as many service items tend to be under-reported. Industrial countries, in particular, have increased exports of services faster than merchandise exports, accentuating their dominance of services trade.

Shifts in world manufacturing trade and output

Asia's industrialisation ...

In recent years there has been a steady shift of world manufacturing output from Europe and North America to Asia. Although international comparisons of the real value of output are anything but straightforward, calculations based on 1980 purchasing power parities suggest that manufacturing activity in Asia caught up with output levels in Europe and the NAFTA countries by the mid-1980s (see the graph below). Using actual 1980 exchange rates would put the catch-up in the early 1990s.

Global shifts in manufacturing output and trade



[1] In billions of US dollars expressed at constant 1980 prices and converted at 1980 manufacturing PPPs (US PPP = 1). [2] Percentage of total extra-regional manufactured exports. [3] Canada, Mexico and the United States. [4] Japan, the Asian NIEs, China, India, Indonesia, Malaysia, the Philippines and Thailand. [5] Argentina, Brazil, Chile, Colombia, Peru and Venezuela.

... led by exports ...

The growth of output in Asia has been driven by exports, and not by import substitution. The share of output exported has risen sharply – to an average of over 50% for the NIEs and 35% for the other ASEAN countries (see the table on page 42). There has been a corresponding increase in the ratio of imports to GDP. Hong Kong and Singapore have pursued free trade policies for many years, and the other countries in the region have significantly reduced barriers to imports in recent years. By exposing the economy to the greater competition in international markets, openness to trade has been an important ingredient of rapid economic growth. Asia's share of world trade has thereby increased much more rapidly than its share of world output.

... and supported by trade liberalisation

Asia's effective presence in world trade of manufactured goods is best highlighted by its share of extra-regional trade. (World trade statistics are still heavily influenced by large intra-European trade flows.) The Asian region now supplies over 40% of the extra-regional demand for imported manufactured goods, compared with about 25% for both western Europe and the NAFTA countries – a reversal of the relative position in the early 1970s. Japan led the Asian export drive up to the early 1970s, followed by the NIEs up to the mid-1980s, and then, most recently, by China, Indonesia, Malaysia and Thailand.

The major developing countries in Latin America have not been able to match the Asian economies. Their share of the world market has remained fairly stable at around 5%, and their share of global manufacturing output has changed little.

Intra-regional trade in Asia ...

Intra-Asian trade, exceptionally buoyant notwithstanding the virtual absence of explicit preferential trading arrangements, now accounts for nearly half of Asia's trade (compared with one-third in the early 1970s). Very strong economic growth in most of the region combined with the close production links created and fostered by extensive intra-regional direct investment has provided the momentum for greater intra-Asian integration.

... and Europe

Intra-European trade in manufactured goods has also risen strongly and now amounts to 24% of the area's GDP. The progressive dismantling of barriers to trade and the establishment of a single market have been key factors. By contrast, Europe's extra-regional trade has expanded more slowly and is now equivalent to only 7% of area GDP, the lowest proportion of the four regions shown in the graph on page 73.

Trade policies

Uruguay Round concluded

Seven years of trade negotiations in the Uruguay Round drew to a close in December 1993, overrunning the original deadline by three years. No previous round had addressed such a wide spectrum of issues. A comprehensive attempt was made to tackle many areas that in the past had been put to one side as too politically sensitive or too intractable. The Final Act of the Uruguay Round included an agreement to establish the World Trade Organisation as the successor of the GATT. Its main functions will be to monitor the implementation of the Round's agreements, to serve as the permanent forum for further trade negotiations and to provide mechanisms

for the multilateral settlement of trade disputes. The finalised legal texts were signed in April 1994; after ratification by the individual member states, the agreement is expected to come into force around the middle of 1995.

Progress in liberalising merchandise trade ...

Much was achieved by the Uruguay Round. Within the traditional area of *merchandise trade*, agreement was reached not only to cut tariffs on industrial goods by over one-third, but also to extend the coverage of GATT rules to trade in agriculture, clothing and textiles. Greater market conformity for agricultural trade is to be achieved by limiting production subsidies, by significantly reducing subsidised exports and by converting non-tariff barriers into tariffs that in turn are to be progressively reduced. Even so, some quantitative restrictions can be maintained until the end of the century: one notable case in point is Japan's import of rice. Trade in textiles and clothing, largely managed on a discriminatory basis throughout most of the post-war period, will also become subject to multilateral rules, with bilateral quotas to be phased out over a ten-year period.

... incorporating new areas of international commerce ...

More important, perhaps, the negotiations covered entirely *new areas* of international commerce. A broad framework agreement was worked out to cover trade in services – financial services, telecommunications, transport, audiovisual products, tourism, professional services and the movement of workers. Basic obligations such as the most-favoured-nation (MFN) principle (the extension to all member countries of concessions granted to one country) and transparency were accepted – backed up in some cases by specific national commitments to grant national treatment and enhance market access for foreign services. Significant progress was also made in agreeing on a multilateral framework of principles to govern intellectual property rights and trade-related investment measures.

... and subjecting trade policies to clearer rules

Trade-related policies and measures were also extensively reviewed. The fuller definition of what constitutes actionable trade-distorting subsidies should help reduce resort to countervailing duties. Rules on the legal determination of dumping and on the implementation of anti-dumping measures were also clarified and tightened. In particular, the maximum duration of such measures – some have existed for over twenty years – was set at five years. In addition, greater restraint was sought on the use of measures to safeguard a domestic industry that claims serious injury from increased imports. The imposition of new "grey area" measures, such as voluntary export restraints and orderly market arrangements, was prohibited; existing measures are to be phased out. Finally, the GATT settlement system was strengthened significantly, to limit the scope for the unilateral resolution of trade disputes.

The multilateral reduction of trade barriers envisaged in the Uruguay Round agreement should help to counteract the trade diversion effects inherent in any regional trade arrangement. Not only can such arrangements direct demand away from more efficient suppliers outside the region, but the lack of a common external tariff in most free trade areas often increases resort to non-transparent rules of origin that sometimes serve as barriers to trade with the wider world.

But against these undoubted achievements must be set the fact that

much was left undone. The rules on certain subsidies (for instance in some "high-tech" industries) and on anti-dumping procedures were less tightly drawn than had been hoped, leaving room for future dispute. In many service sectors, the agreements mostly covered only the basic principles, with actual liberalisation commitments being left for future negotiations: commitments to liberalise trade in telecommunications, air and maritime transport and the audiovisual sector fall into this category.

Unfinished business ...

Financial services proved to be a particularly thorny issue and resolution was postponed until after the entry into force of the Uruguay Round agreement. Disappointed by how little a number of Asian and Latin American countries were willing to commit themselves to open their financial markets to foreign firms, the United States proposed in October 1993 a two-tier approach – in line with the terms of the proposed Fair Trade in Financial Services Act under consideration in the US Congress – which would give trading partners differential access to US financial markets depending on the extent to which they agreed to open their markets to US firms. As current US law requires regulators to apply an "unconditional" national treatment standard to foreign financial services firms, the proposal to institutionalise reciprocity encountered strong foreign opposition. The United States therefore agreed to continue the negotiations for another six months following the entry into force of the Uruguay Round agreement, but reserved the right, at the end of this period, to exclude financial services from the MFN principle if, in its view, other countries had not offered sufficient openness in domestic financial markets. Correspondingly, the countries thus affected would be under no obligation to implement whatever liberalisation measures they had proposed during the original negotiations.

... particularly in trade in financial services

It is to be hoped that the Uruguay Round agreement can create the necessary momentum to reverse the trend towards managed trade. By the early 1990s almost one-fifth of total merchandise imports of industrial countries was covered by non-tariff measures; and developing countries have increasingly resorted to such measures (imposing anti-dumping duties in particular). In early March 1994, the United States revived its "Super 301" trade policy instrument that permits it to impose sanctions on countries with barriers to US exports that it judges unacceptable. The use of this instrument – or even the threat – has often resulted in market-sharing arrangements or numerical import targets that limit competition, thereby forcing consumers or industrial users to pay higher prices and weakening the pressures on producers to be efficient and innovative. The European Union also continues to rely on bilateral arrangements (in late March, for instance, it agreed with Japan on the maximum number of Japanese cars that could be imported in 1994).

Drift towards managed trade

Current account developments: overview

As in 1992, external developments last year were dominated by marked cyclical differences in economic activity. The graph opposite summarises the

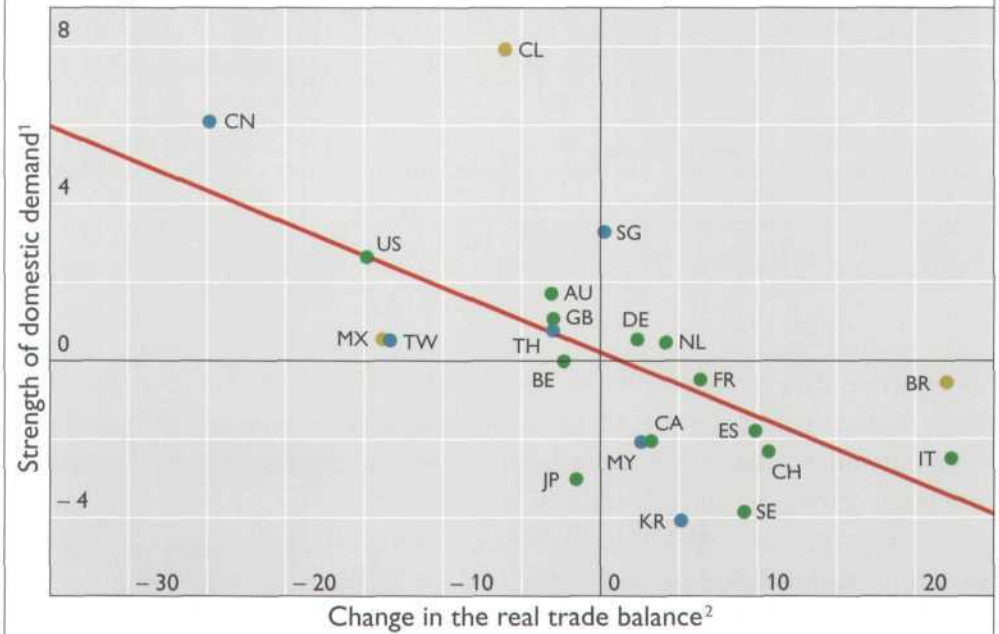
Current account developments reflect cyclical factors ...

impact of relative demand on the real trade balances of the more important economies (in the developing as well as in the developed world) over the last two years. During this period, continental Europe experienced a pronounced weakening of domestic demand: recorded imports fell by a cumulative 3%. By contrast, the volume of North American imports rose by 10% in each of the last two years. Latin American domestic demand has also grown faster than output growth in recent years, and the real trade balance deteriorated sharply. A strong rise in import-intensive investment demand in some Asian developing countries, such as China, Thailand and Taiwan, resulted in a significant deterioration of their real trade balances.

... and changes in competitiveness

A marked improvement in competitiveness has affected the relative position of a number of countries – shown above the red line in the graph which relates changes in the real trade balance to cyclical factors. Italy is one notable case. Japan stands out on the other side, as an appreciation of the yen has reduced real net exports. As for Latin America, Brazil and Chile – both with relatively strong competitive positions – are well above the line while a major real appreciation has sharply reduced the net exports of Argentina (beyond the scale of the graph) and Mexico. In the face of very strong growth in domestic demand, China's real depreciation has

Change in the real trade balance and the cycle



Notes: AU = Australia; BE = Belgium; CA = Canada; CH = Switzerland; DE = Germany; ES = Spain; FR = France; GB = United Kingdom; IT = Italy; JP = Japan; NL = Netherlands; SE = Sweden; US = United States; CN = China; KR = South Korea; MY = Malaysia; SG = Singapore; TH = Thailand; TW = Taiwan; BR = Brazil; CL = Chile; MX = Mexico. The red line shows the regression of changes in the real trade balance on the strength of domestic demand.

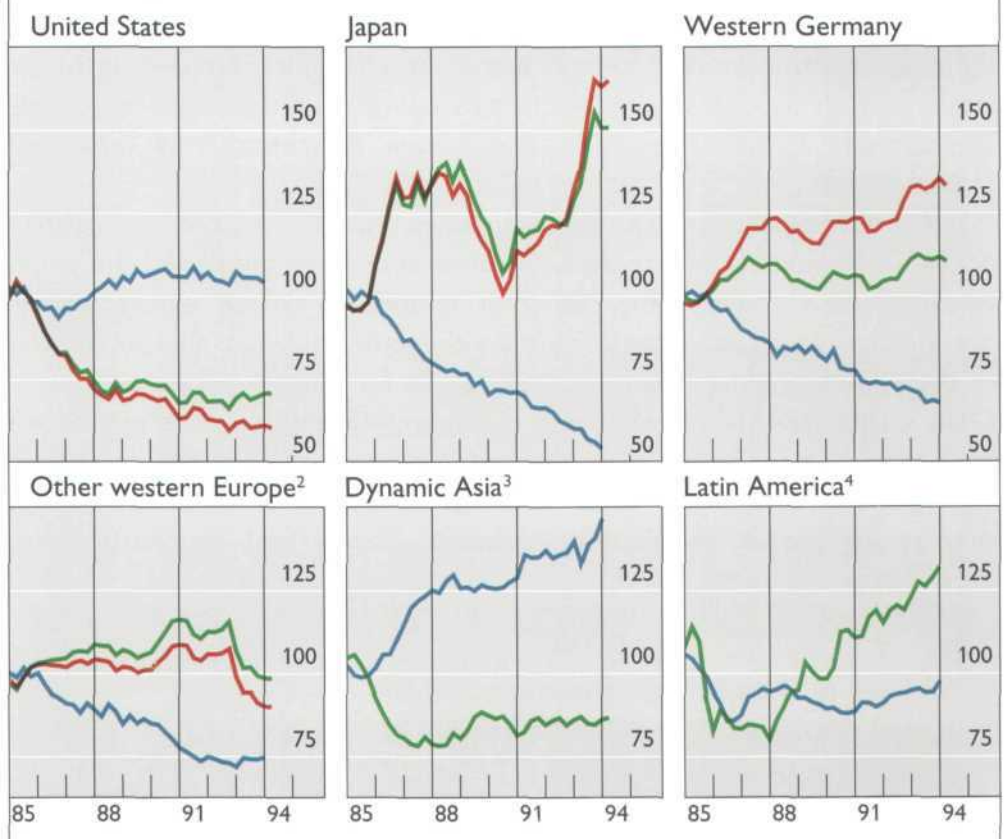
[1] Change in real domestic demand between 1991 and 1993 relative to trend GDP growth less the corresponding change in partner countries. [2] Change in the trade balance between 1991 and 1993, measured at constant 1991 prices and expressed as a percentage of average 1991 merchandise exports and imports.

Competitiveness and export market shares

Quarterly averages, 1985 = 100

Competitiveness in terms of: Unit labour costs[1] Consumer prices

Export market share[1]



[1] In manufacturing. [2] Belgium, France, Italy, the Netherlands, Spain, Sweden, Switzerland and the United Kingdom. [3] Hong Kong, Indonesia, Malaysia, Singapore, South Korea, Taiwan and Thailand. [4] Argentina, Brazil, Chile and Mexico.

limited the deterioration in the real trade balance. A number of other Asian countries lie below the line not so much because of worsening competitiveness but more because of a very strong expansion in imports of capital goods as investment has boomed.

Cost competitiveness and export performance

The impact of cost competitiveness on export performance in a more medium-term perspective is illustrated in the graph above. The improved competitiveness of US manufacturing since the mid-1980s has enabled US producers to slowly regain export market shares. The counterpart is that substantial increases in relative costs in Germany and Japan have hurt export performance. The recent improvement in the competitiveness of European countries other than Germany appears to have halted market share losses. Finally, real exchange rate appreciation in Latin America has prevented export market gains as large as might have been expected from extensive economic reforms. The reverse is true for Asia.

Industrial countries

United States

Larger current account deficit due to ...

As the non-oil trade deficit widened again last year, the US current account deficit exceeded $100 billion for the first time in the 1990s; the trade deficit increased further in the early months of 1994. With the terms of trade barely changed, the widening reflected a cyclical buoyancy of imports and a deceleration of export growth as stagnation in continental Europe and in Japan continued.

... rapidly rising imports ...

Imports of capital goods (other than automotive products and civilian aircraft) rose by nearly 25%; computer equipment imports were up by some 40%. This rate of increase exceeded the 16% rise in real domestic fixed investment in durable equipment. Despite a slowdown from earlier years, non-agricultural export growth remained significant last year. Capital goods exports increased at above-average rates as did exports of automotive products: these two groups now account for over half of US exports.

... slowing exports ...

... and declining net investment income

The other components of the US current account changed little last year. Adverse cyclical factors brought a five-year period of rapidly rising surpluses on services to an end. With external financial liabilities exceeding financial assets by a wide margin, falling international interest rates served to moderate the decline of US net investment income. Overall, the balance on investment income fell to virtually zero last year – for the first time since before the First World War.

Japan

Widening trade surplus

Japan's current account surplus rose in dollar terms last year but by significantly less than in the previous two years. The trade surplus widened by $9 billion and net investment income on overseas investments rose by a little over $5 billion.

Differences from 1980s

The factors behind the reappearance of a large Japanese trade surplus were quite different from those of the 1980s. One important difference is that export growth has been much lower than in the early 1980s, when exports had been strongly stimulated by a temporarily undervalued yen: the much stronger yen since then, protectionist pressures abroad and increased foreign direct investment have contained export growth (see the table overleaf). A second difference is that the main bilateral counterpart to Japan's increased surplus is to be found in Asia, not in the United States. A third difference is the greater severity of the domestic recession.

Reorientation of trade towards Asia

A considerable part of the expansion of trade with Asia has reflected Japanese companies' diversion of some of their manufacturing production to countries with lower labour costs. An early wave of such investment, in the 1970s, was directed at the NIEs; later, as wages rose in these economies, direct investment shifted to Indonesia, Malaysia and Thailand, where wages were lower; last year saw a major redirection to China. As Japanese enterprises or joint ventures in Asia tend to be highly trade-oriented, exporting heavily both to Japan and to the wider world, this shift has had a major influence on trade patterns.

Japan: the trade surplus and exports

	Change in trade surplus (in billions of US dollars)		Percentage growth in exports (dollar values)	
	From 1982 to 1986	From 1990 to 1993	From 1982 to 1986	From 1990 to 1993
Total	75.8	68.1	50.7	25.8
of which vis-à-vis:				
United States	*39.3*	*12.2*	*121.5*	*16.7*
Western Europe	*7.9*	*7.4*	*73.2*	*2.5*
South-East Asia and China	*16.5*	*31.3*	*46.0*	*51.6*

Sizable correction in real terms ...

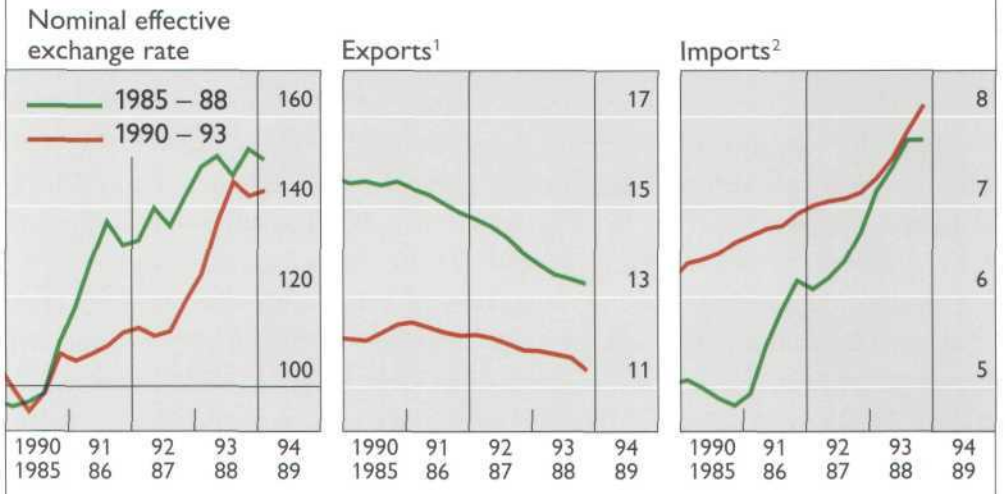
While strong terms-of-trade gains boosted the trade surplus in dollar terms, the surplus at constant prices declined by almost $14 billion, the largest fall since 1988. When allowance is made for Japan's much weaker cyclical position relative to conditions in its major markets (notably the United States and Asia), the underlying external adjustment in the country's manufacturing trade balance is even more sizable. The decline in Japan's real export market share accelerated appreciably in 1992 and 1993, extending a trend established by the earlier appreciation of the yen (see the graph below). More recent, and perhaps more remarkable, is the steep rise in imports of manufactured goods – a category that has hitherto been unusually low in Japan. In 1990 imports amounted to only 6% of gross domestic output of manufactured goods; the continuation of strong import growth and virtually flat industrial production took this percentage to 8% by the end of last year.

... as share of export markets declines ...

... and import penetration rises

Declining exports and rising imports have had a major depressive effect on the Japanese economy. In principle, however, terms-of-trade gains from

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.

Terms-of-trade gains not transmitted to domestic prices

the appreciation of the yen should provide an important offset. Indeed, the cumulative terms-of-trade gain since 1990 has been substantial: even allowing for the modest decline in export prices, the net gain has amounted to almost 30%, or about 2% of GNP. But lower import prices have not been reflected in consumer prices to any great extent, and this has limited the potential stimulus to consumer spending. The case of oil products is perhaps the most striking example of the limited pass-through of import price declines into consumer prices. Despite a 20% decline in world oil prices last year, tax-exclusive prices of petrol and domestic heating oil in Japan rose by about 5–10% in dollar terms in the year to the fourth quarter of 1993 – taking price levels to about two to three times the levels prevailing in major European countries (where dollar prices fell by about 15% over the same period).

Western Europe

Recession-induced trade surplus partly reflects under-reporting of imports

The recession in continental Europe depressed imports last year. However, the scale of the import decline is uncertain: the new reporting system for trade within the European Union, introduced on 1st January 1993, has distorted intra-EU trade statistics. A preliminary aggregation of bilateral trade data for 1993 suggests that the sum of reported intra-EU exports exceeds the sum of reported intra-EU imports by between $20 and 25 billion – a statistical discrepancy that in the past has usually been small. This suggests a greater under-reporting of imports than of exports, where tax-refund considerations encourage prompter and more complete reporting; by implication, the western European trade surplus for 1993 shown in the table on page 84 is overstated.

Gains in competitiveness

Calculations that exclude intra-regional trade weights suggest that western Europe's competitiveness has improved: by late 1993, relative unit labour costs had fallen by about 15% from their peak in mid-1992. Also, external demand has been boosted by the cyclical recovery in North America and the continuing strong growth in South-East Asia. As a result, western Europe's trade deficit with the world outside Europe was reduced by over $45 billion last year.

Marked shifts in intra-European competitive positions

Competitive positions within western Europe also changed significantly as the earlier marked divergence in real exchange rates was reversed. The path of consumer prices expressed in a common currency provides one simple indicator of this. Up to mid-1992, just before the European currency crisis broke, accumulated inflation differentials combined with stable nominal exchange rates had led to losses of competitiveness in Italy, Spain, Sweden and the United Kingdom relative to countries where inflation was lower (Belgium, France, the Netherlands and Switzerland). By mid-1992, consumer prices expressed in Deutsche Mark had risen in the first group of countries by an average of 34% over 1987 levels; the rise in the second group was around 13%, a little below the increase seen in Germany (see the table overleaf). This major divergence had a significant impact on external positions: current account deficits in the first group of countries were between 1½ and 3½% of GDP, while countries in the second group had

large external surpluses or, in the case of France, had eliminated earlier deficits.

The exchange rate changes in Europe since mid-1992 have brought the DM-adjusted changes in consumer prices in surplus and deficit countries much closer together. Thanks to large lira and krona depreciations, the cumulative DM-adjusted changes in Italian and Swedish consumer prices since 1987 have fallen below the cumulative changes recorded in the surplus countries over the corresponding period.

Strong export performance in most depreciating countries ...

The large depreciation of the lira stimulated Italian exports, which rose by about 9% in volume terms last year, more than twice as fast as in 1992 and well above the expansion in export markets. As import volumes are reported to have declined even faster than domestic demand, a $28 billion current account deficit in 1992 was transformed into a $11 billion surplus last year. Improved competitiveness also contributed to a 16% increase in Spanish export volumes and in turn a much lower trade deficit last year. Swedish exports also rose strongly and the trade surplus widened. In all three cases, the response of export volumes to exchange rate depreciation has been surprisingly rapid – a result, perhaps, of the pronounced weakness in domestic demand. In contrast, the volume of UK exports rose by only 4%. Moreover, as the UK economic recovery took firmer hold, the widening cyclical divergence with continental Europe left the United Kingdom with a sizable current account deficit.

... contrasting with stagnating exports in the others

While the volume of exports of the four main depreciating countries rose by an average of 8% last year, flat or falling exports were recorded by those that did not devalue against the Deutsche Mark. However, import demand in Belgium, France, the Netherlands and Switzerland was even weaker, with declines in import volumes in 1993 ranging from 1% (the Netherlands and Switzerland) to 3½% (France), although some pick-up in demand could be detected as the year went on, particularly in France and Switzerland. The current account surpluses of all four countries widened significantly.

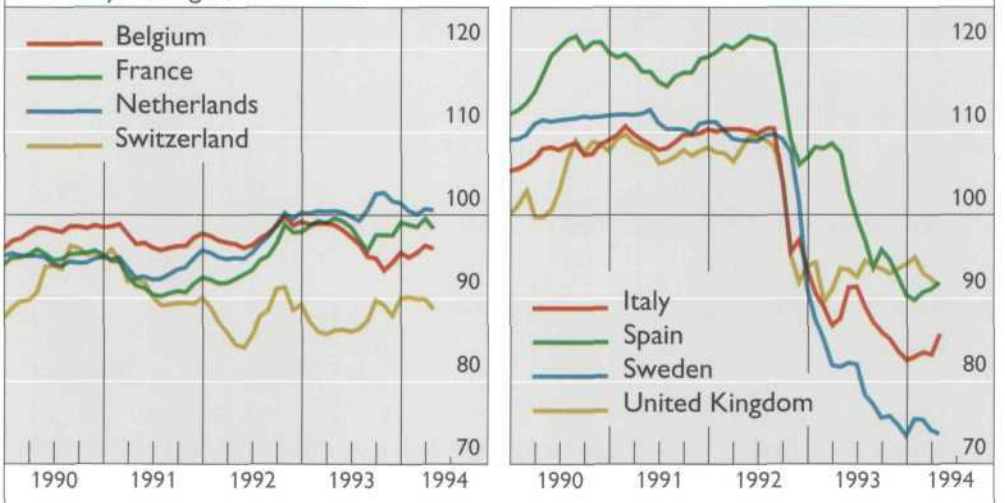
Consumer prices in selected European countries in a common currency

Periods	Surplus countries[1]					Western Germany	Deficit countries[1]				
	Belgium	France	Nether-lands	Switzer-land	*Average*		Italy	Spain	Sweden	United Kingdom[2]	*Average*
	in Deutsche Mark, 1987 = 100										
1990	108.4	109.1	104.4	107.0	*107.2*	106.9	115.4	130.1	119.8	114.7	*120.0*
1991	112.4	111.5	107.8	112.5	*111.1*	110.6	121.9	138.8	131.6	125.7	*129.5*
1992	115.1	114.6	111.3	112.4	*113.3*	115.0	121.9	140.6	131.8	123.8	*129.5*
1993	116.6	115.8	114.5	117.0	*115.9*	119.7	105.3	125.4	109.3	115.0	*113.8*
1994 Q1	119.7	117.8	116.6	125.1	*119.8*	122.4	105.0	121.6	111.9	120.3	*114.7*
Memo item: May–August 1992	*115.2*	*115.2*	*111.1*	*112.0*	*113.4*	*115.1*	*126.9*	*145.0*	*135.2*	*130.0*	*134.3*

[1] According to average current account position in 1991–93. [2] Excluding housing.

Real effective exchange rates in selected European countries*

Monthly averages, 1987 = 100



* Based on relative unit labour costs in manufacturing.

Germany

Given a marked loss of competitiveness, German exports remained weak throughout most of 1993 although they appeared to pick up in the final quarter of the year. But with domestic demand in Germany shrinking, imports declined even more so that Germany's trade surplus increased to $40 billion. Much of this widening was offset by the rapid deterioration in the invisibles account. For the first time since 1982, net investment income turned negative in the final quarter of the year, although part of this deterioration may be illusory, reflecting the statistical difficulties in capturing the "foreign" interest earnings on German residents' savings channelled via Luxembourg into domestic financial assets. The current account deficit remained above $20 billion.

Turkey

Turkey's current account deficit widened to almost 6% of GDP last year. A large public sector deficit fuelled domestic demand growth, leading to higher inflation and a significant real exchange rate appreciation; the volume of imports rose by one-third. These imbalances, a sharp rise in external indebtedness and uncertainty about policy provoked a severe run on the currency in early 1994. In early April, the authorities announced a series of measures to reduce demand and curb inflation.

Other industrial countries

Buoyant export growth in Canada ...

Canadian exports rose strongly for the second year in succession after three years of below-average growth. The recovery of US domestic demand and a sharp drop in the real exchange rate were the major factors. Following heavy losses up to late 1991, competitiveness has improved sharply as wage costs were contained and as the nominal effective exchange rate depreciated by 15% between late 1991 and early 1994: relative unit labour costs have now fallen back to the low levels seen in the mid-1980s. However, strong export growth was matched by vigorous import growth. Moreover, the servicing of the country's large external debt required heavy net

Current account balances of the industrial countries and the Asian NIEs

Countries and areas	Current account balance			of which					
				Trade balance			Balance on investment income		
	1991	1992	1993	1991	1992	1993	1991	1992	1993
	in billions of US dollars								
Industrial countries	–36.8	–45.3	11.0	–14.9	23.5	73.0	– 8.8	–15.1	–15.3
United States	– 8.3	–66.4	–109.2	–73.8	–96.1	–132.5	13.0	6.2	0.1
Japan	72.9	117.6	131.4	103.0	132.3	141.5	26.7	36.2	41.4
Western Europe	–65.3	–61.6	20.0*	–54.1	–23.3	53.3*	–14.6	–25.1	–27.1
France	– 6.5	3.9	10.3	– 9.0	2.8	9.3	– 5.1	– 7.7	– 8.0
Germany	–19.3	–22.1	– 21.2	20.8	29.8	40.4	19.6	15.7	9.2
Italy	–23.6	–28.0	11.2	– 0.3	3.0	32.3	–17.2	–21.0	–16.4
United Kingdom	–13.7	–18.1	– 16.1	–18.3	–24.0	– 20.2	0.5	7.6	4.1
BLEU[1]	4.7	6.4	11.2	– 0.4	1.2	3.2	1.4	1.1	3.1
Netherlands	4.2	5.0	8.4	5.2	7.5	9.3	1.0	0.1	0.7
Sweden	– 4.3	– 6.7	– 0.4	5.1	5.9	7.1	– 5.8	– 7.8	– 5.8
Switzerland	10.7	15.1	18.6	– 5.6	– 0.6	1.9	15.3	14.8	14.7
Austria	0.1	– 0.2	– 0.9	– 9.6	– 9.7	– 8.4	– 1.5	– 1.2	– 1.1
Denmark	2.1	4.8	5.3	4.7	7.2	7.8	– 5.6	– 5.7	– 4.6
Finland	– 6.8	– 4.9	– 1.0	1.1	2.8	5.4	– 4.6	– 5.4	– 5.0
Greece	– 1.5	– 2.1	1.1	–12.3	–13.9	– 12.5	– 1.7	– 2.0	– 2.1
Iceland	– 0.3	– 0.2	0.0	0.0	0.0	0.2	– 0.3	– 0.2	– 0.2
Ireland	1.4	2.6	2.9	3.2	5.7	6.8	– 4.6	– 5.4	– 5.2
Norway	5.0	2.9	2.4	8.3	7.6	7.4	0.5	– 0.6	– 0.6
Portugal	– 0.7	0.0	1.0	– 7.8	– 9.4	– 6.9	0.1	0.6	0.5
Spain	–17.0	–19.1	– 5.6	–31.8	–30.9	– 15.6	– 4.8	– 6.5	– 8.8
Turkey	0.3	– 0.9	– 7.3	– 7.3	– 8.2	– 14.2	– 1.9	– 1.6	– 1.8
Other industrial countries	–36.1	–34.9	– 31.2	9.9	10.5	10.7	–34.0	–32.4	–29.6
Australia	–10.3	–10.8	– 10.7	3.5	1.6	– 0.1	–12.4	–10.2	– 8.1
Canada	–25.3	–23.0	– 19.6	4.4	7.3	9.1	–19.1	–20.0	–19.1
New Zealand	– 0.5	– 1.0	– 0.9	2.1	1.7	1.7	– 2.5	– 2.2	– 2.3
Asian NIEs	9.1	8.4	10.5	2.6	1.4	0.5	4.8[2]	4.6[2]	3.6[2]
Hong Kong	2.5[3]	1.8[3]	2.3[3]	– 2.1	– 4.3	– 5.0	..	..	..
Singapore	3.3	2.9	2.0	– 4.1	– 4.9	– 8.1	1.4	1.6	1.3
South Korea	– 8.7	– 4.5	0.4	– 7.0	– 2.1	2.1	– 1.0	– 1.1	– 1.3
Taiwan	12.0	8.2	5.8	15.8	12.8	11.4	4.4	4.1	3.6

* Subject to serious distortion; see text.

[1] Belgium-Luxembourg Economic Union. [2] Excluding Hong Kong. [3] Net exports of goods and non-factor services.

investment income payments abroad; the current account deficit fell somewhat but still amounted to 3½% of GDP.

... Australia and New Zealand

Competitive exchange rates, combined with the increasing orientation of trade to South-East Asia, have also stimulated Australian and New Zealand exports of manufactured goods over the last two years: the volume of manufactured exports rose by 9% in 1992 in both countries before slowing to about 4–5% last year. At the same time a marked recovery in domestic demand has sharply increased the volume of imports in both

countries. The trade surplus remained unchanged in New Zealand and turned into a small deficit in Australia. Given its large external debt and thus sizable investment income payments, Australia's current account deficit amounted to almost 4% of GDP in 1993.

Former centrally planned economies

Eastern Europe

Stagnating export volumes

The volume of eastern Europe's exports stagnated last year after two years of strong growth. One depressive factor was probably the sharp appreciation in real exchange rates over the last couple of years. It is also possible that the transition from state trading had artificially inflated exports in 1991 and 1992 as the excessive inventories typically held in command economies were sold and as the absence of hard budget constraints permitted the export of goods at below-cost prices. With imports rising strongly, the area's trade deficit widened by about $4 billion.

Shift in orientation of exchange rate policies

These developments have led to a shift of emphasis in exchange rate policies from providing a "nominal anchor" to maintaining international competitiveness in the face of continuing high inflation. Only two countries have maintained fixed nominal exchange rates for any length of time: the Czech Republic (since December 1990) and Estonia (since June 1992).

Czech and Slovak republics

Because the Czech koruna has remained competitive and because tight fiscal and other policies have been maintained (see Chapter III), the trade deficit was cut substantially last year as exports expanded steadily. Moreover, portfolio capital inflows rose, permitting an increase in reserves of about $3 billion and supporting the fixed exchange rate. The external deficit of the Slovak Republic, much more dependent on trade with Russia, widened. The Slovak koruna was devalued in July 1993 and a 10% surcharge was imposed on imported consumer goods in March 1994.

Hungary

Hungary's trade deficit widened sharply, mainly because of increased domestic spending although some special factors (notably the embargo on trade with parts of former Yugoslavia and a drought) also depressed exports. With the balance on invisibles swinging from surplus to deficit, the current account deficit reached about 10% of GNP. This deficit was mostly financed by direct investment inflows, in particular in connection with the privatisation of the telecommunications system. In a major shift, exchange rate policy sought to limit further real exchange rate appreciation: the forint was devalued against its currency basket on five occasions during 1993, with a cumulative depreciation of 15%.

Poland

The Polish deficit widened as imports rose strongly. The crawling peg exchange rate regime in operation since 1991, which implies an annual rate of depreciation of about 20–25%, proved insufficient to maintain competitiveness and had to be supplemented by further devaluations, the latest – of 8% – in August 1993.

Slovenia

Slovenian exports stagnated last year while imports rose sharply, leading to a deterioration of almost $1 billion in the trade balance. Trade liberalisation and a modest expansion in GDP – after three years of severe

Eastern European trade

Countries and areas	Exports			Imports			Trade balance		
	1991	1992	1993[1]	1991	1992	1993[1]	1991	1992	1993[1]
	in billions of US dollars								
Eastern Europe	28.3	33.8	33.9	31.9	39.4	43.4	−3.6	−5.7	−9.5
Bulgaria[2]	*1.2*	*1.6*	*1.6*	*1.7*	*1.9*	*2.1*	*−0.5*	*−0.3*	*−0.5*
Czech Republic	*4.4*	*5.7*	*7.1*	*4.1*	*6.9*	*7.5*	*0.3*	*−1.3*	*−0.4*
Hungary[2]	*6.4*	*7.0*	*6.2*	*6.6*	*7.8*	*8.5*	*−0.2*	*−0.8*	*−2.3*
Poland[2]	*9.5*	*10.7*	*10.4*	*12.6*	*13.7*	*15.0*	*−3.1*	*−3.0*	*−4.5*
Romania[2]	*2.3*	*2.3*	*2.6*	*2.3*	*3.2*	*3.5*	*0.0*	*−0.8*	*−0.9*
Slovak Republic	*1.4*	*2.0*	*1.8*	*1.4*	*2.0*	*2.3*	*0.1*	*0.0*	*−0.5*
Slovenia	*3.0*	*4.4*	*4.2*	*3.2*	*3.9*	*4.6*	*−0.2*	*0.5*	*−0.3*
Memorandum item: Commonwealth of Independent States[2]	*28.7*	*26.7*	*30.7*	*27.3*	*24.7*	*26.1*	*1.5*	*2.0*	*4.6*

[1] Partly estimated. [2] Based on OECD countries' trade data. Import data on a c.i.f. basis adjusted to f.o.b. by subtraction of a 4% f.o.b./c.i.f. margin. Trade between the former Soviet Union and Finland is excluded.

contraction – were the main factors. Unlike a number of other countries in the region, the real exchange rate (measured in terms of prices) has been held down (although real wages have grown rapidly). Bulgaria and Romania, heavily dependent on imports of oil and raw materials, faced increasing balance-of-payments difficulties.

Bulgaria and Romania

The Baltic states have weaned themselves from extreme export dependence on the Russian market and have coped with a massive terms-of-trade shock as the prices of imported energy rose to world levels. Although there have been important differences, Estonia and Latvia have pursued tight monetary policies which have insulated them from the hyperinflation that engulfed Russia, and which have led to huge appreciation in the – initially very low – exchange rate vis-à-vis western trading partners. As described in more detail in last year's Annual Report, Estonia led the way by tying its newly introduced kroon to the Deutsche Mark – keeping domestic interest rates very high to attract the capital inflows needed to sustain this commitment. Output fell sharply; and within a year inflation had been brought down. Last year output and exports rose strongly, and trade was redirected towards the West; in early 1994, however, inflation rebounded. Latvia also used tight monetary policy to bring about disinflation but did so while allowing its new currency to float against the convertible currencies. Lithuania has taken rather longer to tighten policies. Rouble-denominated coupons were replaced by a new currency only in July 1993; after several months of floating culminated in a period of heavy downward pressure, the authorities tied the currency to the dollar in April 1994.

Estonia

Latvia

Lithuania

Access to markets in the industrial countries is essential for the full success of the economic reforms in eastern Europe. The Association Agreements with the European Union and other similar agreements did much to enlarge access to western markets; last year, the European Union decided to accelerate the tariff reductions envisaged in these Agreements.

Need for greater access to western markets

Nevertheless, eastern European producers have run into protectionist barriers as their traditional export goods – agricultural products, iron and steel, textiles and clothing – are among the products most protected in the West. Quite apart from the cost of such protectionism for consumers, these restrictions almost certainly rebound on western exporting enterprises as any curtailment in eastern European exports is very likely to be accompanied by an approximately equal reduction in their imports.

Commonwealth of Independent States

Trade surplus

The dollar value of exports from the CIS to the industrial world rose last year, as exports of metals and other heavy industry products increased. Oil exports were broadly unchanged with a sharp fall in production being offset by deep cuts in domestic consumption for the second year in succession. The scale of the difficulties confronting the CIS is underlined by the fact that the production of oil – the main export commodity – is now running at about 40% below output rates prevailing at the end of the 1980s. According to partner country trade data, the trade surplus with the industrial countries rose last year.

Real exchange rate appreciation

With continued rapid inflation, the rouble fell sharply during the first half of 1993, going from Rb. 414 to the dollar in December 1992 to Rb. 1,081 by June 1993, although in real terms the currency appreciated. But the slide was halted for much of the remainder of the year: intervention, changes in foreign trade regulations and a compression of import demand as subsidies were reduced were the main factors. Also, towards the end of the year rouble interest rates became positive in real terms, thus eliminating the hugely negative real rates that had characterised Russian monetary policy since prices were liberalised. The consequence of this interlude of nominal exchange rate stability at a time of rampant inflation was that the real effective exchange rate more than doubled. From late 1993, however, uncertainty about the direction of policy led to renewed downward pressure on the rouble, with its dollar value falling by April 1994 to about Rb. 1,800.

Capital flight

The rapid fall in the value of the rouble must have created strong incentives to hide export earnings – particularly during the period when rouble interest rates were so negative in real terms. Capital flight has doubtless occurred but its size is uncertain. BIS international banking statistics put deposits from the former Soviet Union held with reporting banks at $16 billion at the end of 1993. After adjustment for exchange rate changes, deposits rose by $3½ billion in the first half of the year when the rouble plummeted but fell by $1 billion in the second half when it was more stable. However, covert capital exports are not fully captured by these statistics.

Difficulty in putting intra-CIS trade on a commercial basis

Putting trade between Russia and the other states onto a normal commercial basis has proved very difficult because, under central planning, Russia had supplied the other states with energy at a fraction of world prices and imported from them manufactured goods that were not competitive on world markets. Despite massive increases in the rouble price of energy exports and substantial cuts in supply, prices remained well below

world market levels during 1992: one Russian government estimate puts the implicit trade subsidy during that year at 13% of Russian GDP. In addition Russia continued to make substantial financial transfers to the other republics.

Heavy Russian subsidies

The sheer size of this support was a major reason for the reluctance of most of the former republics to leave the rouble area. Although by no means the only factor, the failure to come to terms with this issue postponed stabilisation policies in both Russia and the other republics. In 1993, however, Russia took major steps to reduce these subsidies. Oil prices in dollar terms were increased and the Russian authorities tightened the conditions for the extension of new credits; interstate financing through the accounts of the Russian central bank virtually dried up. Even though no framework for effective interstate monetary coordination could be agreed, most countries still clung to the rouble: by mid-1993, only the Baltic states, Ukraine and Kirgizstan had left the rouble area. The crunch came in July 1993 with the demonetisation of pre-1993 rouble banknotes – 1993 banknotes had been issued only in Russia, not the other republics. Renewed attempts to preserve the rouble area as a monetary union came to nothing and, by the end of 1993, all the other republics (with the exception of Tajikistan) had introduced their own legal tender. The Russian central bank then began to quote exchange rates between the rouble and all new national currencies, incorporating prevailing market discounts on currencies in the region. The combined effects of the marked cutback in the implicit trade subsidy and the end of most official transfers from Russia now weigh heavily on the other states of the CIS: an IMF estimate puts the loss at 15% of GDP for these countries as a whole. However, the close links between Russia and a number of the other states have prompted a search for new mechanisms of cooperation on economic and other matters.

China

Unification of exchange rate regime

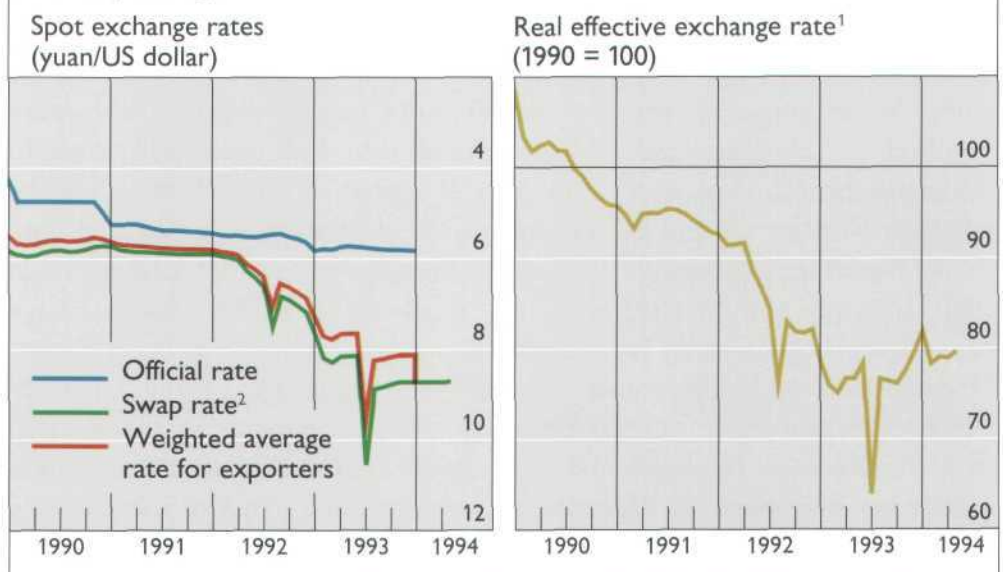
A change with far-reaching consequences for China's economic relations was the abandonment, in January 1994, of the multiple exchange rate mechanism. The official exchange rate under this system coexisted with the more market-responsive rates in the various Foreign Exchange Adjustment Centres throughout China. Arbitrage between these so-called "swap centres" was imperfect; because dealings in these centres remained subject to administrative controls – for example limiting access only to certain participants – black markets also existed, their actual importance at any one time depending on the extent of official interference.

Earlier coexistence of official and swap rates ...

This scheme served to encourage exports as most foreign exchange earnings could be sold at the more favourable swap rates: only 20% of enterprises' foreign earnings had to be exchanged at the official rate. Nevertheless, the state reserved the right to buy a further 30% at a specified swap rate – in effect allowing it to pre-empt 50% of export earnings for the purchase of official or "plan" imports (e.g. of certain agricultural goods or by state-owned enterprises) or for official reserve accumulation. "Non-plan"

China's exchange rates

Monthly averages



[1] Based on the weighted average rate for exporters and relative consumer prices. [2] Shanghai swap centre rate.

imports had to be paid for at the more expensive swap rates. This mechanism in effect magnified the potential impact of a rise in non-plan imports on swap rates: if the state took its full 50% of export earnings, an equal rise in exports and non-plan imports would lead to downward pressure on swap rates. At the same time, official reserves could be rising. The system may also have encouraged some under-reporting of exports: officially reported exports are below industrial countries' reported imports from China.

... led to distortions

By late 1991, substantial devaluation of the official rate, much lower inflation and a large current account surplus had reduced the gap between the official rate and the swap rates to less than 10%. But hopes that the authorities would be able to unify exchange rates were subsequently dashed by a resurgence of inflation. Moreover, significant reductions in import tariffs during 1993 (still very high by international standards, notably on consumer goods) fuelled the import boom and, according to official Chinese figures, contributed to a $14 billion deterioration in the trade account last year.

Inflation and widening external deficits ...

These developments put the exchange rate mechanism under severe strain. Attempts by the authorities at various stages during the year to put a floor under the falling swap rates – by intervention but also by administrative means – diverted transactions to black markets and ultimately proved unsustainable. The swap rate dropped sharply before rebounding and stabilising at around Yuan 8.7 to the dollar during the final months of the year (see the graph). At the end of the year the government scrapped the official rate, leaving a single managed and administered floating rate. During the early months of 1994, the currency settled at the rate that had prevailed in the swap markets before the change and about one-third below the old official rate. Although the official intention is to replace the swap

... put the system under severe strain

centres with a single interbank foreign currency market, foreign companies have had to continue their foreign exchange operations at the swap centres.

Impact of exchange rate unification

These changes will have a major impact on Chinese trade. The sharp rise in the local currency cost of official imports will squeeze state-owned enterprises that are already running heavy losses. On the other hand, the unification of exchange rates will benefit those foreign investors who were required to bring in funds at the official rate but were permitted to repatriate profits only at a swap rate. If consumer price indices can be taken to be accurate and relevant measures of inflation, the exchange rate facing exporters depreciated in real effective terms by over 20% between 1990 and the end of 1993 (see the graph on page 89). Such a large depreciation is not unusual for a country undertaking major trade liberalisation. Nonetheless, the considerable stimulus to exports makes the need for effective measures to contain domestic demand growth all the greater. It is therefore to be welcomed that recent steps to restrict credit have reinforced the effect of depreciation in constraining import demand and thus have contributed to a renewed rise in foreign exchange reserves.

The Asian NIEs

China's extremely rapid growth has provided a strong stimulus to other Asian economies. Additional factors behind continued Asian buoyancy include the underlying strength of domestic demand and the highly elastic supply of labour.

Strength of domestic demand

The recent vigour of domestic demand in the area has its roots in the earlier period of rapid and often export-led growth, which had given rise to marked internal economic strains. In particular, severe labour shortages in South Korea and Taiwan led to sharp rises in real wages and consumption. The period of hectic growth also provoked serious bottlenecks in the transport and communications infrastructure, creating a demand for major public investment programmes.

Foreign direct investment within Asia

Higher real wages in the countries which had industrialised first led enterprises to invest heavily in low-wage neighbouring countries – thereby assuring themselves of an elastic supply of labour no longer available at home. In this way, intra-Asian foreign direct investment flows hastened the integration of the low-wage countries into the international economy and stimulated their import demand – not only for investment goods but also for the advanced components used in local processing.

Transformation of trade of NIEs

As enterprises in the NIEs moved their labour-intensive manufacturing to other Asian countries, their share of world markets declined and the share of more sophisticated products in their exports increased. The recent appreciation of the yen has furthered this transformation, greatly strengthening the position of South Korean and Taiwanese exporters relative to their Japanese competitors. South Korean exports of labour-intensive products, for instance, have fallen, squeezed by the rapid expansion of capacity in other Asian countries with much lower wages; but exports of cars, computers and so on – where the main competitor is Japan – have

South Korea

risen sharply. The recovery of exports was the main factor behind the country's first current account surplus since 1989. This rise in exports led to a steep increase in imports from Japan, on which South Korea is heavily dependent for capital equipment and electronic components; hence the bilateral deficit vis-à-vis Japan did not change. Taiwan's exports, stimulated by the recent depreciation of the Taiwan dollar, have followed a similar pattern. However, the trade surplus fell as imports expanded rapidly. Also a boom in Singapore's exports of computers and related products – not only to the United States – limited the deterioration in the current account.

Taiwan

Other developing countries

External deficits in Latin America and Asia reflecting ...

The current account deficit of the developing countries (other than the Asian NIEs) widened to $91 billion last year, equivalent to some 12% of their total exports of goods and services, up sharply from the 1992 figure of less than 10%. The deterioration was most pronounced in Latin America, where the deficit exceeded 23% of exports, the highest level since the outbreak of the debt crisis in 1982. In Asia, China's $16 billion swing from surplus to deficit was the principal factor. The current account deficit of the rest of Asia narrowed last year.

... the strength of domestic demand ...

Two common roots of the external deficits in both continents were a rapid expansion in domestic demand and sizable increases in private capital inflows. Over the last three years, domestic demand in both regions has been stronger than elsewhere. The graph on page 77 illustrates the role

Current account balances of developing countries

Countries and areas	Current account balance			of which					
				Trade balance			Balance on investment income		
	1991	1992	1993[1]	1991	1992	1993[1]	1991	1992	1993[1]
	in billions of US dollars								
Developing countries[2]	–92.0	–72.8	–90.9	19.0	– 2.9	–11.4	–47.4	–49.3	–55.0
Africa	– 4.9	– 7.4	– 7.9	8.7	3.3	2.4	–17.6	–17.1	–16.9
China	13.3	6.4	– 9.6	8.7	5.2	– 9.1	0.8	0.2	– 0.3
Other Asia[2]	–21.5	–20.2	–15.4	–12.2	– 9.9	– 4.0	–13.0	–12.6	–14.5
of which: India[3]	*– 2.1*	*– 4.9*	*– 0.5*	*– 2.1*	*– 4.1*	*– 0.5*	*– 3.7*	*3.6*	*3.4*
Indonesia	*– 4.1*	*– 3.7*	*– 1.9*	*4.8*	*6.0*	*8.8*	*– 5.5*	*– 6.0*	*– 6.1*
Malaysia	*– 4.2*	*– 1.6*	*– 2.1*	*0.5*	*3.4*	*3.4*	*– 2.4*	*– 2.9*	*– 3.1*
Thailand	*– 7.4*	*– 6.1*	*– 6.5*	*– 6.0*	*– 4.2*	*– 4.3*	*– 2.0*	*– 2.3*	*– 2.7*
Middle East	–60.4	–17.6	–18.6	7.9	10.7	14.6	14.4	10.8	8.3
Latin America	–16.6	–31.2	–36.8	13.0	– 3.9	– 8.6	–29.2	–28.0	–28.9
of which: Argentina	*– 2.8*	*– 8.4*	*– 7.6*	*4.4*	*– 1.5*	*– 2.5*	*– 5.6*	*– 4.6*	*– 3.9*
Brazil	*– 1.4*	*6.3*	*– 0.6*	*10.6*	*15.5*	*13.1*	*– 9.7*	*– 8.1*	*– 9.0*
Chile	*0.1*	*– 0.6*	*– 2.1*	*1.6*	*0.7*	*– 1.0*	*– 1.8*	*– 1.9*	*– 1.5*
Mexico	*–13.8*	*–22.8*	*–20.5*	*–11.3*	*–20.7*	*–18.8*	*– 7.1*	*– 7.5*	*– 8.5*

[1] Partly estimated. [2] Excluding the Asian NIEs. [3] Financial year starting in April.

of cyclical conditions in changes in the real trade balance of a number of developing countries. Secondly, heavy capital inflows (see Chapter VII) eased the financial constraints that had limited import growth in Latin America in the 1980s and contributed to rapid industrialisation in Asia. In addition, trade liberalisation pursued in many countries has released latent import demand.

... and increased capital inflows

An important difference, however, is that Latin American exports have expanded by much less than Asian exports. The volume of Latin American exports in 1993 was about 20% higher than in 1990, while the volume of imports rose by 50%. In Asia, by contrast, the expansion in imports and exports has been more balanced, at around 40%.

Competitiveness and trade performance in Latin America

The trade performance of many Latin American countries has been hurt by marked real exchange rate appreciation since 1990, especially in Argentina, Colombia, Mexico and Peru where trade balances have deteriorated sharply in recent years. In Chile, on the other hand, the maintenance of competitiveness has sustained real export growth; the trade deficit that emerged reflected to a large extent deteriorating terms of trade. Brazil has been a case apart in recent years: with a rather depreciated real exchange rate, the trade surplus remained large last year, although the current account surplus was eliminated.

Investment-led import growth in Asia

In Asia real effective exchange rates have been rather stable in recent years. In Indonesia, Malaysia and Thailand the preservation of the competitiveness gains from the dollar depreciation in the mid-1980s has facilitated the continued growth of exports. But very strong investment-led increases in imports have led to sizable current account deficits in all three countries.

India's reforms

India has become more fully integrated with the world trading system. Three years ago, the authorities – faced with a current account deficit of over 3% of GDP, capital flight, growing external indebtedness and depleted reserves – took steps to tighten fiscal and monetary policies, to reduce state intervention (including the easier approval of foreign investment) and to make the exchange rate more competitive, devaluing by about 19% against the US dollar. During 1992 and 1993 a second round of reforms focused on financial market reform and trade liberalisation, which included a relaxation of restrictions on imports. In addition, the dual exchange rate system was unified in early 1993 (implying an effective depreciation) and the rupee was made convertible for trade purposes. These reforms produced a large improvement in India's external accounts: the trade deficit, which had been close to $7 billion at the height of the crisis in the financial year 1990/91, was virtually eliminated by 1993/94. The dollar value of exports rose by 20% last year. Capital inflows gathered strength, leading to upward pressure on the exchange rate and complicating monetary management.

Large devaluation of CFA franc

The 50% devaluation of the CFA franc in January 1994 from a parity against the French franc that had applied since 1948 (together with a 33% devaluation for the Comorian franc) has provided these countries with the chance to restore competitiveness and to bring better balance to their economies. The sharp fall in dollar commodity prices in the mid-1980s followed by the rise in the French franc against the dollar in the late 1980s

had made their export sectors extremely uncompetitive, and permitted a level of imports that export earnings could not sustain. Substantial external assistance is planned to help cushion the shock of adjusting to a more realistic exchange rate.

Foreign direct investment

Cyclical pattern of outflows from industrial countries

The pattern of direct investment outflows reflected differences in the cyclical position of investor countries. A strong expansion in flows from the United States and the United Kingdom was combined with significant declines in flows from the rest of the industrial world. The sum of US and UK outflows rose by over $22 billion and accounted for half of total industrial country outflows. There was a decline of almost equal magnitude in outflows from continental European countries; Belgium and France saw the sharpest falls.

Falling Japanese investment

Japanese investment abroad fell once again. The apparently very poor rate of return earned on earlier investments may have discouraged further investment: according to balance-of-payments statistics, total investment earnings in recent years have averaged only $8 billion annually, on a cumulative FDI stock put at $250 billion. The US recovery did not prevent Japanese-owned affiliates in the United States from suffering further losses in 1993. According to estimates by MITI, returns on Japanese investment in Asian countries have consistently been much higher; the strengthening

Global pattern of direct investment

	1976–80	1981–85	1986–90	1990	1991	1992	1993*
	in billions of US dollars, annual averages						
Total outflows	39.5	43.0	162.8	217.4	184.5	173.5	173.4
Industrial countries	38.7	41.3	154.0	203.5	173.3	158.9	152.5
of which: United States	*16.9*	*8.4*	*25.1*	*27.1*	*29.1*	*34.8*	*50.2*
Japan	*2.3*	*5.1*	*32.1*	*48.0*	*30.7*	*17.2*	*13.7*
United Kingdom	*7.8*	*9.2*	*28.1*	*19.4*	*16.0*	*18.5*	*25.4*
Other Europe	*9.8*	*14.6*	*59.4*	*102.8*	*90.1*	*85.1*	*54.2*
Developing countries	0.8	1.7	8.9	14.0	11.2	14.5	20.8
of which: Asia	*0.1*	*1.1*	*7.8*	*12.5*	*9.3*	*12.9*	*19.0*
Latin America	*0.2*	*0.2*	*0.6*	*1.0*	*1.2*	*0.3*	*0.5*
Total inflows	31.8	52.6	147.6	193.9	152.5	140.3	175.7
Industrial countries	25.3	34.9	124.1	161.0	111.0	85.9	101.5
of which: United States	*9.0*	*19.1*	*53.1*	*48.0*	*24.0*	*2.4*	*31.5*
Japan	*0.1*	*0.3*	*0.3*	*1.8*	*1.4*	*2.7*	*0.1*
United Kingdom	*5.6*	*4.3*	*21.7*	*32.5*	*16.2*	*16.8*	*14.5*
Other Europe	*8.7*	*9.9*	*38.8*	*63.6*	*57.5*	*54.1*	*50.7*
Developing countries	6.5	17.7	23.5	32.8	41.6	54.4	74.2
of which: Asia	*2.1*	*4.9*	*13.7*	*20.2*	*23.3*	*32.7*	*47.5*
Eastern Europe	*0.0*	*0.0*	*0.2*	*0.6*	*2.5*	*3.4*	*5.0*
Latin America	*3.7*	*4.7*	*5.8*	*6.8*	*11.3*	*13.8*	*17.5*

* Partly estimated.

of the yen has further stimulated investment in low-wage Asian countries, notably China.

Cyclical factors also led to a sharp rise in investment in the United States, but inflows remained well below the heavy rates seen in the late 1980s. As European inflows declined, gross inflows into the industrial world came to about $100 billion. The most significant development in 1993 was the boom in foreign direct investment in the developing world. Preliminary estimates suggest total inflows of about $75 billion, making FDI the largest single source of external finance for developing countries.

FDI boom in the developing world reflecting ...

Several factors account for this. The much increased role of Asian countries in international trade – including intra-regional trade – is one important factor. Over $45 billion flowed into Asian developing countries last year. Balance-of-payments statistics suggest a $14 billion rise in FDI in China to about $25 billion. Although the figure was inflated by the "round-tripping" of Chinese capital through Hong Kong (to take advantage of fiscal and other benefits given to foreign investors), there can be little doubt that the boom in China has greatly stimulated foreign investment. FDI in Malaysia and Indonesia slackened after years of heavy inflows: investment approvals last year dropped steeply as these countries faced competition from China. South Korea, Taiwan and almost certainly Hong Kong have in recent years become major net providers of FDI capital – notably to other Asian countries. China, too, has become a significant investor, with cumulative investments in Hong Kong put at $13 billion at the end of last year.

... Asia's growing trade share ...

A second factor is that regional trade agreements have increased the attractiveness of a number of countries as a base for export-oriented manufacturing operations. NAFTA – which reduced restrictions on foreign direct investment – has probably had such an effect on Mexico. The EU Association Agreements with eastern European countries may have similar effects. A number of other countries have also dismantled restrictions on foreign investment. Investment in Chile, for instance, has been boosted by allowing foreign investors to exploit the country's natural resources.

... regional trade agreements ...

A final factor has been privatisation. This has been particularly important in eastern Europe: one estimate suggests that more than half of the revenue from privatisation has come from abroad. Privatisation was also important in Latin America last year, particularly in Argentina, the destination of more than one-third of total direct investment in the region. However, privatisation has played little part in Asian flows. As is discussed in Chapter VII, investment related to privatisation represents a change of ownership of existing assets, and not of itself new fixed capital formation.

... and privatisation

V. International financial markets

Highlights

With banks' traditional on-balance-sheet business dampened by credit concerns and a number of other cyclical and long-term factors, a large proportion of total international financing last year continued to be conducted through the securities markets. Both gross and net securities issuance reached new highs, buoyed by declining interest rates and the growing popularity of Euro-medium-term notes (EMTNs), global issues and customised securities linked to derivatives. The growth of international bank assets remained well below the 1987–90 average and included a large volume of securities purchases by banks for their own account, leading to a record overlap between the two market segments. At the same time, the continuing volatility of interest rates and exchange rates further encouraged the use of derivatives, on and off organised exchanges, by a widening range of participants. The unsettled conditions in financial markets may also have been one reason for some revival of interest in gold.

The interdependence of markets worldwide increased last year, further blurring the distinctions between bank credit and securities issues, domestic and international paper, cash instruments and derivatives, and between different categories of derivative products. This growing integration stimulated cross-border investment flows. Thus, new position-taking in foreign exchange, securities and derivatives markets resulted in major banking flows between European centres. In addition, banks boosted their trading and ancillary services, drawing from them a rising share of their revenues. In the securities markets, the increasing use of global bonds, issued simultaneously on domestic and foreign markets, added liquidity, while EMTN programmes with multi-currency options offered flexibility on a scale not available at the purely domestic level. The proliferation of tailor-made products, such as "structured" securities, whose initial risk/return profile is modified by the embedding of derivative features, generated new business and further accentuated the integration of various market segments. Finally, the growing linkages between derivative instruments – futures, options and swaps – helped to raise trading volumes and liquidity, though the net contribution of this to underlying cash markets is hard to ascertain.

Measures were taken in a number of countries to remove competitive distortions and to facilitate the international financing of public sector deficits. Governments offered large liquid issues, encouraged the use of national currencies for Euro-bonds and EMTN programmes and supported the expansion of derivative contracts on government paper. By attracting capital in search of secondary market liquidity, these measures contributed

Estimated net financing in international markets

Components of net international financing	Changes[1]						Stocks at end-1993[2]
	1988	1989	1990	1991	1992	1993[2]	
	in billions of US dollars						
Total cross-border claims of reporting banks[3]	436.1	684.9	608.3	– 54.7	189.9	274.7	6,464.9
Local claims in foreign currency	74.8	122.2	106.0	– 48.7	–25.7	–13.4	1,127.3
minus: Interbank redepositing	*250.9*	*397.1*	*249.3*	*–183.3*	*–30.8*	*96.3*	*3,812.3*
A = Net international bank credit[4]	260.0	410.0	465.0	80.0	195.0	165.0	3,780.0
B = Net Euro-note placements	19.9	8.0	33.0	34.9	40.4	72.7	255.8
Total completed international bond issues	221.6	264.7	239.8	319.7	342.2	466.4	
minus: Redemptions and repurchases	*82.5*	*89.6*	*107.7*	*149.3*	*222.9*	*282.6*	
C = Net international bond financing	139.1	175.0	132.1	170.5	119.3	183.8	1,849.8
D = A + B + C = Total international financing	419.0	593.1	630.1	285.4	354.7	421.5	5,885.7
minus: Double-counting[5]	*69.0*	*78.1*	*80.1*	*40.4*	*74.7*	*121.5*	*705.7*
E = Total net international financing	350.0	515.0	550.0	245.0	280.0	300.0	5,180.0

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] Preliminary. [3] 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. [4] Excluding, on an estimated basis, redepositing between reporting banks. [5] International bonds taken up by the reporting banks, to the extent that they are included in the banking statistics as claims on non-residents.

to market expansion. Ample liquidity, sizable cross-border investments and reflows of principal and interest payments made it possible to accommodate a large volume of public sector issues, a recovery of corporate borrowing demand from some countries and new issues from the developing world.

Interest rate and exchange rate developments were felt in various ways. In the banking sector, the shift by borrowers away from traditional sources of credit in favour of securities issues was more than offset by new business related to foreign exchange transactions and lending against securities. With respect to securities business, the turbulence in the foreign exchange market does not seem to have had a significant impact on the currency composition of issuance except perhaps in the case of the ECU. In the field of derivatives, finally, the expansion in interest rate-related instruments recorded both on and off exchanges was supported by expectations of a general decline in interest rates. On the other hand, the ERM crisis did not lead to a significant overall increase in exchange-traded currency-related derivatives, as participants continued to rely on traditional cash and forward markets for hedging and position-taking.

The international banking market

Moderate growth of bank lending ...

The growth of the gross and net international bank credit aggregates, at $261 billion (4%) and $165 billion (5%) respectively, remained moderate compared with the second half of the 1980s. On the liabilities side, reporting

banks relied heavily on the liquidity available in domestic markets to compensate for the smaller volume of cross-border deposits received from non-banks in the industrialised world and a rundown of deposits from other regions. While the downgrading of a number of internationally active banks may have impaired their ability to attract deposits, there was no evidence of a shortage of loanable funds. In fact, conditions in the market for syndicated loans, where a high proportion of announced facilities ($221 billion) represented refinancing or the establishment of precautionary lines, suggest the opposite. Competition to attract prime names intensified, resulting in a lowering of spreads and fees for such borrowers, and the market opened up to new customers. Nonetheless, ample liquidity did not weaken selectivity, as exemplified by greater cost differentiation between the various categories of borrower.

... but no shortage of loanable funds

Persistence of lender selectivity

Activity by reporting centre and nationality of reporting banks

Contrasts in the activity of individual centres ...

As in 1992, there was a sharp contrast between the expansion of business in Europe and a contraction in the United States and Japan. The declines in claims in the latter two countries were due to the further scaling-back of Japanese banks' international positions. Whereas in 1991–92 the retrenchment of these banks had reflected in large measure a genuine retreat from the international interbank market, last year it stemmed from the trimming of cross-border positions between affiliated offices. Most affected by the

Main features of international banking activity

Uses and sources of international bank credit	Changes, excluding exchange rate effects				Stocks at end-1993*
	1990	1991	1992	1993*	
	in billions of US dollars				
A = Claims on outside-area countries	−11.9	8.1	66.2	17.2	829.3
of which: On non-banks	*– 9.6*	*– 0.7*	*18.2*	*5.3*	*417.5*
B = Claims on entities within the reporting area	680.8	−103.9	95.6	227.1	6,629.6
(1) Claims on non-banks	*284.4*	*100.8*	*90.5*	*118.6*	*1,982.2*
(2) Banks' own use for domestic lending	*147.1*	*– 21.3*	*35.9*	*12.1*	*835.2*
(3) Interbank redepositing	*249.3*	*−183.3*	*−30.8*	*96.3*	*3,812.3*
C = Unallocated	45.4	– 7.6	2.4	17.0	133.4
D = A + B + C = Total gross international bank assets	714.3	−103.3	164.2	261.3	7,592.3
E = D – B *(3)* = Estimated net international bank credit	465.0	80.0	195.0	165.0	3,780.0
A = Liabilities to outside-area countries	92.0	– 12.3	13.7	−15.4	706.7
of which: To non-banks	*37.6*	*– 12.2*	*– 9.0*	*−20.8*	*291.9*
B = Liabilities to entities within the reporting area	626.4	−201.7	100.8	81.2	6,131.4
(1) Liabilities to non-banks	*175.7*	*16.5*	*101.8*	*51.8*	*1,294.9*
(2) Banks' own supply of domestic funds	*165.3*	*20.3*	*54.7*	*97.9*	*1,331.2*
(3) Interbank redepositing	*285.4*	*−238.5*	*−55.6*	*−68.4*	*3,505.3*
C = Unallocated	32.0	55.5	24.9	30.8	447.2
D = A + B + C = Total gross international bank liabilities	750.4	−158.5	139.4	96.6	7,285.3

* Preliminary.

Cross-border banking activity in individual reporting centres

Country of residence of reporting banks	Assets					Liabilities				
	Changes, excluding exchange rate effects				Stocks at end-1993*	Changes, excluding exchange rate effects				Stocks at end-1993*
	1990	1991	1992	1993*		1990	1991	1992	1993*	
	in billions of US dollars									
All countries	608.3	−54.7	189.9	274.7	6,464.9	646.8	−130.7	110.2	32.7	6,266.1
United Kingdom	86.1	−51.9	87.7	50.8	1,052.7	104.6	− 43.7	65.5	36.5	1,134.1
Japan	72.6	−35.9	−57.9	− 6.6	918.6	47.0	−127.9	−128.8	−38.8	688.4
United States	−28.2	6.8	−24.7	−17.1	542.7	−2.5	1.2	38.2	27.1	715.4
France	64.6	−14.5	75.0	64.9	514.6	88.1	18.7	23.6	11.4	492.0
Germany	72.5	10.2	6.1	95.1	446.0	46.8	12.3	50.4	43.1	301.4
Switzerland	45.8	− 6.5	6.0	−12.3	358.6	42.8	0.1	3.8	− 9.7	287.2
Netherlands	21.8	7.3	6.1	4.1	172.8	20.1	3.2	17.9	3.7	155.3
Spain	9.4	8.3	25.4	55.6	116.9	17.9	9.9	14.8	9.1	87.7
Italy	2.4	4.5	4.2	13.6	113.5	6.7	25.0	31.4	−19.8	214.1
Caribbean centres	65.8	4.0	−18.4	8.7	599.5	78.9	1.8	− 11.5	− 1.6	589.5
Asian centres	117.5	− 5.3	21.7	− 0.5	868.2	101.2	− 20.3	17.6	− 2.8	840.4
Other countries	77.9	18.4	58.6	18.5	760.8	95.2	− 11.0	− 12.5	−25.4	760.5

* Preliminary.

process were the Japan Offshore Market in Tokyo and the International Banking Facilities in New York. In fact, more than the whole of the decline in cross-border claims of banks in the United States was accounted for by Japanese banks' affiliates in that country.

... and of different nationality groups of banks

When the international assets of individual nationality groups of banks are aggregated across reporting countries, the slight increase in current dollar terms reported for Japanese banks translates into a fall of roughly $50 billion after exchange rate effects are eliminated, following a cumulative $400 billion (or 20%) contraction in the preceding two years. On the other hand, US banks' international business was supported by their improved credit standing, as reflected in a number of upgradings by rating agencies, and strong positioning in underwriting and trading. There was, in particular, an expansion in the books of their London affiliates and in their direct credit to non-bank customers.

The international activity of European banks varied widely from country to country. While most EU banks expanded their international assets significantly, banks in some other countries sharply reduced their market presence. Nordic banks continued to be burdened by problem loans and, like Italian banks, experienced repayments of foreign currency credits by residents in the wake of the 1992 currency upheaval. In the case of Swiss banks the downturn was more than entirely due to a decline in traditional trustee intermediation, whereas direct lending to the non-bank sector was buoyant. Even for those banks that expanded their cross-border business, there was a tendency to pare down inter-office accounts, the share of which in total reported international claims fell by a further percentage point, to 27%.

Developments by currency

Large currency flows in Europe, due to the ERM crisis ...

The renewed bouts of ERM tension in early and mid-1993 led to major cross-border lending in domestic currency by banks in France, Spain, Italy and Denmark to meet hedging or speculative borrowing demand for their respective currencies. Since the funds were often channelled through the Euro-markets before reaching their final destination, there was a multiplication of recorded transactions. While in France the outflows were of roughly the same order of magnitude as in 1992, they reached unprecedented levels in the other three countries.

... booming securities business and changes in domestic taxation

In addition, booming securities business in Europe was associated with large banking flows. In particular, foreign acquisition of German bonds led to corresponding exports of Deutsche Mark funds by banks in that country. There was a heavy concentration of exports of funds by German banks in the fourth quarter, when the announcement of a forthcoming change in the withholding tax on interest income induced German residents to liquidate part of their holdings in foreign investment funds. The drying-up of funding from that source in turn led banks in the Euro-market to refinance themselves through banks in Germany. Moreover, the absence towards year-end of any visible unwinding of the earlier net outflows through the French, Spanish and Italian banking systems recorded at the peak of the ERM tensions suggests the existence of other explanatory factors. Borrowing may in part have been motivated by the hedging of existing long positions and, as long as long-term interest rates were declining, securities traders may have financed new securities purchases through short-term

International assets by nationality of reporting banks[1]

Country of origin of reporting banks	Total assets					of which: Vis-à-vis non-related entities[2]				
	Changes in current dollars				Stocks at end-1993[3]	Changes in current dollars				Stocks at end-1993[3]
	1990	1991	1992	1993[3]		1990	1991	1992	1993[3]	
	in billions of US dollars									
All countries	845.1	–104.7	– 77.1	217.7	6,260.0	590.2	– 59.0	– 16.9	202.2	4,546.4
Japan	152.9	–190.0	–256.3	5.5	1,683.4	81.4	–129.0	–142.1	29.8	1,105.7
Germany	163.9	29.6	44.6	103.2	786.6	127.0	15.0	25.8	57.5	595.3
United States	–15.4	– 2.3	7.5	37.0	693.4	–25.5	19.8	27.6	36.8	349.9
France	122.3	– 10.5	89.4	33.2	688.4	83.0	– 21.1	79.1	34.5	560.1
Switzerland	34.8	14.2	– 3.1	–10.2	386.6	23.8	8.9	– 9.8	4.4	278.7
Italy	73.5	21.7	9.5	–32.0	374.5	64.6	14.7	– 2.6	–29.0	322.6
United Kingdom	25.2	– 12.4	16.1	38.4	332.2	25.3	– 10.5	18.6	31.0	285.1
Netherlands	42.2	15.8	5.2	8.5	212.9	31.2	15.6	0.9	– 2.5	166.6
Nordic countries[4]	71.8	– 3.2	– 50.0	–38.1	187.5	56.5	– 8.6	– 50.2	–28.0	136.3
Other countries	174.0	32.5	59.9	72.3	914.4	123.0	36.3	35.7	67.7	746.2

[1] Cross-border claims in all currencies plus the foreign currency claims vis-à-vis residents of banks in the following countries: Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Luxembourg, the Netherlands, Norway (from 1992 only), Spain, Sweden, Switzerland, the United Kingdom and the United States (cross-border claims in domestic currency only); the figures for US banks also include the cross-border claims reported by US banks' branches in the Bahamas, the Cayman Islands, Panama, Hong Kong and Singapore. [2] Non-related banks, non-banks and official monetary institutions. [3] Preliminary. [4] Denmark, Finland, Norway (from 1992 only) and Sweden.

Currency composition of banks' cross-border claims[1]

Currencies	Domestic currency					Foreign currency				
	Changes, excluding exchange rate effects				Stocks at end-1993[2]	Changes, excluding exchange rate effects				Stocks at end-1993[2]
	1990	1991	1992	1993[2]		1990	1991	1992	1993[2]	
	in billions of US dollars									
All currencies	48.7	20.8	7.3	186.0	1,728.1	376.3	−74.2	179.3	80.5	3,269.2
US dollar	−23.4	1.6	−18.4	−13.0	482.5	162.9	−78.0	78.5	3.9	1,723.4
Deutsche Mark	29.6	− 6.4	−16.0	75.5	265.3	36.9	−10.5	75.6	36.2	497.6
ECU						21.3	15.8	12.3	5.7	162.0
Japanese yen	19.9	20.8	−28.5	− 4.0	486.5	22.8	−43.6	−43.8	−18.8	143.7
French franc	8.9	5.5	49.5	41.3	145.0	28.9	14.0	6.9	20.2	117.8
Swiss franc	10.4	− 8.2	− 8.5	− 0.4	86.2	9.0	1.1	4.2	−18.0	113.8
Pound sterling	9.0	−10.0	24.0	15.0	99.3	25.1	−18.7	12.9	− 8.3	98.2
Italian lira	− 7.4	3.3	2.8	17.7	25.9	27.0	20.1	8.5	30.0	94.1
Spanish peseta	0.2	1.7	10.6	36.2	45.2	..	..	..	..	..
Other	1.5	12.6	− 8.1	17.8	92.3	42.5	25.7	24.2	29.7	318.6

[1] Banks in industrial reporting countries only. [2] Preliminary.

bank borrowing. No direct statistical evidence is available at present, but there are also strong indications that bank lending against securities is fast becoming an important instrument of liquidity management in Europe.

Business with non-banks inside the reporting area

Large exports of domestic funds by German non-bank residents

On the liabilities side of banks' cross-border business with non-bank entities located inside the reporting area, the main feature of the period under review was the $12.5 billion of new deposits placed by German residents. Avoidance of the German withholding tax introduced in January 1993 was probably the prime factor, although, in the absence of data from Luxembourg, it is not possible to assess the full scale of this movement. At the same time, banks in Germany received $9.6 billion of deposits from non-bank entities located in the Netherlands, presumably representing the onlending of funds raised in the form of securities issues by financing affiliates in that country. The only other major group of non-bank depositors comprised entities located in the United Kingdom and Belgium-Luxembourg, reflecting those countries' role in Euro-currency banking and securities business. In other Group of Ten countries, stagnation in cross-border non-bank depositing reflected either weak conditions in the home market (e.g. in Japan and France) or a shift from Euro-dollar deposits to other types of asset (in the United States, as a result of the steepness of the yield curve).

On the lending side, there were sizable increases in cross-border claims on non-banks located in the United States, the United Kingdom and Germany. With the exception of transactions with entities located in the United Kingdom, which are inflated by the Euro-currency market role of London, new credits tended to be denominated overwhelmingly in the currency of the borrowers and represented a significant proportion of the growth of the corresponding domestic credit aggregates. Increases in bank assets

External assets boosted by banks' own purchases of securities

reflected to a large extent banks' own purchases of securities and, especially in the case of the United States, a recovery in syndicated credits other than for refinancing purposes. Circular movements of short-term funds through the Euro-market to circumvent domestic regulations or taxation also contributed to the expansion.

Business with countries outside the reporting area

Subdued outside-area lending ...

Banks' continuing reluctance to lend to a number of countries, together with borrowers' improved access to bond and equity markets, dampened overall bank credit to countries outside the reporting area. The shift to other forms of financing was most pronounced in Latin America, but was seen also in Asia, whereas banks' caution was chiefly responsible for the decline in exposures to eastern Europe and the Middle East. In the latter

Banks' business with non-bank entities in the Group of Ten countries

Country of residence of non-bank customers	Changes, excluding exchange rate effects								Stocks at end-1993	
	Cross-border positions[1]				*Memorandum item: Domestic bank credit and money*[2]				Cross-border positions[1,3]	*Memo item: Domestic bank credit and money*[2]
	1990	1991	1992	1993[3]	*1990*	*1991*	*1992*	*1993*		
	in billions of US dollars									
Total assets	193.0	84.2	112.2	141.8	*823.6*	*593.0*	*702.5*	*632.5*	1,183.0	*17,173.5*
Japan	63.7	44.1	12.3	13.4	*351.5*	*133.7*	*147.0*	*42.8*	283.3	*5,803.1*
United States	50.1	5.6	29.7	38.1	*–12.5*	*13.0*	*111.1*	*194.6*	344.1	*4,652.0*
Germany	2.5	9.5	35.0	34.7	*141.7*	*174.9*	*191.5*	*199.0*	150.2	*2,213.2*
France	5.6	2.2	6.6	12.0	*153.9*	*85.0*	*84.7*	*65.9*	46.4	*1,615.1*
United Kingdom	10.8	5.6	1.7	36.2	*62.6*	*41.8*	*37.7*	*35.4*	94.5	*946.6*
Italy	23.3	8.0	9.2	7.1	*51.0*	*64.2*	*70.1*	*11.1*	84.6	*496.9*
Switzerland	4.5	– 1.3	1.8	–0.4	*22.5*	*17.1*	*11.3*	*17.3*	23.7	*411.4*
Canada	8.3	3.4	3.1	3.5	*21.8*	*30.8*	*23.6*	*47.7*	43.0	*340.0*
Netherlands	15.8	4.7	–1.9	1.4	*17.4*	*13.3*	*12.4*	*9.5*	56.3	*314.5*
Belgium	3.4	0.9	–0.4	1.0	*14.0*	*8.2*	*18.1*	*13.7*[4]	28.6	*296.6*[5]
Sweden	4.9	1.5	15.2	–5.2	*– 0.4*	*10.9*	*–5.1*	*– 4.6*	28.3	*83.9*
Total liabilities	108.5	4.0	45.3	28.4	*659.0*	*412.8*	*273.1*	*433.3*	766.6	*13,448.1*
Japan	–2.0	– 5.7	–0.2	–2.8	*241.4*	*90.9*	*– 4.4*	*102.9*	18.3	*4,708.5*
United States	22.1	–12.1	–9.2	–3.6	*58.8*	*56.4*	*6.3*	*46.1*	252.5	*4,244.3*
Germany	28.8	11.7	30.8	12.5	*67.8*	*79.4*	*104.6*	*145.7*	165.5	*1,098.9*
France	12.3	– 0.1	6.9	–1.6	*78.3*	*23.2*	*50.0*	*–14.7*	43.0	*892.6*
United Kingdom	14.3	3.9	–2.1	8.0	*89.9*	*47.8*	*30.9*	*44.8*	69.7	*811.5*
Italy	7.3	3.2	5.4	0.4	*58.3*	*67.0*	*25.4*	*37.5*	36.9	*574.8*
Switzerland	10.6	1.3	1.6	–2.2	*8.1*	*8.0*	*6.7*	*17.8*	53.6	*283.4*
Canada	6.2	– 3.6	–1.7	–1.5	*23.2*	*14.5*	*19.3*	*8.8*	11.0	*310.3*
Netherlands	1.6	4.7	8.9	12.6	*14.8*	*11.9*	*15.0*	*17.8*	71.0	*241.4*
Belgium	7.5	0.0	5.8	5.4	*7.0*	*9.1*	*18.7*	*23.4*	40.7	*196.9*
Sweden	–0.1	0.6	–0.8	1.4	*11.5*	*4.6*	*0.5*	*3.2*	4.4	*85.5*

[1] Positions vis-à-vis Belgium include those vis-à-vis Luxembourg. [2] For Japan, M_2+CDs; for the United Kingdom, M_4; for other countries, M_3. [3] Preliminary. [4] First nine months of 1993. [5] At end-September 1993.

Banks' business with countries outside the reporting area

Positions of banks vis-à-vis	Changes, excluding exchange rate effects						Stocks at end-1993[1]	
	Assets			Liabilities				
	1991	1992	1993[1]	1991	1992	1993[1]	Assets	Liabilities
	in billions of US dollars							
Total outside area	8.1	66.2	17.2	–12.3	13.7	–15.4	829.3	706.7
Developed countries	0.4	7.0	3.1	– 3.5	11.2	7.3	156.6	118.1
Eastern Europe	–1.5	3.9	–4.1	1.3	9.7	2.4	88.2	32.4
of which: Former Soviet Union	*1.3*	*5.9*	*–1.8*	*0.3*	*5.8*	*2.3*	*55.1*	*16.3*
Developing countries[2]	9.2	55.3	18.2	–10.1	–7.3	–25.0	584.5	556.2
Latin America[3]	–0.8	14.8	5.9	– 2.3	–2.1	– 4.1	230.6	135.9
China	5.7	6.2	5.5	6.2	1.8	0.5	48.2	49.6
Other Asia	16.6	19.4	14.6	– 1.9	–3.1	– 0.7	189.9	141.0
Africa	–3.6	–1.2	–2.2	0.2	2.6	0.4	39.8	36.5
Middle East	–8.7	16.1	–5.6	–12.4	–6.5	–21.1	76.0	193.2

[1] Preliminary. [2] Including OPEC countries. [3] Including those countries in the Caribbean area which are not classified as offshore banking centres.

case, there was also a massive withdrawal of deposit holdings, reflecting OPEC countries' weak oil revenues, high current account and budget deficits as well as, in the case of Iran, debt servicing difficulties.

... but interbank flows remain important in Asia ...

Asian countries were again the main group of borrowers from reporting banks last year, benefiting generally from good creditworthiness allied to strong economic performance. Interbank flows remained the primary channel for bank financing, with high local interest rates boosting reporting banks' lending to Malaysia, Thailand and, to a lesser extent, Taiwan. There was by contrast a net repayment of credit by India and a slackening of lending to South Korea, as large inflows on other accounts facilitated official debt repayment in both countries. In Indonesia, the easing of monetary policy was one factor behind the reduction in interbank inflows. In spite of efforts by the authorities to moderate the pace of economic growth, new credits to China declined only marginally from the record level of 1992. With the major exception of Malaysia, which accumulated $6.9 billion of new deposits, international bank lending to Asia was not reflected in any significant accumulation of these countries' deposits with reporting banks. In addition to the use of funds to repay official debt or finance current account deficits, three tentative explanations can be cited. The first is linked to the greater attractiveness of financial assets within the region itself, to which domestic deregulation has contributed. The second, partly related to the first, is the development of local and regional financial centres, which has reduced the demand for intermediation through the international banking system. The third is the official reserve policy of certain authorities, with diversification out of bank deposits being one possible reason for the withdrawals made by some countries.

In Latin America, the shift to borrowing through securities issues, and reporting banks' continuing reluctance to lend for other than short-term

trade financing purposes, held back banking flows to the region and resulted in a further rise in the share of maturities up to one year (to more than 50% on average at end-June 1993, the latest date for which such a breakdown is available). At the same time, private residents in these countries continued to repatriate funds held with reporting banks, and these movements generally exceeded the placement of foreign exchange accruals with banks (except in the cases of Chile and Mexico). There were sizable increases in claims on Mexico ($3.8 billion) and Brazil ($2.4 billion), which were more than accounted for by short-term interbank lines and, in the case of Brazil (whose debt restructuring agreement with creditor banks was signed in April 1994), new interest arrears. On the other hand, banks' outstanding exposure to Argentina fell by $1.4 billion as a result of the debt reduction agreement signed in December 1992.

... as do short-term credits to Latin America

In eastern Europe, substantial direct and portfolio investment made it possible for Hungary and the Czech Republic to repay part of their debt to international banks. Write-offs reduced banks' exposure to other countries, although the accumulation of interest arrears by Poland and the former Soviet Union and new officially guaranteed credits to Russia partially offset the decline. Some repatriation of foreign deposits by Polish non-bank residents contributed to the financing of the current account deficit, whereas entities in the former Soviet Union built up foreign assets.

Finally, with respect to other countries outside the reporting area, repayments of bank credit by Australian and South African entities in 1993 contrasted with the $5 billion rise in reporting banks' claims on Turkish entities. Although Turkey was a major Euro-bond issuer last year, the gap between local interest rates and the rate of currency depreciation encouraged short-term banking inflows, until the rate of depreciation accelerated in March this year. The increase in reported claims on Portugal was equivalent to only one-half of the $5 billion of new deposits placed with reporting banks. After the lifting of the remaining capital controls at the beginning of 1993, interbank outflows were the main channel through which renewed pressures on the escudo manifested themselves during the year.

Record lending to Turkey

The securities market

The short and medium-term note market

Large volume of funds available under Euro-note programmes

With $117 billion of new announcements during the year, the cumulative total of Euro-note programmes launched so far exceeded $780 billion at the end of 1993. At the same time, total drawings under existing facilities amounted to a record $73 billion, which was nearly twice as much as in 1992, bringing the actual stock of notes to $256 billion by the end of the year. Net new issues were more than accounted for by Euro-medium-term notes (EMTNs), 60% of which were denominated in currencies other than the US dollar. By contrast, the market for short-term notes, including Euro-commercial paper (ECP), saw net repayments for the first time. The strong growth of EMTNs meant that, at the end of 1993, the outstanding stock of such instruments exceeded the volume of ECP by over 80%.

EMTNs outstanding exceed ECP

Issuing activity in the domestic and international short and medium-term note markets

Sectors and currencies	Net issues[1]								Amounts outstanding at end-1993	
	Domestic[2]				International[3]				Domestic[2]	International[3]
	1990	1991	1992	1993	1990	1991	1992	1993		
	in billions of US dollars									
Short-term notes[4]	96.1	−43.1	18.8	−11.4	18.9	16.5	12.1	−5.4	782.6	109.2
US dollar	35.9	−29.7	17.0	8.6	10.6	10.2	14.6	−7.3	553.8	86.8
Japanese yen	20.1	−26.9	−1.6	−10.3	0.5	−0.3	−0.2	−0.4	98.8	0.2
French franc	12.0	5.3	−3.5	− 7.6	0.0	0.0	0.2	−0.3	38.5	0.0
Spanish peseta	16.7	2.2	5.4	− 4.7	0.0	0.1	0.2	−0.3	18.9	0.0
Canadian dollar	−0.2	0.0	−2.4	1.2	0.0	0.1	0.1	0.4	17.3	0.5
Pound sterling	0.6	− 0.2	0.2	2.3	1.4	0.3	0.0	2.5	8.0	4.2
Deutsche Mark	0.0	5.4	5.1	− 2.7	0.0	1.2	2.5	−0.7	6.8	2.8
Other[5]	11.1	0.7	−1.4	1.7	6.4	5.0	−5.4	0.6	40.6	14.7
Medium-term notes	24.7	43.6	93.7	62.9	14.2	18.4	28.3	78.1	296.7	146.6
US dollar	24.0	42.4	34.4	33.6	6.4	7.0	11.2	31.1	210.4	63.9
French franc	0.0	0.0	55.9	22.3	0.0	0.2	0.5	2.4	74.5	3.0
Pound sterling	0.7	1.2	3.4	7.0	0.4	1.4	2.8	6.2	11.8	10.2
Other[5]	0.0	0.0	0.0	0.0	7.4	9.9	13.8	38.4	0.0	69.6

[1] Changes in amounts outstanding at constant exchange rates. [2] Issues by residents and non-residents in local currency in the local market; OECD countries only, excluding Iceland and Turkey. [3] Issues by residents and non-residents in foreign currency. [4] Data on domestic issues relate to commercial paper only; data on international issues relate to Euro-commercial paper and other short-term Euro-notes. [5] Including the ECU.

Sources: Euroclear, national authorities and BIS.

In the *short-term Euro-note market*, there was a reduction in the amount of paper outstanding but some increase in the volume of new facilities, which may be explained by precautionary arrangements and the enlargement of existing programmes by a number of top-rated borrowers. The decline in the stock of paper was due in large measure to a shift by international banks away from issuance of certificates of deposit in favour of longer-term funding, in particular floating rate notes (FRNs).

Growing popularity of underwritten issues ...

Activity in the *EMTN market* was boosted by investor preference for longer-term paper, the introduction of new currencies and maturities in drawing options and the development of special features. There was in particular a shift away from "best efforts" placement towards the underwriting of issues, which facilitates the raising of large amounts of funds at short notice. A number of transactions – more than half in recent quarters according to certain market sources – were linked to derivative instruments ("structured"), allowing issuers and investors to modify original risk/return profiles according to their own expectations and preferences. The relaxation of issuing constraints in several OECD countries also contributed to market expansion. Since July 1993 Japanese companies have been allowed to tap the EMTN market directly, and applications and notification rules have been simplified. In other countries a number of

... "structured" notes ...

deregulatory measures were introduced (in France, Italy and Switzerland) or proposed (in the United Kingdom) to facilitate the use of the national currency in EMTN programmes.

... and multi-currency options

Multi-currency options have become the norm in EMTN programmes, enhancing the competitiveness of the technique vis-à-vis other forms of funding. Last year, EMTNs accounted for 30% of the total growth of international bonds and notes outstanding and amounted to more than twice the volume of new dollar-denominated MTNs in the United States. Since their inception in 1986 EMTNs have evolved from being a borrowing device bridging the maturity gap between short-term Euro-notes and Euro-bonds to become a more general fund-raising instrument providing a high degree of flexibility (in terms of currency, maturity, size and structure of offerings) on very competitive terms (since funds are raised under the same initial legal and documentation arrangements). However, concerns have been voiced with respect to the liquidity of structured securities issued under such facilities. Against this background, a decisive step was taken recently by the World Bank with the introduction of a global multi-currency note programme incorporating a continuous buyback commitment.

However, flexibility may have been at the cost of liquidity

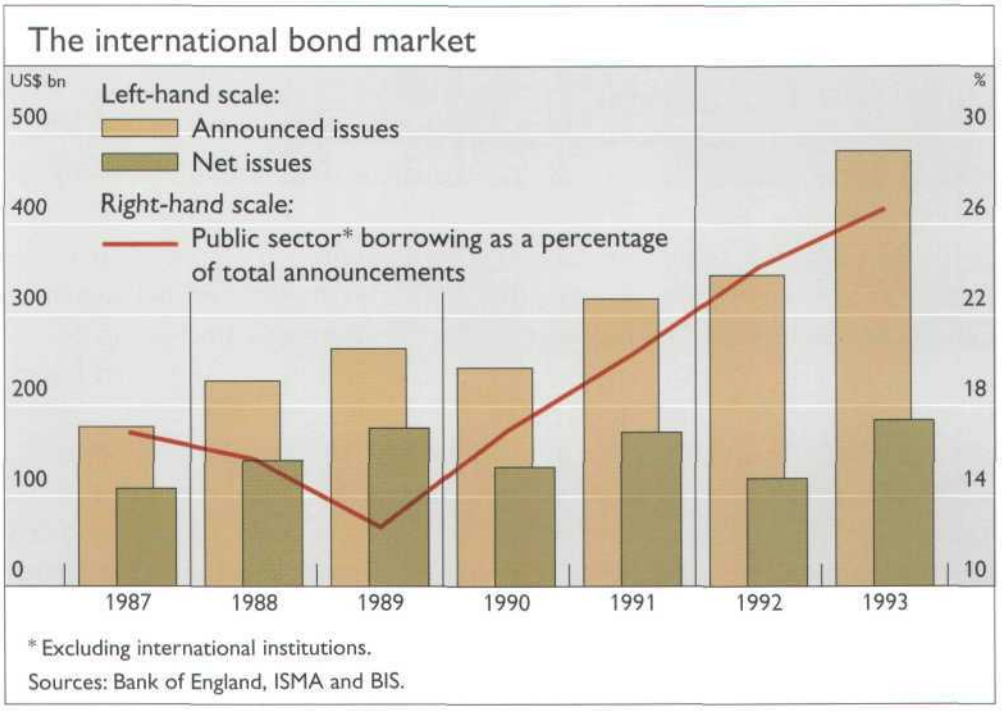
The international bond market

Record gross and net issuance of international bonds

Gross announcements of new issues in the international bond market surged to a record $481 billion, an increase of 40% over 1992. Borrowing demand was buoyed by a combination of declining bond yields, large and rising fiscal deficits in many OECD countries and the need in several countries to bolster foreign exchange reserves. Financial institutions' demand for wholesale funds and capital and substantial borrowing by developing countries also contributed to the boom in gross issuance. After allowing for redemptions and repurchases, net issues were, at $184 billion, slightly higher than the previous record set in 1989. This expansion occurred despite increasing competition from other markets (such as domestic securities and EMTNs).

Growing dichotomy between large liquid issues and tailor-made products

The market was characterised by a growing dichotomy between large liquid issues and tailor-made products. On the one hand, global bonds, which are registered issues launched in both domestic and international markets, continued to gain in importance, with total issues of $29 billion during the year and $59 billion outstanding at year-end. Global bonds now encompass a wide range of currencies (including for the first time last year Deutsche Mark paper), maturities (up to forty years), issue sizes and categories of borrower. On the other hand, there was a proliferation of somewhat less liquid tailor-made or "niche" products. One example is the development of the "dragon" bond market for issues in Asia aimed at tapping the financial resources of the rapidly growing Asian economies. Another can be seen in the rising number of structured instruments such as FRNs with caps (which fix maximum coupons) and collars (which set minimum and maximum coupons). These features, together with expectations of interest rate tightening in the dollar sector after the summer and strong demand for funds by financial institutions, combined to boost FRN issues last year. There was also an increase in Euro-convertible issues by



non-Japanese Asian names in response to the strong performance of local equity markets.

Activity supported by deregulation ...

The further deregulation of domestic and Euro-bond issuance also affected activity in the international bond market. In Japan the Ministry of Finance announced a series of measures which included permission for Japanese banks' overseas subsidiaries to underwrite Euro-yen bonds, an easing of rating requirements for issuance on the domestic market and of other restrictions on Japanese domestic issues, a shortening of the notification requirements for Euro-yen issues by Japanese companies, and, as from 1st January 1994, 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 Swiss authorities also relaxed regulations for foreign Swiss franc issues by requiring (as from 1st April 1993) that only the lead manager be located in Switzerland or Liechtenstein, and by abolishing the stamp duty. In June the Italian authorities authorised foreign banks to become lead managers and to trade in Euro-lira securities on the same footing as Italian banks. This measure was followed by the relaxing of restrictions on Euro-lira issues. As from 1st January 1994 the abolition of VAT on issuance fees in the French franc bond market became effective, following a number of other deregulatory measures.

... and by government borrowing requirements

As regards market structure, growing government borrowing requirements have accentuated the need for more efficient primary and secondary domestic debt markets. Much of this reorientation has involved the use of techniques initially developed in the United States. In the domestic government debt markets, for instance, there has been a shift away from quantitative allocations towards auctions and underwriting by primary dealers. In the secondary markets, higher liquidity has been achieved by moving towards standardised public issues, by rationalising and streamlining official

debt management procedures, by issuing larger volumes within certain maturity bands and new tranches fungible with outstanding paper, and by establishing primary dealers committed to making two-way markets in certain government securities. Authorities have also attempted to improve market efficiency by clarifying or simplifying issuing procedures, eliminating tax impediments (especially those related to withholding taxes) and harmonising settlement procedures.

Increasing worldwide integration of securities markets

This greater homogeneity of national debt markets has contributed to the further integration of securities markets worldwide. As a result, borrowing, investment and trading have increasingly been taking place across markets. This has been reflected in large volumes of domestic government paper being taken up by foreign investors, and in a rising number of domestic issuers shifting to the international market, either to tap foreign resources directly or to arbitrage between domestic and international issuing conditions. The strong growth recorded last year in the Deutsche Mark, French franc, Italian lira and peseta sectors of the Euro-market should be seen in this context. At the same time, domestic paper, including in particular government debt, has increasingly been traded through international clearing houses, which accounted for most of the 65% expansion in secondary market trading reported by Euroclear and Cedel last year.

Limited impact of the ERM crisis on primary market activity

The latest ERM crisis appears to have had a limited impact on primary market activity. Admittedly, strong investment inflows into the German market created favourable borrowing conditions in the recently liberalised Euro-DM segment. In addition, mounting pressures on the French franc in the early summer were associated with a 30% decrease in the volume of new issues in that currency between the second and third quarters, although

Type and currency structure of international bond issues

Sectors and currencies	Announced issues*				Net issues*				Stocks at end-1993
	1990	1991	1992	1993	1990	1991	1992	1993	
	in billions of US dollars								
Total issues	241.7	317.6	343.8	481.1	132.1	170.5	119.3	183.8	1,849.8
Straight fixed rate issues	166.2	256.2	276.7	373.1	80.8	142.0	115.3	193.7	1,389.9
of which: US dollar	*52.2*	*75.0*	*90.9*	*113.1*	*16.0*	*27.9*	*41.2*	*63.8*	*455.1*
Japanese yen	*30.2*	*39.1*	*39.6*	*49.2*	*24.8*	*20.7*	*3.6*	*14.3*	*233.6*
Deutsche Mark	*7.3*	*12.2*	*29.2*	*50.2*	*1.3*	*4.8*	*17.1*	*27.0*	*142.0*
Floating rate notes	42.5	19.0	42.9	68.5	28.2	3.5	23.7	44.7	263.3
of which: US dollar	*15.0*	*4.4*	*25.1*	*43.0*	*7.6*	*–5.1*	*14.8*	*31.7*	*157.1*
Pound sterling	*10.8*	*7.6*	*5.4*	*8.6*	*6.9*	*4.6*	*3.0*	*3.5*	*44.3*
Deutsche Mark	*8.2*	*2.8*	*3.5*	*3.9*	*7.3*	*2.7*	*1.9*	*2.7*	*25.2*
Equity-related issues	33.1	42.4	24.2	39.6	23.1	25.0	–19.8	–54.6	196.7
of which: US dollar	*19.5*	*24.9*	*12.9*	*19.5*	*15.9*	*15.1*	*–20.0*	*–54.8*	*110.0*
Swiss franc	*8.2*	*7.0*	*5.3*	*9.8*	*4.1*	*2.3*	*– 2.8*	*– 3.6*	*43.8*
Deutsche Mark	*1.9*	*4.7*	*2.1*	*2.3*	*0.7*	*3.7*	*1.5*	*– 2.0*	*16.9*

* Flow data at current exchange rates.

Sources: Bank of England, ISMA and BIS.

the success of a large domestic government bond issue in July may also have diverted investors away from the Euro-market. The widening of the ERM bands in August was followed by a narrowing of the yield differential between French franc and Deutsche Mark government bonds and a resumption of French franc issues. Apart from episodes of currency tension, the broadly based decline in long-term interest rates supported issuance of fixed rate instruments across the board, with prospects for capital gains seemingly overriding currency considerations in investors' decisions.

Predominance of interest rate considerations

The most visible sign in bond markets of tensions within the ERM was seen in activity in the ECU market, where repayments have exceeded new issues almost continuously since the third quarter of 1992 and trading on secondary and futures markets has dropped significantly. At the end of 1993, total ECU Euro-bonds and Euro-notes outstanding amounted to $98 billion, representing a 27% contraction from the September 1992 peak. Nonetheless, the decline in investor interest does not appear to have caused market disruption, nor to have prevented the absorption of a continuing, albeit subdued, flow of new issues by European supranational and sovereign entities. The spread between the actual ECU yield and that of the underlying basket of currencies taken individually had become positive in the summer of 1992 but turned negative again in the early part of 1993, and was only temporarily reversed thereafter. With the easing of currency tensions, two developments contributed more recently to improving conditions in the ECU market. On 1st September the Bank of England launched

In the ECU market the stock of paper continues to decline

Issuing activity in the domestic and international bond markets

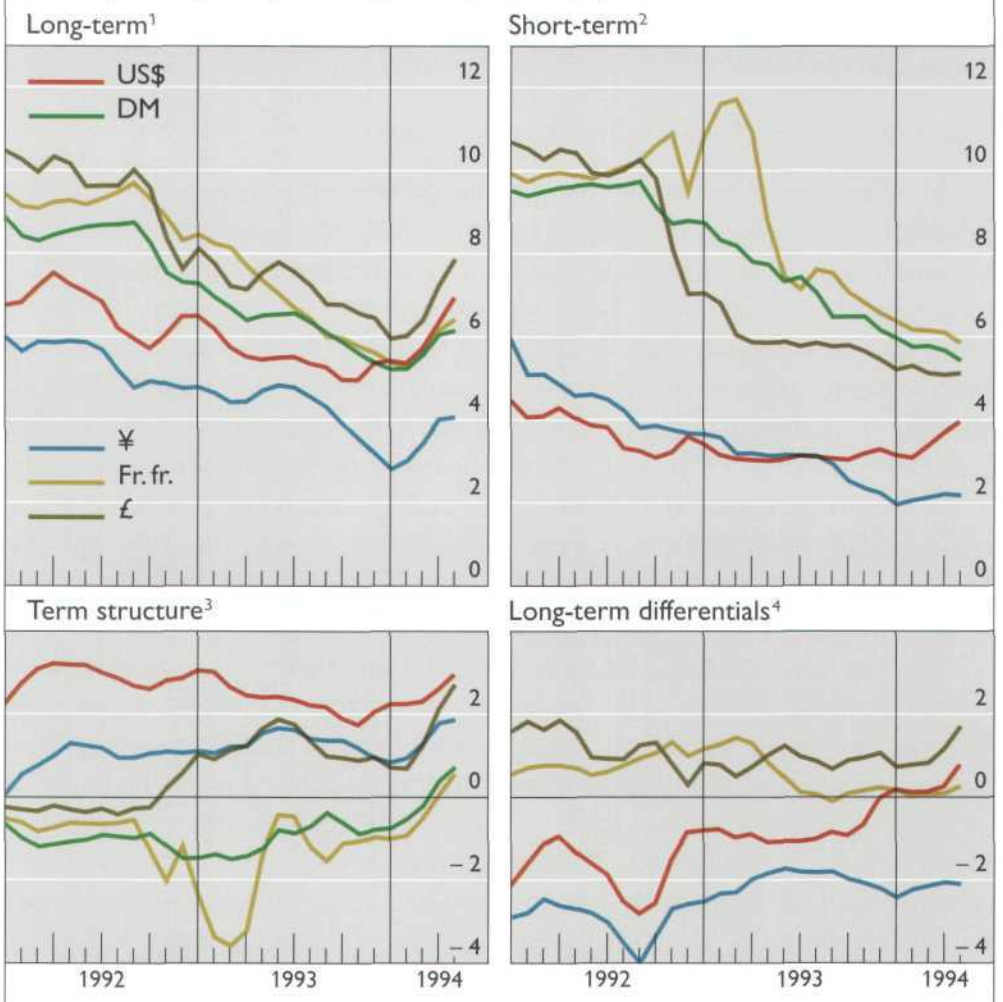
Currencies	Net issues[1]								Amounts outstanding at end-1993	
	Domestic[2]				International[3]				Domestic[2]	International[3]
	1990	1991	1992	1993	1990	1991	1992	1993		
	in billions of US dollars									
All currencies	985.7	1,185.9	1,202.2	1,370.9	132.1	170.5	119.3	183.8	15,561.7	1,849.8
US dollar	462.8	557.1	573.6	529.6	39.5	37.9	36.0	40.7	7,301.8	722.2
Japanese yen	120.5	141.5	141.6	175.3	26.8	20.6	5.9	20.5	3,397.0	252.0
Deutsche Mark	167.0	126.1	188.4	217.9	9.2	11.2	20.5	27.6	1,353.3	184.1
Italian lira	68.3	119.4	69.9	108.2	6.0	9.3	6.2	9.6	738.2	29.5
French franc	38.5	31.6	35.8	56.0	7.8	15.9	21.8	34.1	546.1	92.4
Pound sterling	–19.7	24.0	37.4	77.0	16.1	20.6	11.2	27.2	328.0	146.3
Canadian dollar	22.8	27.5	24.9	26.6	1.6	14.1	7.4	20.4	327.2	80.5
Swiss franc	18.7	16.3	10.3	–0.3	7.4	5.4	–6.7	–2.8	179.6	149.9
Dutch guilder	11.7	13.9	14.6	16.1	–0.3	0.9	4.7	6.0	173.9	32.9
Spanish peseta	4.1	26.0	12.4	51.5	1.6	3.0	1.6	3.9	143.3	10.6
ECU	14.7	6.9	4.1	3.6	11.2	26.2	10.3	–4.2	52.5	90.0
Other	76.4	95.6	89.2	109.4	5.1	5.4	0.4	0.7	1,020.8	59.5

[1] *For domestic bonds, changes in amounts outstanding at constant exchange rates; for international bonds, flow data at current* exchange rates. [2] Issues by residents in local currency in the local market only; OECD countries only, excluding Iceland and Turkey. [3] Issues by residents in foreign markets and in foreign currency in the local market.

Sources: Bank of England, ISMA, national authorities and BIS.

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.

a new ECU clearing facility, offering same-day settlement for ECU-denominated paper, in order to enhance market liquidity and promote an ECU repo market, and towards the end of the year several governments announced their intention to increase issuance in ECUs in 1994.

Abrupt reversal of market sentiment at the beginning of 1994 ...

Coincident with the decision by the US Federal Reserve on 4th February 1994 to raise the federal funds rate there was an abrupt change in market sentiment worldwide. This sharply reversed the buoyant conditions which had prevailed in the primary market for international bond issues. Whereas total announcements in January exceeded the 1993 monthly average by 74%, they fell to 17% below that average in February-March. Within the market, there was a partial shift away from fixed rate to FRN issuance.

At the same time, the offloading of paper on the secondary market pushed trading through international clearing houses to new highs. Transactions in interest rate futures and options also reached record levels, as a result of the liquidation or adjustment of large outstanding positions in

the new interest rate environment. Capital losses were particularly significant for some structured FRNs (notably those including floors on interest payments, which lost their value when actual rates increased) and for Latin American issues, thus raising questions about market liquidity and price formation.

... with major capital losses

Type and residence of international securities issuers

As in 1992, governments and state agencies were the major issuers in the international securities markets. Altogether, they accounted for 37% of the expansion in the total stock outstanding. The most active borrowers were from Canada, Sweden, Italy, Denmark and Finland. Together with the placing of domestic issues with non-residents and measures to enhance marketability, the increasing recourse of governments to international markets is part of an overall policy to enlarge the absorptive base for their debt, reduce borrowing costs and increase debt management flexibility. Most noteworthy in this regard has been the development of large individual global and Euro-bond issues, of EMTN programmes with multi-currency drawing options, and of the trading of domestic government paper through international clearing houses.

Increasing recourse of public sector entities to the market

In the case of the private sector, market expansion was driven by drawings under Euro-note facilities, as record gross bond issues by non-financial corporate borrowers were nearly matched by repayments of past issues. In particular, the upsurge in new international bond issues by Japanese companies, to $54 billion, should be seen in relation to the $93 billion of maturing (mostly equity-related) Euro-bonds from such entities. On the other hand, a marked increase in both gross and net borrowing was recorded by French, German, Dutch, US, Swedish and Canadian entities, reflecting, in the United States and Canada, a recovery of demand from the corporate sector and, elsewhere, high funding requirements of banks and other financial institutions. In the case of French private entities, net new borrowing was overwhelmingly denominated in the national currency, as remaining domestic restrictions continued to favour Euro-French franc issuance.

Issues of bonds by non-financial corporate borrowers almost fully offset by repayments

Faced with subdued borrowing demand from the corporate sector in most major countries, large repayment flows and substantially smaller returns from prime names, investors sought higher margins by lending to lower-quality borrowers. Thus, developing country borrowers more than doubled their net issuance of international debt securities last year, from $12.5 billion to $29.2 billion. Within the group, Latin American names were again predominant, with Mexico raising $9.6 billion, Argentina $6.7 billion and Brazil $5.4 billion. While public sector entities were generally able to achieve better terms, a number of private names made their debut in the market, although with considerable differentiation in issuing conditions and, towards the end of the year, some general resistance by investors to reduced margins relative to benchmark issues. At the same time, Asian borrowers (from South Korea, China, Thailand and the Philippines in particular) stepped up their borrowing, and this movement tended to gather pace in the course of the year. Until recently, Asian borrowers had relied heavily on bank

Broadening of the range of issuers to include many new LDC borrowers

Issuing activity in the domestic and international securities markets[1]

Country of residence	Net issues[2]								Amounts outstanding at end-1993	
	Total				of which: Private sector				Total	of which: Private sector
	1990	1991	1992	1993	1990	1991	1992	1993		
	in billions of US dollars									
All countries[3]										
Domestic	1,446.4	1,349.5	1,433.4	1,514.0	565.2	438.0	398.3	379.6	19,354.4	7,093.4
International	166.7	206.8	153.8	252.8	128.6	142.2	82.5	128.6	2,105.7	1,433.9
United States										
Domestic	594.3	627.1	631.1	605.8	126.3	150.4	135.2	153.8	9,071.0	3,236.6
International	1.3	12.4	14.5	25.3	3.3	12.4	14.6	25.1	210.7	210.5
Japan										
Domestic	170.6	77.6	156.4	204.6	83.2	40.5	55.3	46.7	3,976.9	1,325.8
International	30.4	39.1	−3.3	−41.2	28.7	36.1	−5.0	−43.8	278.7	261.1
Germany										
Domestic	166.9	150.6	189.1	210.2	92.2	95.4	71.0	74.3	1,376.3	738.6
International	1.8	3.7	9.5	21.1	1.7	3.7	9.4	20.7	44.5	43.8
Italy										
Domestic	151.2	166.3	137.1	134.6	45.9	48.9	42.9	40.3	1,188.2	300.9
International	7.7	10.8	−2.6	9.3	2.8	5.3	−2.1	− 1.7	49.7	17.5
France										
Domestic	137.1	73.2	120.7	67.8	109.4	49.3	62.7	3.6	961.2	543.9
International	12.3	22.2	20.0	28.0	12.2	22.4	19.6	24.1	150.8	145.6
United Kingdom										
Domestic	12.4	20.4	31.4	90.8	25.0	−1.5	1.2	14.7	452.5	134.0
International	28.5	29.7	20.7	21.3	27.9	24.7	13.1	20.5	191.8	174.7
Canada										
Domestic	37.3	37.9	34.8	31.5	4.5	0.6	−0.6	4.2	482.0	50.7
International	5.1	16.6	11.0	22.5	−0.2	0.8	−1.7	1.4	154.8	48.8
Sweden										
Domestic	31.2	53.5	15.8	12.7	20.6	13.7	12.2	8.1	214.6	132.9
International	3.8	−0.8	12.8	31.2	5.6	0.5	8.9	17.5	86.8	49.3
Australia										
Domestic	14.8	11.6	12.1	5.5	5.3	0.3	0.3	− 2.2	127.0	27.3
International	4.6	3.2	−2.2	3.9	5.3	3.1	−1.2	4.2	72.8	56.6
Other										
Domestic	130.6	131.3	104.8	150.5	52.8	40.4	18.1	36.1	1,504.8	602.7
International	71.3	69.8	73.4	131.3	41.0	33.2	26.9	60.6	865.1	426.1

[1] All bonds, notes and other debt securities issued by the private and public sector. [2] Changes in amounts outstanding at constant exchange rates, except for data on international bonds, which are on a flow basis. [3] For domestic markets, OECD countries only, excluding Iceland and Turkey.

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

loans to meet their financing needs, benefiting from their high credit standing. However, the officially sponsored development of capital markets and the progressive removal of restrictions on capital movements have facilitated issuance of international securities, with foreign absorption stimulated by favourable economic prospects and, in the case of convertible issues, booming equity markets.

The market for derivative instruments

Rapid growth in both organised and OTC markets ...

Organised and over-the-counter (OTC) derivatives markets both grew rapidly in 1993. Activity continued to be supported by a number of secular factors such as the globalisation of investment, the proliferation of new exchanges and products, a deepening of the user base and expansion of securitisation and structured transactions. Contributory cyclical and other short-term factors included bull markets in stocks and fixed income securities and high currency volatility. An abrupt change in sentiment in bond and equity markets in February and March this year led to record turnover on many exchanges. Derivatives exchanges continued to list new contracts and extended the maturity of existing ones. Competition between exchanges in Europe remained keen, while in the United States organised exchanges attempted to capture OTC business by introducing instruments replicating some of the features of OTC contracts. Nevertheless, in the OTC markets themselves growth continued unabated. While market participants continued to work on new structures and procedures aimed at reducing counterparty risks, several studies were published which addressed the issue of risks in OTC markets (see page 117 below).

... with competition and innovation continuing at a rapid rate

Exchange-traded instruments

Non-US exchange trading in futures and options catches up with that in the United States

Turnover of financial futures and options contracts on organised exchanges continued to increase at a rapid pace in 1993, with the number of contracts traded rising by 22%. As a result of a further strong expansion in activity outside the United States (34%, compared with 12% in the United States) non-US exchanges caught up with their US counterparts. In fact, leaving options aside, the volume of trading outside the United States substantially

Markets for selected derivative instruments

Instruments	Notional principal outstanding					
	1988	1989	1990	1991	1992	1993
	in billions of US dollars					
Exchange-traded instruments	1,306.0	1,768.3	2,291.7	3,523.4	4,640.5	7,839.3
Interest rate futures	895.4	1,200.6	1,454.1	2,157.1	2,902.2	4,960.4
Interest rate options[1]	279.2	387.9	599.5	1,072.6	1,385.4	2,362.4
Currency futures	11.6	15.6	16.3	17.8	24.5	29.8
Currency options[1]	48.0	50.1	56.1	61.2	80.1	81.1
Stock market index futures	27.8	41.8	69.7	77.3	80.7	119.2
Stock market index options[1]	44.0	72.2	96.0	137.4	167.6	286.4
Over-the-counter instruments[2]	..	..	3,450.3	4,449.4	5,345.7	..
Interest rate swaps	1,010.2	1,502.6	2,311.5	3,065.1	3,850.8	..
Currency swaps[3]	319.6	449.1	577.5	807.2	860.4	..
Other swap-related derivatives[4]	..	..	561.3	577.2	634.5	..

[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; excluding instruments such as forward rate agreements, currency options, forward foreign exchange contracts and equity and commodity-related derivatives. [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.

Derivative financial instruments traded on organised exchanges

Instruments	Annual turnover of contracts					Notional principal outstanding at end-1993
	1989	1990	1991	1992	1993	
	in millions					in billions of US dollars
Interest rate futures	201.0	219.1	230.9	330.1	427.0	4,960.4
On short-term instruments	70.2	76.0	84.8	130.8	166.8	4,627.0
of which: Three-month Euro-dollar rates[1]	*46.8*	*39.4*	*41.7*	*66.9*	*70.2*	*2,178.6*
Three-month Euro-yen rates[2]	*4.7*	*15.2*	*16.2*	*17.4*	*26.9*	*1,080.1*
Three-month Euro-DM rates[3]	*1.6*	*3.1*	*4.8*	*12.2*	*21.3*	*421.2*
On long-term instruments	130.8	143.1	146.1	199.3	260.2	333.4
of which: US Treasury bonds[4]	*72.8*	*78.2*	*69.9*	*71.7*	*80.7*	*32.6*
French government bonds[5]	*15.0*	*16.0*	*21.1*	*31.1*	*36.8*	*12.6*
Japanese government bonds[6]	*19.1*	*16.4*	*12.9*	*12.1*	*15.6*	*136.0*
German government bonds[7]	*5.3*	*9.6*	*12.4*	*18.9*	*28.1*	*33.3*
Interest rate options[8]	39.5	52.0	50.8	64.8	82.9	2,362.4
Currency futures	27.5	29.1	29.2	30.7	38.0	29.8
Currency options[8]	20.7	18.9	22.9	23.4	23.8	81.1
Stock market index futures	30.1	39.4	54.6	52.0	60.7	119.2
Stock market index options[8]	101.7	119.1	121.4	133.9	141.8	286.4
Total	420.4	477.7	509.8	634.9	774.2	7,839.3
of which: In the United States	*286.2*	*310.3*	*300.7*	*339.4*	*379.0*	*4,328.9*
In Europe	*64.4*	*83.0*	*110.5*	*185.0*	*255.9*	*1,819.9*
In Japan	*45.7*	*60.6*	*66.2*	*51.7*	*57.8*	*1,193.6*

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

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

Strongest growth in interest rate contracts

exceeded US trading. Growth was particularly rapid in Europe and certain non-OECD countries, especially on recently established exchanges. The increase in trading was most pronounced in interest rate contracts and, with turnover rising by 29%, their share in total financial derivatives activity increased from 62 to 66%. The sharp rise in trading of interest rate contracts in Europe reflected factors such as the growing use of such instruments for the active management of financial risk, demand for enhanced liquidity in domestic bond markets and the continuing process of international portfolio diversification. In addition, trading in financial derivatives was mutually reinforcing to the extent that position-taking in traded options, swaps and other OTC instruments often generates a series of hedging-related trades in the underlying futures markets.

Trading in currency futures grew at a faster pace than in 1992 (24%). However, much of the increase reflected expansion in a narrow range of contracts, principally those in yen and Brazilian cruzeiros. Activity in exchange-

traded currency options rose only marginally (2%). With much of the activity in currency-related derivatives conducted in OTC forward and options markets, the strong pressures which persisted in European currency markets were reflected only minimally in trading on organised exchanges. Nevertheless, some increase in activity was recorded for certain exchange-traded contracts on European currencies. For instance, the widening of ERM fluctuation bands in August was followed by a tripling of trading in French franc options on the Philadelphia Stock Exchange. Futures and options on stock market indices increased by 17% and 6% respectively. In Japan, however, activity continued to be weak, with a 27% decline in the combined turnover of such instruments.

Currency-related contracts traded primarily off exchanges

Over-the-counter markets

Interest rate and currency swaps. In the first half of 1993, the latest period for which data on new contracts are available from the International Swaps and Derivatives Association (ISDA), the notional value of new swaps increased by 27% relative to the second half of 1992 to reach a new record of $2,095 billion. Of this, interest rate swaps accounted for $1,938 billion and currency swaps for $157 billion, representing rises of 29% and 8% respectively over the previous six-month period. Growth in the volume of interest rate swaps rebounded following a slowdown in the second half of 1992, while currency swaps expanded again after a year of contraction.

Interest rate swaps expand rapidly ...

Within the interest rate swaps sector, very buoyant growth in non-dollar currency segments led to a further decline in the share of dollar business (from 43 to 40%). The large volume of non-dollar business may have reflected interest rate uncertainty in Europe and the further development of swaps in Europe and Asia. Swaps with maturities between five and eight years staged a strong comeback, following a contraction in the second half of 1992. The revival of activity in the currency swap market was principally the result of increases in contracts involving the yen and the US dollar. However, new contracts arranged in the first half of 1993 remained below the peak reached in the second half of 1991. There was a significant increase in the average size of currency contracts, suggesting that a relatively high proportion was related to large international bond issues, in which such swaps tend to involve larger amounts than in hedging transactions.

... especially in non-dollar currencies

Revival of currency swaps

Other swap-related derivatives. Following a pause in the second half of 1992, business in swap-related instruments, such as caps, floors, collars and swaptions, rebounded sharply in the first half of 1993, with a particularly strong expansion taking place in swaptions. Much of the increase was linked to the large volume of structured Euro-bond and EMTN issues. For example, structured FRN issues including features such as caps and collars rose from $2.8 billion in 1992 to $19.1 billion in 1993.

Sharp increase in swap-related derivatives

Another indication of the scale of activity in OTC derivatives markets was provided by the record volume of business in warrants on stocks, fixed income securities and commodities. According to private sector data, the aggregate value of warrant issues increased from $9.8 billion in 1992 to $49.1 billion in 1993. Although a large proportion of this was linked to

Growing popularity of warrants ...

Markets for selected derivative instruments traded over the counter[1]

Instruments	New contracts arranged					Amounts outstanding at end-1992
	1990	1991	1992 H I	1992 H II	1993 H I	
	notional principal in billions of US dollars					
Total	1,769.3	2,332.9	1,768.0	1,949.0	2,605.0	5,345.7
Interest rate swaps	1,264.3	1,621.8	1,318.3	1,504.3	1,938.5	3,850.8
Currency swaps[2]	212.8	328.4	156.1	145.8	156.8	860.4
Other swap-related derivatives[3]	292.3	382.7	293.6	298.8	509.7	634.5

[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.

European equities and bonds, there were a significant number of issues on individual stocks or baskets of stocks of firms in developing countries. Warrant issues are generally sold to retail investors who have no access to organised exchanges or who are from countries where markets for equity derivatives are not yet developed. They also allow investors to take tailored exposures to particular equity markets to an extent which would not be possible through organised exchanges or equivalent OTC options. Buoyant activity and the increasing number of intermediaries have reportedly deepened liquidity and reduced price premia over OTC options.

... and of structured securities with derivative features

Last year also saw a strong expansion in the issuance of structured securities in an attempt to preserve current income in a context of declining yields. For instance, some securities were offered with higher initial coupons but with principal repayment linked to financial indices such as stock market indices. In addition, the greater flow of cross-border equity investment, combined with the high degree of uncertainty prevailing in currency markets, spurred the development of products which allow investor participation in foreign equity markets while removing the attendant foreign exchange risk. The widening of the ERM bands in August also generated greater interest in products such as options on baskets of ERM currencies.

Other market developments and policy issues

Competition between exchanges in Europe

Competition between exchanges remained intense in 1993. This was most evident in Europe, where LIFFE continued to take advantage of London's central position in global cash markets by expanding its listing of instruments related to foreign securities. Meanwhile, a number of other European exchanges attempted to strengthen their competitive position vis-à-vis LIFFE by entering into mutual cooperation agreements and extending the range of products offered. As an illustration of the first element of this strategy, the MATIF in France and the Deutsche Terminbörse (DTB) in Germany established a trading partnership providing for reciprocal trading of certain interest rate contracts. One example of the second leg of this strategy was the introduction by the DTB of a Deutsche Mark interbank contract

sharing some of the characteristics of LIFFE's Euro-DM contract. The DTB also introduced a long-term contract (on 15 to 30-year Bunds and Treuhand bonds) following the German Government's decision to resume issuance of longer-term bonds.

US exchanges introduce contracts to compete with OTC markets

In the United States exchanges concentrated on creating products and services that would enable them to compete more effectively with OTC markets. The Chicago Board Options Exchange (CBOE) introduced so-called "flex" options on equity indices which offer some of the features of customised OTC instruments, such as the possibility to select strike price, term (up to five years) and exercise type (American or European), while at the same time providing the benefits of reduced counterparty risk and the price transparency offered by exchange-traded instruments. The CBOE's innovation was taken up by other US exchanges with contracts on equity indices and US Treasury securities. Such contracts could improve the liquidity of options markets by facilitating the entry of new (lower-rated) counterparties. Meanwhile, the Chicago Mercantile Exchange (CME) and Singapore Mercantile Exchange (SIMEX) introduced currency contracts designed to replicate OTC foreign exchange cash transactions. The CME's "rolling spot" contracts, for instance, allow firms to replicate spot transactions but without automatic settlement after two days (as is the case in the cash market) and without the exchange of gross amounts. By netting profits and losses on intraday trading, the settlement of transactions through an exchange should reduce the number and volume of interbank transactions and therefore delivery risks. The posting of margins at the exchange should also substantially reduce counterparty risks.

Measures continue to be taken by market participants to reduce risks ...

Concerns about rising counterparty exposures in OTC markets have in recent years led market participants to respond in a number of ways. These include: the development of master agreements incorporating netting provisions; clauses providing for the termination of contracts in the event that a counterparty is downgraded, certain exposure thresholds are reached, or other adverse changes occur in a firm's financial condition; the imposition of collateral requirements on outstanding OTC positions; periodic marking to market and settlement of open positions; the reduction of credit lines to lower-rated counterparties and the capping of exposures to better-rated ones; and the establishment of separately capitalised derivatives subsidiaries.

... but concerns remain

While several of these measures have served to reduce counterparty risks, concerns remain regarding the implications of collateralisation and termination clauses, since in periods of financial market instability it may be very difficult to evaluate collateral needs or to obtain the required collateral. Furthermore, imposing or raising collateral requirements in the event of a downgrading of credit ratings or financial market turbulence could accentuate the price volatility of the pledged financial assets. Finally, while derivatives subsidiaries have been established with complex legal and operating frameworks to shield them from the risk of bankruptcy of the parent company, doubts remain as to whether they would be generally immune from the contagion problems besetting conglomerate structures in the event of difficulties at affiliates.

Discussions concerning OTC clearing houses are pursued

Discussions about the establishment of clearing houses for OTC derivatives trading continued last year. If properly designed, such facilities could substantially reduce counterparty risks in OTC derivatives. However, there are technical and practical obstacles to extending the clearing house concept to OTC markets, owing to the customised nature of transactions and a lack of agreement concerning the valuation of many instruments (see Chapter VIII). Moreover, highly rated counterparties may have limited incentive to participate in such arrangements. Nevertheless, a number of financial intermediaries and exchanges began offering clearing services for OTC products. For example, one investment bank, acting as third-party agent, introduced a "margining service" for OTC transactions designed to monitor counterparties' exposure, make margin calls and periodic revaluations of collateral and provide custodial facilities for the assets pledged. Because of the sensitivity of financial information pertaining to margin flows, such margining services may be of greatest use to second-tier participants (such as pension funds and insurance companies) which do not enter into direct competition with major commercial and investment banks. The Chicago Board of Trade (CBOT) also announced plans to introduce a collateral management service for OTC transactions and may eventually launch a full clearing house arrangement for semi-standardised swaps. Several other exchanges are working on similar schemes.

Published studies call for...

A number of studies of derivatives markets were released by central banks, regulatory authorities, legislators and market participants in the course of last year. A report published in July by the Group of Thirty received particular attention. Prepared mainly by market participants, the report provided a comprehensive survey of activity in derivatives markets, their risks and the procedures for managing those risks. It also contained a set of recommendations on sound practice for dealers and end-users designed to strengthen risk management and improve market transparency. In addition, the report called on regulators and legislators to recognise netting arrangements, remove legal and regulatory uncertainties, eliminate tax distortions affecting the use of derivatives and develop internationally consistent accounting and reporting procedures. The report concluded that the growth of derivatives markets had not introduced risks of a fundamentally different nature from those already present in financial markets. It also argued that systemic risks had not been significantly aggravated by derivatives activity and that supervisory concerns could be addressed within existing regulatory structures. Although the report was widely welcomed in regulatory circles for setting out principles of sound risk management, it was generally felt that a more extensive analysis of the public policy issues raised by derivatives would be useful. These extend beyond the sound management of individual firms to include market transparency, customer protection and, more generally, systemic issues.

... improved risk management and transparency

Need for broader analysis of policy issues

Heavy trading losses incurred during the year by some corporate users of derivative products added to concerns about the way in which these instruments had been used. It appears that the losses were largely the result of either inappropriate hedging strategies, inadequate internal control

mechanisms (which had allowed fraudulent or unauthorised trading to take place), outright speculation aimed at boosting income in a context of declining returns on financial assets, or miscalculation of the tax implications of derivatives.

These losses and the ongoing debate about the potential risks posed by derivatives markets have accentuated the need to develop more appropriate measures for the exposures which derivatives actually entail and for the size of markets in comparison with cash markets. The report on Recent Developments in International Interbank Relations, the "Promisel Report", published in 1992 by a working group established by the Group of Ten central banks, had already called for improvements in the quality and coverage of market statistics on OTC derivatives. At present, data on derivatives markets are collected by exchanges, various industry groups, such as the Futures Industry Association and the International Swaps and Derivatives Association (ISDA), and national regulators (as part of their supervisory duties). Some information is also available in the published accounts of market-makers and end-users. Recently, much attention has centred on the notional amount of swaps outstanding as reported by ISDA. While the survey conducted by ISDA is currently the most comprehensive for swaps and swap-related transactions, the data collected represent only a partial indicator of OTC market activity. OTC business is much broader, incorporating forward and option-type instruments on currencies, fixed income securities and equity assets as well as a vast array of cross-product swaps and structured securities. In May this year, the Chairman of the Committee of central bank Governors of the Group of Ten countries announced that the Committee had approved plans to launch a global survey of activity in the derivatives markets, to be conducted in conjunction with the triennial Central Bank Survey of Foreign Exchange Market Activity, the next of which will take place in April 1995.

Gold

Revival of investor interest in gold ...

After several years of weak interest, investors in North America and Europe again found gold to be an attractive investment medium last year. Falling interest rates, which reduced the opportunity cost of holding the metal, and volatility in currency and financial markets combined to boost market demand. Although the recession in Europe weakened demand for jewellery and other gold products, there was a modest increase in gold consumption in North America as economic growth gathered pace. In the aggregate, however, consumption demand fell back from the peak level reached in 1992.

... met by large supply from official holders ...

On the supply side, mine output increased slightly. The most noteworthy feature was the unusually large amount of gold disposed of by official holders. In fact, net sales were larger than in any year since 1979. This was principally because of the settlement of a 400 tonne forward transaction undertaken by the Netherlands in late 1992 and record sales by Canada within the context of its long-standing programme of reducing its official holdings.

Estimated market sources of gold					
Items	1989	1990	1991	1992	1993
	in tonnes				
World production[1]	2,070	2,135	2,160	2,235	2,280
South Africa	608	605	601	614	620
United States	266	294	296	329	336
Australia	204	244	236	244	247
Former Soviet Union	285	270	252	237	244
Canada	160	167	177	160	151
China	86	95	110	118	127
Brazil	101	84	79	77	76
Papua New Guinea	34	34	61	71	62
Others	326	342	348	385	417
Net supply from official stocks[2]	180	30	70	305	565
Net supply from financial operations[1,3]	140	235	65	185	135
Total (= estimated non-monetary absorption)	2,390	2,400	2,295	2,725	2,980
Memorandum items:	*annual averages, in US dollars per ounce*				
Market price of gold					
in current US dollars	*381*	*384*	*362*	*344*	*360*
in constant US dollars[4]	*119*	*114*	*103*	*95*	*97*

[1] As published by the Gold Fields Mineral Services Ltd. (London). [2] As reported to the IMF. [3] Including gold loans, forward sales and option hedging. [4] Deflated by the US consumer price index (1970 = 100).

... and leading to some firming of the gold price

Owing to the buoyancy of investment and speculative demand, prices firmed (in real terms) for the first time in six years. Quotations rose to over $390 at the end of the year, 17% above the level at the end of 1992. In the first four months of 1994, gold traded in the $370–395 range. Derivatives markets played an important role in the gold market last year. Various gold-linked financial instruments allowed investors to take positions in the market without bearing the costs of holding the physical commodity. Hedge funds and the proprietary trading desks of the bullion houses were reported to have been present in the market on a variety of occasions. Price volatility increased substantially in the spring of 1993 and remained high up to September. This in turn encouraged dealers who trade their portfolios actively to pay greater heed to the gold market.

VI. Monetary policy

Highlights

Last year, monetary policy in the industrial countries reflected the desire of monetary authorities to permit a gradual recovery of real economic activity while consolidating and extending the gains that had been made against inflation.

In the United States policy remained accommodative in 1993 but was tightened moderately in early 1994 with a view to forestalling a revival of inflation as the pace of expansion quickened and economic slack diminished. Elsewhere in the industrial world interest rates continued to fall. The easing of monetary policy in those countries which had floated or devalued their currencies in late 1992 or early 1993 continued. The pace of the easing in Germany took account of slowly abating wage and price pressures. In other ERM countries the relaxation of policy mainly took place following the widening of the exchange rate fluctuation bands when their currencies, after first weakening, recovered against the Deutsche Mark.

With short-term interest rates lower, developments in asset prices were somewhat more positive in 1993 than in the previous year. The decline in real estate prices came to an end in some countries and slowed in others, although the weakness of property prices is still hampering economic recovery in Japan and many European countries. Bond prices were on a rising trend for most of the year, and equity prices were also generally buoyant, with the notable exception of Japan. In early 1994, however, financial asset prices suffered a setback.

The slow response of economic activity to the lowering of short-term interest rates and the differences between countries in the maturity and interest rate basis of financial contracts highlighted by exchange market turbulence have drawn increased attention to the monetary policy transmission process and illustrated the need for flexibility in the implementation of policy.

Monetary authorities have nevertheless continued to stress the importance of price stability as the ultimate goal of monetary policy. However, their approaches to achieving this objective now differ considerably, particularly with respect to the use of intermediate objectives and the publication of quantified inflation objectives.

Monetary policy and economic activity

Last year central banks in the industrial countries faced difficult choices as to how much they could do to accommodate the recovery of economic

activity without endangering what had been achieved with regard to price stability. The continued existence of slack in the United States and the weakening of economic activity in Japan were the major considerations determining the stance of monetary policy in these countries. In most European countries, however, policy was in varying degrees constrained by concern that rapid monetary easing might revive inflationary pressures either through its direct effect on expectations or indirectly via its effect on the exchange rate. Differing judgements about the consequences of lowering short-term interest rates contributed to differences between the stance of policy in ERM countries and elsewhere.

Indicators of domestic monetary conditions

Short-term interest rates

Assessing the impact of monetary policy on the economy requires the use of a range of indicators. Short-term interest rates are the instrument that is most directly under the control of policy-makers, but they are not necessarily the most important variable affecting economic decisions. The influence of monetary policy on economic activity also depends on long-term interest rates, exchange rates and domestic asset prices, as well as the (unobservable) effects of policy changes on inflation expectations.

The term structure of interest rates

The spread between nominal short rates and bond yields has been interpreted in various ways. An upward-sloping yield curve indicates that short-term rates are low relative to their expected average value in the future and thus that monetary policy is relatively easy. But there is no mechanical link between policy-induced changes in short rates and the behaviour of long rates. When reductions in short rates are seen as part of a credible strategy aimed at achieving price stability, they may be accompanied by falls in bond yields. If, on the other hand, they are seen as reflecting a wish to give greater priority to growth over containing inflation, they may have the opposite effect. In most countries the impact of changes in policy-influenced rates on output depends significantly on the behaviour of long rates, which highlights the importance of credibility in influencing the response of bond markets to changes in monetary policy. During 1993, falling short-term rates in Europe elicited a parallel response in long-term yields, but in early 1994 long and short yields moved in opposite directions, re-establishing in most countries a positively shaped yield curve.

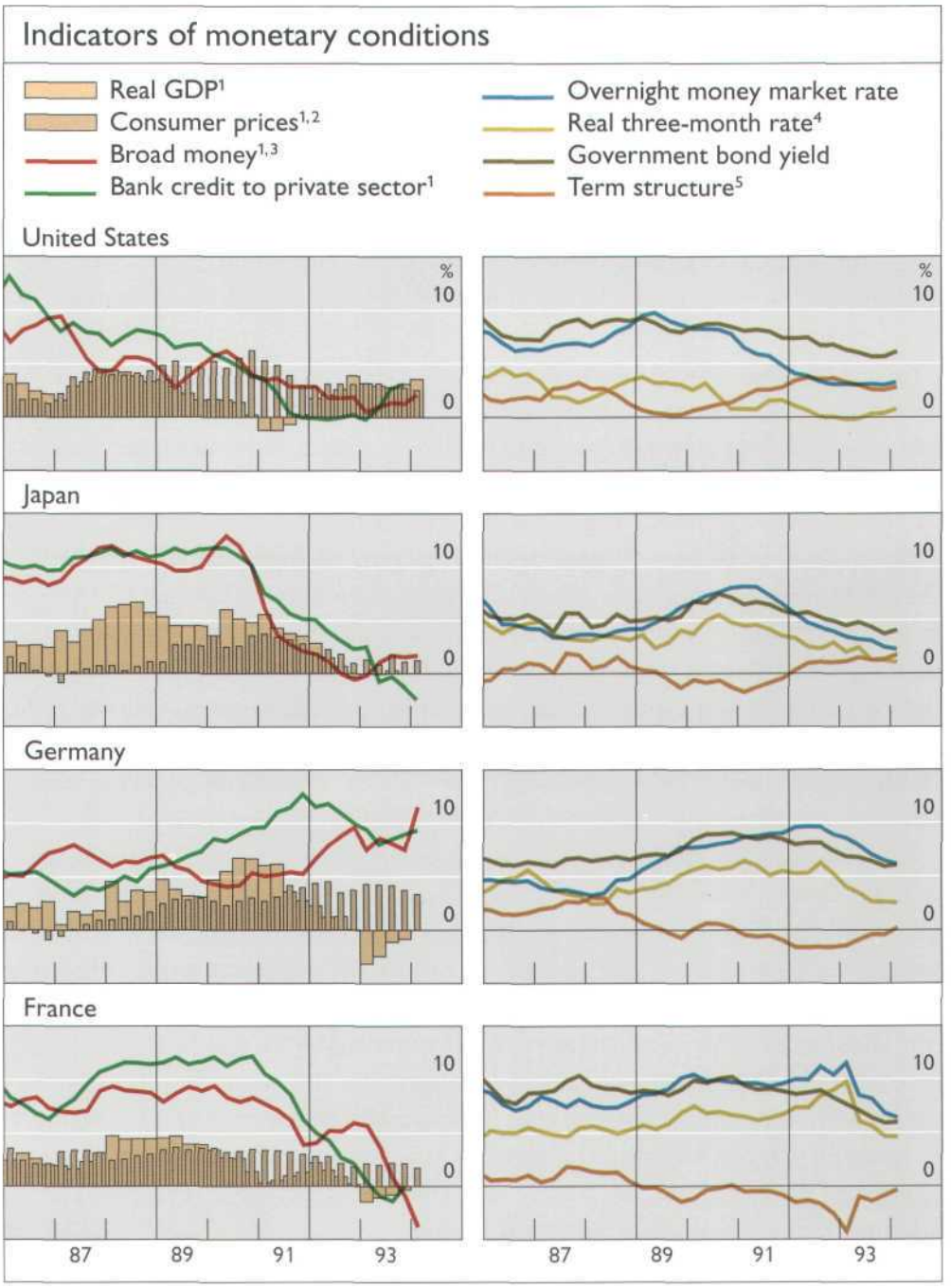
Developments in monetary and credit aggregates

While the instrument of monetary policy is the control of short-term interest rates, monetary growth rates have been widely used for judging the stance of monetary policy. An increasing number of countries, however, have found the demand for money to be insufficiently stable for monetary growth rates to be the primary guide for the implementation of policy in the short run. Changing patterns of intermediation in the financial system induced both by innovation and by changes in the interest rate environment have tended to weaken the relationship between the development of monetary aggregates and the level of final demand. Nevertheless, in many countries the behaviour of money and credit is assigned a role, sometimes an important one, as an information variable.

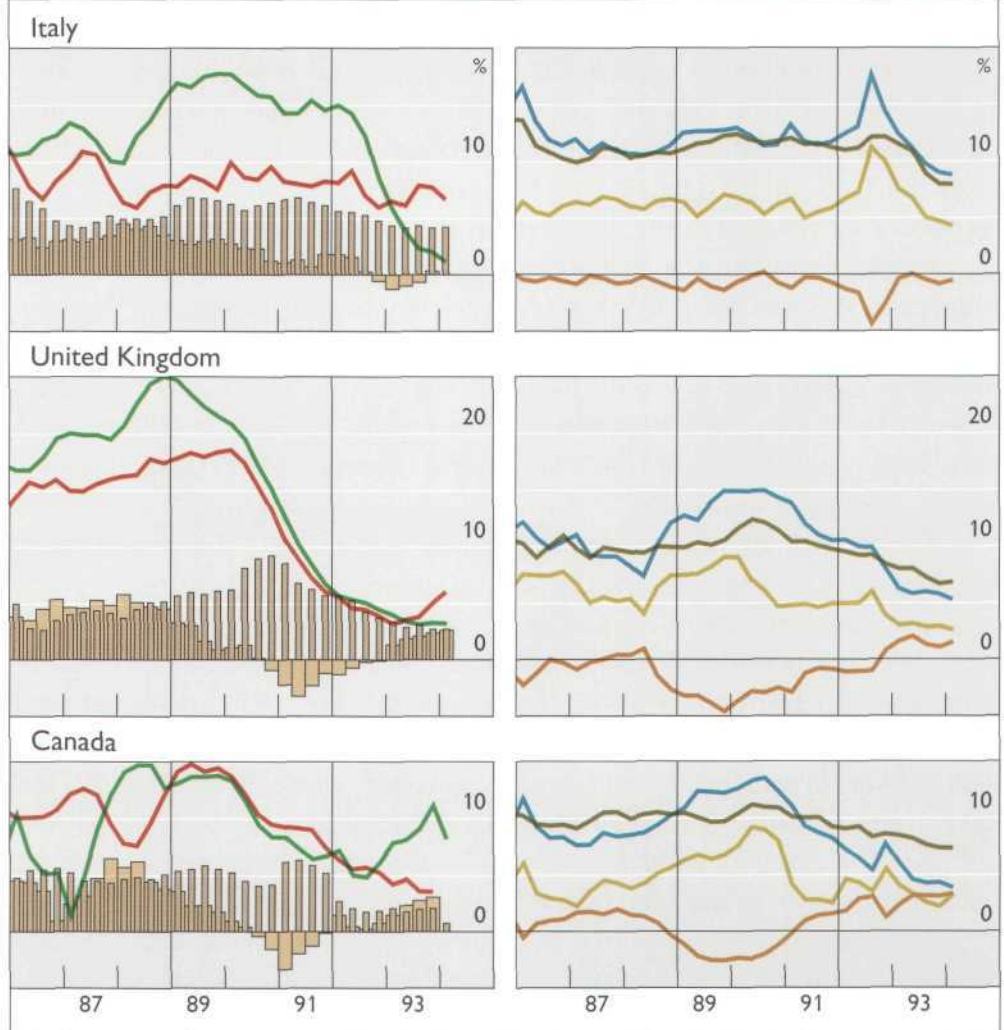
Monetary policy and monetary conditions in the largest economies

Monetary policy in the United States ...

In lowering short-term interest rates in the United States in the last few years the Federal Reserve had expressly taken into account unusual financial constraints on economic activity associated with corporate and household debt burdens. Although short rates did not fall further in 1993, the declines in bond yields in the first three quarters of the year facilitated balance-sheet restructuring by enterprises and households and contributed to a quickening of interest-sensitive investment spending, which helped to absorb spare productive capacity. Deposit institutions began to ease tight credit terms, although their interest rate margins remained wide. Bank lending



Indicators of monetary conditions (continued)



[1] Changes over four quarters. [2] For the United Kingdom and Canada, RPIX and CPI_{ex} respectively (see the graph on page 132). [3] For the United States and Italy, M_2; for Canada, M_2+; for Japan, M_2+CDs; for Germany and France, M_3; for the United Kingdom, M_4. [4] Three-month money market rate minus consumer price inflation. [5] Ten-year government bond yield minus three-month rate.

expanded slowly but non-bank financing in the bond and equity markets was unusually large. Weak growth of the broad monetary aggregates, partly reflecting the large placements in bond and share mutual funds, resulted in a further rise in the income velocity of M_2. In early 1994, a first upward adjustment of the federal funds rate left short-term rates still close to the core inflation rate, but produced a much sharper reaction in bond markets.

... Japan ...

Overnight money market rates in Japan were brought down further in the autumn of 1993, when a weakening of business confidence and investment further undermined growth prospects. Continuing slow expansion of M_2+CDs and a decline in bank credit to the private sector reflected a retrenchment of real investment and balance-sheet adjustments by non-financial corporations, as well as the response of banks to loan losses. Short-term interest rates reached unprecedentedly low levels in nominal

terms. However, as consumer prices barely increased and producer prices actually fell last year, real short rates were probably somewhat higher than in the United States.

... Germany, France, the United Kingdom, Italy ...

Short-term interest rates in the four largest European economies were at high levels in late 1992 and early 1993 in relation both to current rates of increase in consumer prices and to bond yields. In real terms, short rates fell in both the United Kingdom and Italy after the floating of their respective currencies. In the British case, the decline took place over about six months following the floating of sterling, whereas in the Italian case reductions in rates were more gradual and continued throughout the year. Short-term interest rates in Germany were lowered in stages as inflationary pressures eased, and following the widening of the ERM bands real short rates in France also fell substantially. Bond yields in Germany, France and Italy were on a generally declining course after mid-1993 and remained below short rates until early 1994.

The growth of M_3 in Germany stayed high in 1993 and the demand for long-term credit was strong, though demand for short-term credit weakened substantially. The upsurge in monetary growth in late 1993 and early 1994 partly reflected special influences linked to tax changes. A quickening of the expansion of M_4 in the United Kingdom was associated with a recovery of bank lending to the personal sector, though companies' demand for broad money and credit remained weak. In France M_3 and bank credit recorded falls, in response to the weakness of economic activity but also as a result of shifts in lending and deposits to the financial markets following changes in the tax treatment of money market funds. Fast growth of M_2 in Italy in 1993 seems to have been largely attributable to declines in interest rates.

... and Canada

In Canada monetary policy had the twin aims of easing monetary conditions in the face of a large output gap and resisting downward pressure on the exchange rate that might threaten the stated inflation objective. Short-term interest rates generally declined during 1993. In the spring of 1994, however, short-term interest rates again rose well above rates in the United States, despite long-standing inflation differentials in favour of Canada, as the authorities attempted to limit the weakening of the Canadian dollar. Bond yields remained higher in Canada than in the United States, apparently because of risk premia associated with political uncertainties and large budget deficits, especially in certain provinces. Though influenced by preferences of business borrowers and lenders for capital market instruments, rates of expansion of bank credit and M_2+ reflected the slow pace of recovery.

Monetary policy and monetary conditions in other industrial countries

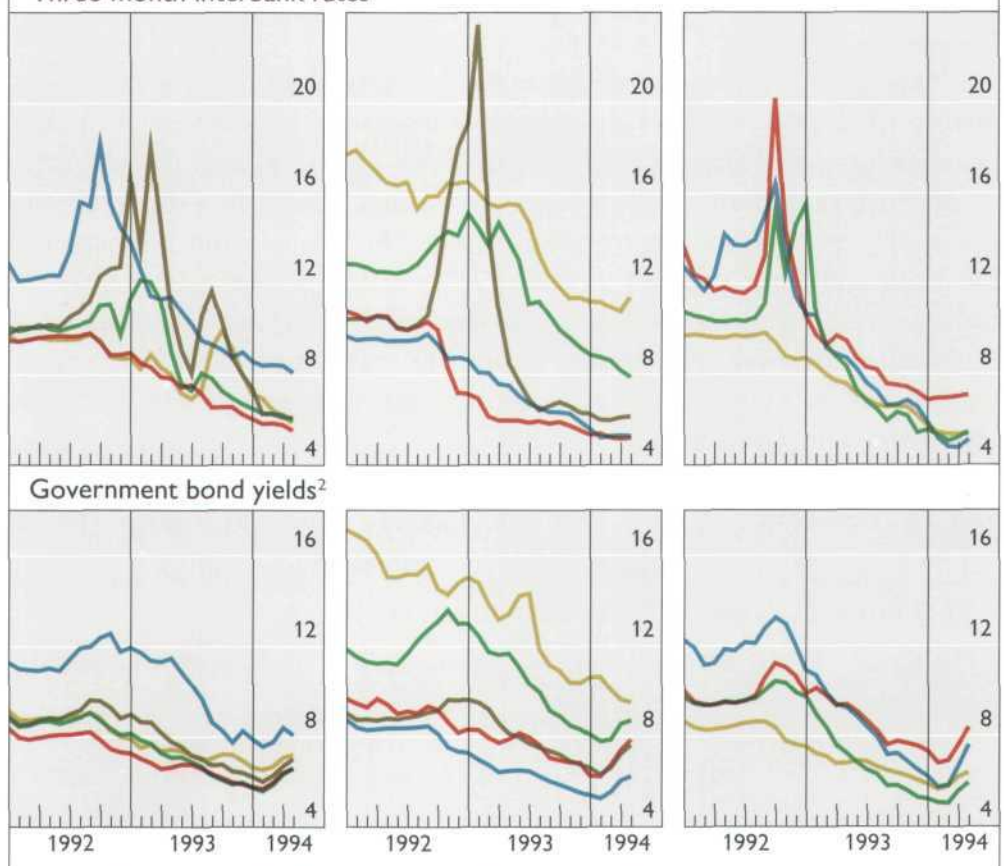
Monetary policy in ERM countries

In many countries interest rate policy has continued to be strongly influenced by developments in exchange markets. In some ERM countries efforts to defend exchange rates resulted in substantial rises in short-term interest rates in early and mid-1993. Policies remained cautious after the widening of the ERM bands, reductions in rates being generally geared to restoring

Short and long-term interest rates in European countries

Monthly averages

Germany
France
Italy
Belgium
Denmark
United Kingdom
Spain
Netherlands
Portugal
Ireland
Sweden
Norway
Finland
Austria



[1] For Portugal and Sweden, Treasury bills. [2] Representative (mainly ten-year) bonds.

interest rate differentials vis-à-vis Germany to pre-crisis levels. By early 1994 currency spreads within the ERM band were comparable to those that had existed before the widening of bands.

Finland, Norway and Sweden

Nominal short-term rates fell below German rates in only a few European countries in 1993 and early 1994. Apart from the United Kingdom, these included Finland, whose currency had depreciated but rose in real effective terms last year, Norway, which held the krone stable against the ECU after a small depreciation in late 1992, and the Netherlands, whose currency remained closely linked to the Deutsche Mark. Short-term interest rates in Sweden declined substantially but remained well above those in Germany.

An assessment of the evolution of monetary policy and monetary conditions has to take account of developments in exchange markets. A decline in the exchange rate, with unchanged interest rates, represents an effective easing in monetary conditions. It can add to inflationary pressures, other

things being equal, both through its effect on the demand for net exports and because of the direct pass-through effect of higher import costs.

Effect of exchange rate changes on monetary conditions

Over the past two years movements in the real exchange rates of European countries have diverged substantially. In Sweden and Finland, as in the United Kingdom and Italy, monetary conditions were eased by depreciation of the currency in 1992–93. In Spain and Ireland, economic activity was stimulated by ERM realignments which implied substantial falls in real effective exchange rates. The real effective exchange rate changed little on balance over the period in Belgium but appreciated in the Netherlands and Denmark.

Changes in real short-term interest rates

Divergent movements in real exchange rates were a more prominent feature of developments in the smaller European economies in 1993 than divergences in real interest rate changes. Since early 1992 real interest rates in all European countries have fallen on balance. Between early 1992 and the spring of 1994 short-term interest rates in Belgium, the Netherlands, Denmark and Spain declined by about 2–3 percentage points in real terms, broadly in line with the decline in Germany. Real short-term interest rates in Sweden, Norway and Finland appear to have fallen somewhat more overall, but in both groups of countries real short-term rates remained above those in Germany.

Long-term interest rates

While declines in short-term interest rates have helped to pave the way for economic recovery, long-term interest rates play a large role in

Real interest rates and real exchange rates

Countries	Real short-term interest rate[1]					Real exchange rate change[2,4]	
	level[2]			change[3]			
	March			twelve months ending in March			
	1992	1993	1994	1993	1994	1993	1994
Germany	4.9	3.7	2.6	–1.1	–1.1	9.4	0.7
France	7.2	9.1	4.8	1.9	–4.3	7.7	0.4
Belgium	6.9	5.4	3.9	–1.5	–1.6	2.4	– 2.7
Netherlands	5.7	5.1	2.3	–0.6	–2.8	6.0	0.3
Denmark	7.5	13.4	4.4	5.9	–8.9	7.6	– 3.7
Ireland	6.9	9.1	4.4	2.1	–4.7	– 3.7	– 4.2
Spain	5.7	10.6	3.2	4.9	–7.5	– 9.6	–16.2
Italy	6.9	7.1	4.2	0.2	–2.9	–21.5	– 4.1
United Kingdom	4.9	2.5	2.7	–2.4	0.2	–14.6	1.4
Sweden	9.3	4.8	5.4	–4.5	0.6	–25.0	– 9.5
Norway	7.8	6.3	4.3	–1.6	–2.0	– 0.4	– 3.3
Finland	9.4	6.2	4.4	–3.2	–1.6	–25.9	1.5
Japan	3.1	2.1	1.1	–1.0	–1.0	21.0	16.8
Canada	5.1	3.4	4.2	–1.7	0.8	– 5.0	–10.1
Australia	5.9	4.1	3.6	–1.7	–0.6	– 7.3	– 2.7
Switzerland	2.7	1.5	2.6	–1.2	1.1	– 0.1	4.8

[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] In percentages. [3] In percentage points. [4] Effective rates calculated on the basis of unit labour costs.

Sources: National data and BIS.

the financing of households and non-bank enterprises in many continental European countries, as is discussed below. Interestingly, long-term rates in most European countries whose currencies had depreciated fell by more than yields in Germany last year. Indeed the differentials narrowed even in comparison with their early 1992 pre-crisis levels. This no doubt partly reflected a reduction in near-term currency risk once depreciation had taken place, together with growing signs of a relatively modest pass-through of devaluation to prices. However, robust efforts to resist exchange market pressures, even when ultimately unsuccessful, and the caution subsequently displayed in lowering short-term interest rates may have enhanced the credibility of policy. Moreover, in a number of countries whose currencies depreciated steps taken to strengthen the institutional framework for monetary policy, for example by increasing central bank autonomy, contributed to public confidence in stability-oriented policies.

Monetary policy in Australia and Switzerland

In Australia a weakening of the real exchange rate until September 1993 and its subsequent strengthening helped mitigate the effects on the economy of developments in the prices of commodity exports. Overnight rates were kept unchanged. The effect on monetary conditions in Switzerland of a firming of the Swiss franc in real effective terms in late 1993 was partly counteracted by a lowering of short-term interest rates. Real short-term interest rates in both countries, whose currencies have long been floating, remained higher than in the United States.

Monetary policy and inflation

Alternative frameworks for monetary policy

The use of intermediate objectives in monetary policy

For many years the conduct of monetary policy in most industrial countries was based on the premise that both price stability and a satisfactory overall performance of the economy could best be achieved by gearing policy to an intermediate target which served as a nominal anchor. Stabilisation of the growth of an appropriately chosen monetary aggregate, given reasonable stability in the demand for money, or a suitable exchange rate objective, given a satisfactory economic performance in an anchor country, was seen as the best way of achieving price stability in the medium and longer run. Long-run price stability, in turn, was seen as the most conducive environment for the growth of output, investment and employment. The drawback that the monetary authorities' ability to employ discretion in responding to disturbances was thereby limited was thought to be outweighed by the risk that discretionary responses could be misjudged, or unduly influenced by political considerations. The use of intermediate objectives to provide consistency in policy was designed to limit systematic inflationary bias and to permit a build-up of credibility.

Policy frameworks now more diversified

More recently the framework of policy in different countries, and in particular the use made of intermediate targets and indicators, has become more diversified. There is widespread agreement that, although monetary policy can have output effects in the short run, in the longer run it influences mainly the rate of inflation. Inflation, in turn, has adverse effects on

the efficiency of resource utilisation. There is less consensus on how best to ensure that the goal of price stability is properly taken into account in the application of policy instruments. The framework within which some central banks seek to address this question has changed. Quantified inflation objectives have been established in the United Kingdom, Canada, Sweden, Finland and New Zealand. Narrow band exchange rate commitments continue to be employed as intermediate objectives in the Netherlands and Austria. ERM central rates remain the focus for policy even in those countries that have adopted wider margins. Other countries rely on a range of indicators, with less weight having been given to monetary aggregates in the United States and Japan in the last two years.

Targets for monetary aggregates

Monetary aggregate targets potentially provide a clear policy focus and help to highlight the responsibility of the monetary authorities with regard to inflation. However, they become less useful when developments in the chosen aggregates are not sufficiently closely related to the ultimate policy goals or cannot be controlled closely by the policy instruments available to central banks. In the last two or three years, the difficulties faced by central banks in using monetary aggregates as targets and indicators have increased further as a result of a contraction of deposit institutions' share in financial intermediation in the United States and Japan, and the impact of exchange market disturbances on monetary developments in some European countries.

Targets or projections for the growth of monetary aggregates have been given less emphasis in the United States, Japan and the United Kingdom. Targets for monetary aggregates are still used in Germany, Switzerland,

Published objectives for monetary aggregates

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

	United States			Japan	Germany	France
	M_2	M_3	TDNS	M_2+CDs	M_3	M_3
1993 Objective[2]	1–5	0–4	4–8	2	4½–6½	4–6½
Outcome	1.3	0.5	4.9	1.6	7.4	–1.5
1994 Objective[2]	1–5	0–4	4–8	1–2[3]	4–6	5
	United Kingdom		Italy	Spain	Switzerland	Greece
	M0	M_4	M_2	ALP	CBM	M_3
1993 Objective[2]	0–4	3–9	5–7	4½–7½	3	9–12
Outcome	5.6	5.9	7.8	8.6	2.8	15.2
1994 Objective[2]	0–4	3–9	5–7	3–7	1	9–11

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 1993, Switzerland, projection only. The figures shown for 1994 for France and Switzerland are medium-term norms. That for France is also a reference for the growth of domestic debt. [3] Second quarter to second quarter.

Developments in monetary aggregates interpreted flexibly

France, Italy, Spain and Greece. In Switzerland the growth norms for the monetary base relate only to periods of several years, cyclical or other deviations being accepted in individual years. The norms to apply as from 1994 for money and domestic credit in France also relate only to the medium term. In Germany a monetary target has remained central to the design of monetary policy, though the Bundesbank has long interpreted short-term monetary developments flexibly in the light of other indicators. Norms for monetary expansion were assigned an enhanced role as monetary policy guides, along with other indicators, in Italy and Spain following the easing of exchange rate constraints on monetary policy; yet overshooting of the objectives was accepted last year in view of the weakness of the economy. Clearly the use now made of monetary aggregates in inflation control strategies entails a large element of flexibility in interpreting monetary developments.

Norms for exchange rates

Continued use of exchange rates as policy anchors in ERM countries

Since mid-1992, when exchange rate anchors still formed the basis of monetary policy in most European industrial countries, five countries have floated their currencies and adopted other inflation control strategies. However, the widening of ERM bands last year did not result in member countries using the additional margin of flexibility to permit an independent easing of monetary conditions. As subsequent developments in their policies and exchange rates indicate, ERM central parities continue to serve as medium-term policy anchors.

It has long been recognised that fixed exchange rate based policies call for satisfactory inflation performance in the anchor country and can give rise to dilemmas when countries' cyclical positions diverge. However, this did not become a practical consideration in Europe until after German unification, because exchange rate targets played a positive role in restraining inflation and cyclical conditions were reasonably consistent. Cyclical divergences became more apparent following German unification and were part of the reason for the action of countries which floated their currencies in 1992. But the widening of ERM bands in 1993 was more a response to the difficulties of targeting narrow exchange rate bands in the presence of large private cross-border capital flows facilitated by the removal of exchange controls and the growing institutionalisation of private saving.

In most ERM countries the monetary authorities still see advantages in exchange rate anchors because of the visibility of the objective and the ease with which public support for it can be mobilised. The systematic use of exchange rate adjustments to offset cyclical disturbances is inconsistent with their use as a discipline for monetary policy and an instrument of economic integration. Wide swings in floating exchange rates have at times had adverse effects on economic activity, as in Japan last year. Yet as recent experience has demonstrated, there are also dangers in adopting as an anchor an exchange rate constraint that cannot be maintained when pressures emerge.

Discretionary demand management and a real interest rate approach

Judgemental approaches

In the absence of reliable intermediate objectives monetary authorities have to pursue a more discretionary approach, relying on a range of indicators to assess whether instruments need to be adjusted to keep the expansion of output in line with non-inflationary rates of resource utilisation. In doing so they make judgemental allowance for the nature of the disturbances affecting aggregate spending and economic activity, such as credit supply constraints and weakness of asset prices, as was the case in the United States and Japan in recent years. A judgemental approach, however, is confronted with the twin challenges of taking proper account of the lags that are at work, and explaining persuasively why policy measures are being taken ahead of evidence of changes in the inflation situation.

Criteria for real interest rates

In assessing whether an adjustment of nominal rates can be justified, it can sometimes be useful to compare the implied level of real interest rates with what might be considered "normal" as a cycle average. Such an approach was suggested by the Chairman of the Federal Reserve Board in testimony to Congress in July 1993.

The underlying idea is that while real interest rates may be held low or high for a certain period, to combat financial fragility or overheating, prolonged departures from cycle average levels of real rates will eventually lead to an overcorrection, thus amplifying the business cycle.

It is, of course, difficult to say what a "neutral" level of real interest rates might be. In most industrial countries real rates seem to have been higher throughout the 1980s than in the 1970s, but the extent of the change and the reasons for it remain controversial. Assessments of equilibrium real long-term rates for regular use as a monetary policy information variable would have to allow for cyclical and structural changes due to non-monetary influences such as expected developments in the government budget and in the profitability of investment. Fixing real rates at an inappropriate level could lead to a cumulative inflationary or deflationary process.

The real federal funds rate in the United States seems to have been negative only for brief periods. The major exception occurred in the mid-1970s, when, it is now widely agreed, monetary policy was excessively easy and contributed to the subsequent acceleration of inflation. Last year the overnight rate was probably negative in real terms in the United States although it was positive in all other countries. Given the strength of the economic recovery in the United States, and in the absence of reliable monetary aggregates to lend support to a timely tightening of policy, it could plausibly be argued that keeping real policy-influenced interest rates negative for too long risked contributing to a build-up of inflation.

Published inflation objectives and indicators of inflation expectations

Publication of medium-term targets for inflation

In recent years explicit medium-term targets for inflation have been published by the central banks of Canada and New Zealand, and, following the floating of their currencies, the United Kingdom, Sweden and Finland. In some cases the targets have been set by or in agreement with the government.

Published inflation objectives[1]						
	United Kingdom	Canada	Sweden	New Zealand	Finland	France
	December to December, in percentages					
1993 Objective[2]	1–4	1½–3½	–	0–2	–	–
Outcome	2.7	1.7	4.1	1.4	1.6	2.1
Long-term objective[2]	<2	1–3	1–3	0–2	2	<2

[1] Target variables: for the United Kingdom, retail prices excluding mortgage interest payments; for other countries, consumer prices. [2] The objective shown for 1993 for the United Kingdom applies for the remainder of the present Parliament. The long-term objective for Canada applies until 1998. Those for Sweden and Finland apply as from 1995.

In principle, such an approach could give policy-makers more leeway to adapt policy to unexpected developments in aggregate demand in individual countries than exchange rate objectives. The target can be used to express a conviction that there is no long-run trade-off between output and inflation. At the same time, the horizon set for the achievement of the inflation goals can allow for the fact that an excessively rapid reduction in inflation may have undesirable implications for the level of activity. In the absence of intermediate objectives to serve as a policy anchor, the intention has been to gear settings of policy instruments to ensuring that the inflation target is met.

The publication of inflation targets may help to establish a clearer focus on controlling inflation as the primary objective of monetary policy, even when an intermediate target is also announced. A quantification of the final objective of price stability was published in France in January 1994, together with medium-term objectives for domestic monetary and credit aggregates. An inflation objective appears implicit in the 2% allowance made for a tolerable year-on-year inflation rate in setting the annual targets for M_3 growth in Germany.

The quantitative definition of the inflation goal may suggest a firmer commitment for monetary policy and, if it reduces pressures on the central bank to engage in fine-tuning, may contribute to a strengthening of credibility. The credibility of the goal may be reinforced by institutional changes granting independence to the central bank or otherwise shielding monetary policy from political pressure.

Technical questions raised by inflation targeting

The technical questions raised by inflation targeting include the precise measure of inflation to be used and the choice of a target level or range. Most monetary authorities have in practice chosen the consumer price index, largely because of public familiarity and its influence on wage-bargaining. In Canada, New Zealand and Sweden allowance is made for tax changes or other specified shocks. In the United Kingdom the mortgage interest component of housing costs, which is largely a reflection of policy-influenced interest rates, is excluded from the targeted price index. A range, though less precise than a point target, may for that reason sometimes be more credible. Figures greater than zero for the inflation objective reflect a recognition of measurement error and bias in price indices, as well as

the practical problems that would arise from generalised falling prices. In general, where countries have published targets, the mid-point or maximum of the range has been 2%.

Given the long lags between changes in the settings of policy instruments and inflation, means must be available to the central bank for ensuring timely and appropriate adjustment of instruments. In the absence of intermediate objectives the approach may rest partly on forecasts of the relationship between instrument settings, aggregate demand pressures and inflation, or may rely heavily on a single indicator such as the exchange rate, as is the case in New Zealand.

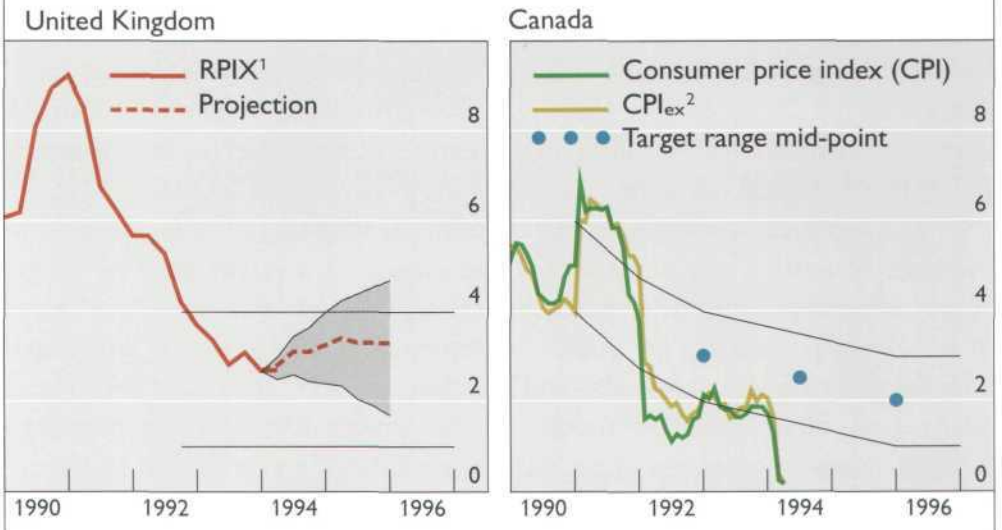
Inflation outcomes and targets

In Canada and New Zealand recorded inflation rates fell to the lower end of the target ranges in 1992, partly as a result of protracted recession in major export markets and, in the case of Canada, the impact of structural changes which weakened economic activity more than expected. In the United Kingdom, Sweden and Finland a key objective has been to help ensure that the response of the economy to currency depreciation does not drive the inflation rate above the target range. The United Kingdom, which was the first of these three countries to adopt an inflation target, seems to have been relatively successful so far, and inflation fell to the middle of the target range by early 1994. In general, however, it is too early to judge how effective inflation targeting strategies will prove in containing an acceleration of inflation as economic activity strengthens.

In the United Kingdom and Sweden emphasis is placed on improving the transparency of the policy process and on helping market participants distinguish between transitory and lasting influences on inflation. A central role is played by inflation reports published by the central bank. These

Inflation outcomes, forecasts and targets

Year-on-year percentage changes

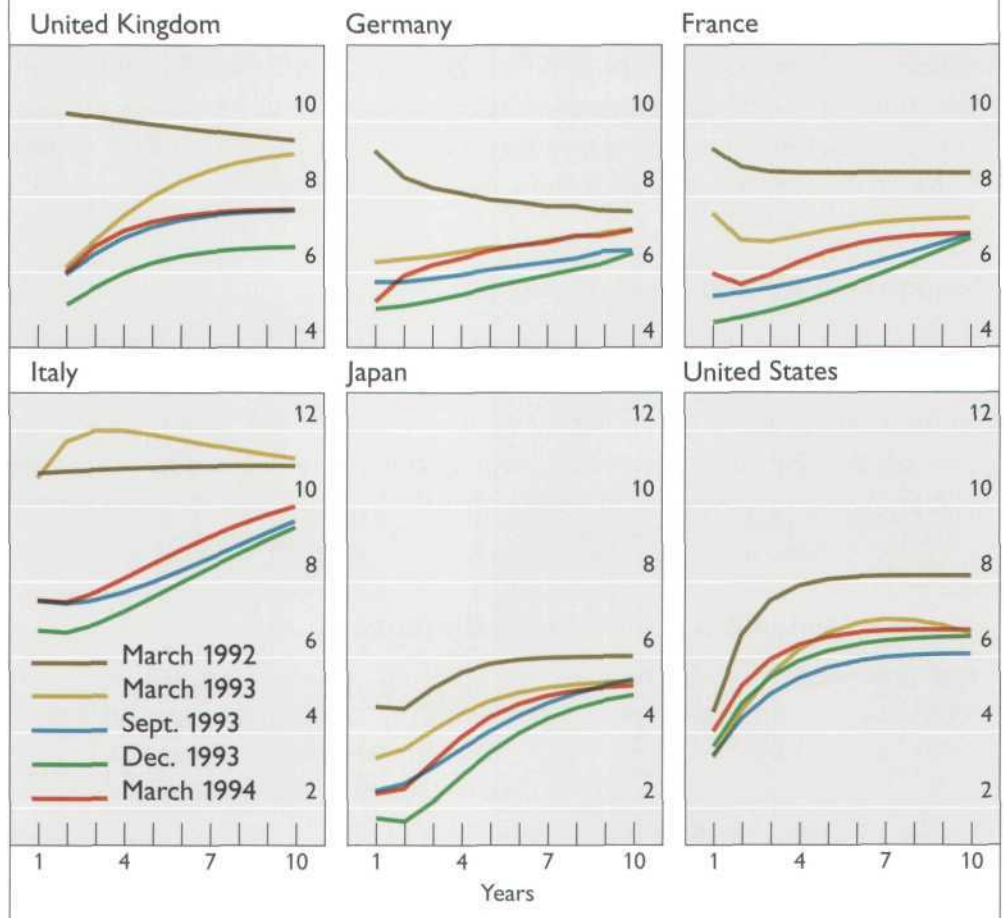


Note: For the United Kingdom the shaded area represents the central projections plus or minus the absolute average error on consumer price inflation projections since 1985.

[1] Retail price index excluding mortgage interest payments. [2] CPI excluding food and energy.

Implied one-year forward rates*

In percentage points



* Calculated from yield curves for government bonds in the months shown. For example, the one-year forward interest rate five years ahead is the yield on a one-year bond issued in five years that equalises the return between investing today in a six-year bond and investing today in a five-year bond and, upon maturity, investing in a one-year bond. Methods of calculating underlying yield curves differ from country to country.

Sources: National data and BIS estimates.

include central bank forecasts of inflation in the light of current policies, based on assessments of developments in wage costs, the exchange rate and asset prices and prospective changes in demand pressures. The forecast for inflation one or two years ahead can indicate whether meeting the objectives seems to call for policy changes.

Forward interest rates and inflation expectations

Private forecasts are also used to give timely warnings of any build-up of inflation expectations. Close attention is paid to opinion surveys and developments in forward interest rates embedded in the term structure of interest rates. Such forward rates are potentially useful but are not always easy to interpret. Declines in near-term forward rates such as those recorded between early 1992 and late 1993 in many European countries probably reflect expectations about official responses to cyclical developments. However, the substantial falls in distant forward interest rates such as occurred in the United Kingdom over the same period suggest a fall in long-term inflation expectations. This interpretation is supported by a decrease from

about 6% to around 3½% in the inflation expectations component calculated from a comparison with distant forward rates for price-indexed government securities. Small declines in distant forward nominal rates were recorded last year in Italy, as well as in Japan, Germany and France, where inflation prospects seem to have been regarded as relatively favourable for some time. The renewed increase in forward rates in all countries in early 1994 is difficult to interpret but it may suggest that the earlier falls should not be attributed entirely to declines in inflation expectations.

Monetary policy and asset prices

Real estate prices and monetary policy

In recent years the impact on economic activity of large falls in real estate prices, following a boom in the late 1980s, has been a significant consideration in the framing of monetary policy in the United States, Japan and many of the European countries whose currencies were floated. Large declines in real estate prices in both nominal and real terms over a number

Nominal and inflation-adjusted real estate prices

Countries and cities	Nominal prices				Inflation-adjusted prices			
	1988	1989	1992	1993	1988	1989	1992	1993
	indices, 1986 = 100							
	Residential property prices							
United States	114.5	119.9	132.9	135.6	106.1	106.0	103.8	102.9
Japan	134.9	157.8	150.6	143.5	133.8	153.1	134.9	127.0
United Kingdom	146.5	177.1	165.9	161.7	134.1	150.4	117.2	112.5
Canada	138.3	155.9	158.5	161.0	127.4	136.8	123.8	123.5
Australia	138.8	165.8	182.5	185.8	119.3	132.5	130.4	130.4
Germany	100.5	98.5	150.5	149.5	99.0	94.4	130.5	124.6
France[1]	117.6	129.4	149.9	147.2	110.9	117.9	125.0	120.2
Sweden	133.9	157.4	171.3	153.1	121.5	134.1	118.2	100.9
Norway	117.7	109.1	89.2	91.3	101.5	89.9	66.7	66.8
Finland	152.2	185.8	121.8	112.9	139.1	159.3	91.7	83.2
	Commercial property prices: major cities							
United States[2]	107.1	107.9	71.9	68.1	99.2	95.4	56.2	51.7
Tokyo	165.9	173.9	136.5	111.5	164.6	168.7	122.3	98.7
London	164.6	160.0	69.2	73.3	150.7	135.8	48.9	51.0
Toronto[3]	124.2	136.3	104.2	91.0	114.4	119.6	81.4	69.8
Sydney	177.8	187.3	82.1	73.6	152.9	149.7	58.7	51.7
Frankfurt	140.9	193.4	199.3	182.5	138.8	185.4	172.8	152.1
Paris	117.6	144.2	119.9	104.9	110.9	131.3	99.9	85.6
Milan	132.7	167.3	201.0	170.2	120.6	143.1	144.4	117.1
Madrid	203.9	292.9	177.0	112.1	184.8	248.6	125.4	75.9
Stockholm	162.2	183.8	94.6	75.7	147.1	156.6	65.2	49.9
Oslo	110.8	93.5	65.5	67.1	95.5	77.1	49.0	49.1
Helsinki	160.8	189.2	121.6	118.2	147.0	162.2	91.6	87.1

[1] New housing. [2] North-East. [3] Price index for offices in Ontario.

Sources: National data and BIS estimates; for commercial property prices, Jones Lang Wootton and various private real estate associations.

of years in several countries worsened debt burdens, created situations of negative household equity and induced balance-sheet adjustments in the private sector. They also resulted in a tightening of credit supply conditions by banks and other financial institutions. By last year there were signs that the long residential property cycle was turning, with renewed rises in house prices becoming evident in the United States, the United Kingdom, Canada and Australia. In Sweden a period of falling house prices came to an end. However, in Japan and some continental European countries, where the peak in house prices was reached more recently, prices appear to have continued to fall last year.

The legacy of overbuilding of commercial property stemming from the earlier upswing in property prices has been particularly severe in the United Kingdom and some Nordic countries and continues to depress non-residential property prices in a wider range of countries. Indications of a resumption of commercial building activity appeared last year in some of the countries which had entered the property cycle first, including Canada and the United States. In the United Kingdom the urban commercial property price index rose in both nominal and real terms but further declines were recorded in Germany, France and, more particularly, Spain and Italy. In Japan, where falls in asset prices have contributed to burdening banks' balance sheets, the authorities stepped up their efforts to encourage a restructuring. Budgetary measures taken to assist the construction sector were designed to help moderate the fall in property prices.

Buoyancy of share prices in 1993

In the United States, the buoyancy of share prices evident for several years proved remarkably resilient in 1993. It could be viewed as a channel through which monetary ease supported a recovery of economic activity. In Europe the widespread recovery in share prices from their September 1992 troughs continued in 1993, the rise being generally most pronounced in some countries where monetary conditions were eased through currency depreciation as well as by declines in interest rates. In Sweden, Norway, Finland, Spain and Italy the increase was far greater than in Germany or France. Share prices in Japan remained fragile last year, the upturn which began in early 1993 being largely reversed in the autumn in response to disappointment about the outlook for the economy and the appreciation of the yen.

Declines in bond and share prices in early 1994

Following their strong showing in 1993 share prices in many industrial countries weakened in early 1994 amid fears that the protracted decline in long-term interest rates was coming to an end. The turnaround in share prices was accompanied by a marked increase in volatility.

In the United States, where bond prices had begun to decline in September 1993, the sharp fall recorded between February and April 1994 following the first tightening of monetary policy in the present economic recovery reflected concerns about the risk of a build-up of inflationary pressures in a context of greater than expected real growth.

The rapid responses of other financial markets to rises in bond yields in the United States are more difficult to explain, given the absence in Japan and many European countries of clear signs of an economic recovery.

Nominal and inflation-adjusted stock prices								
Countries	Nominal prices				Inflation-adjusted prices			
	June 1990	Sept. 1992	March 1993	March 1994	June 1990	Sept. 1992	March 1993	March 1994
	indices, first quarter 1987 = 100							
United States	129.0	149.8	161.2	166.1	110.9	118.4	125.3	125.9
Japan	136.2	78.5	77.9	92.6	127.6	69.5	68.9	80.8
United Kingdom	124.1	122.6	150.0	171.6	98.2	88.2	108.0	120.8
Canada	100.4	93.4	102.1	122.7	86.4	74.7	80.6	96.7
Germany	132.0	100.8	111.6	135.9	123.4	87.0	93.7	110.5
France	132.6	117.4	130.1	142.6	119.9	99.9	108.8	117.6
Italy	108.5	52.5	72.4	94.8	90.4	38.6	52.0	65.4
Spain	120.9	87.4	99.8	140.2	100.9	63.4	71.2	95.2
Sweden	185.5	98.6	140.8	203.2	148.0	69.2	95.4	135.4
Norway	211.1	109.0	150.8	227.0	177.9	86.3	117.4	174.9
Finland	128.6	52.7	91.0	170.4	106.8	40.6	69.0	128.7

Somewhat reminiscent of the worldwide break in share prices in October 1987, the simultaneous falls in bond prices in many markets in early 1994 have been widely ascribed to a correction of earlier large rises associated with major increases in cross-border position-taking.

Transmission of monetary policy

The monetary policy transmission mechanism has recently attracted increased attention. Three factors have helped to prompt the renewed interest. First, real economic growth in the present recovery has appeared to respond more slowly than on earlier occasions to the relaxation of monetary policy. This has led to some concern that the ability of lower interest rates to stimulate aggregate demand has been reduced. Secondly, the turbulence in the European foreign exchange markets between mid-1992 and mid-1993 has raised the question of how far short-term interest rates can be used to defend exchange rate parities without adverse effects on real economic activity. Thirdly, different countries appear to respond differently to monetary stimuli. This raises the question of whether there are dissimilarities in the transmission mechanism across countries and, if so, what the implications are for monetary policy coordination. While differences in the transmission mechanism do not in themselves prevent the coordination of monetary policy, such coordination needs to reflect the diversity in economic structures that exists.

Monetary policy affects macroeconomic developments in several ways. By influencing real interest rates, it has a direct impact on the saving/investment choices of households and firms. Monetary policy also operates through a cash-flow channel by affecting the disposable income of the private sector. As a result of the financial deregulation and the marked increase in the gross indebtedness of firms and households in a number of countries during the 1980s, the cash-flow implications of monetary policy have become increasingly important in recent years.

The cash-flow effects of monetary policy have become more important

The extent of the impact of monetary easing on the cash flow of the private sector is illustrated by the experience of the United Kingdom and the United States. The process of easing of monetary policy in the United Kingdom that started at the end of 1990 led to a reduction of over 40% in the ratio of gross interest payments to nominal GDP in the private non-financial sector between the third quarter of 1990 and the third quarter of 1993. In the United States the relaxation of monetary policy between 1989 and 1993 significantly reduced gross interest payments by the private sector. Interest payments by the non-financial corporate sector relative to nominal GDP fell by 30% over the same period, while interest payments by households relative to nominal GDP fell by 18%.

The cash-flow channel

The cash-flow channel of monetary policy transmission derives from the effect of changes in nominal interest rates on interest payments made and received by firms and households. An increase in the interest rate will raise nominal interest payments and, even if it simply matches an increase in the inflation rate, will generally worsen borrowers' cash-flow positions. If borrowers are unable to finance the higher debt service costs, either from current income or by additional borrowing, firms and households will reduce their expenditure on goods and services.

The cash-flow channel depends on:

The importance of the cash-flow effect depends critically on three factors: the net indebtedness of individual firms and households; the responsiveness of the interest rates that apply to the private sector's assets and liabilities to changes in the short-term interest rates through which central banks implement monetary policy; and the ability of firms and households to increase their borrowing.

the structure of indebtedness;

The structure of indebtedness in the economy plays an important role in determining the size of the cash-flow effect. However, even if the household sector is a net holder of interest-bearing assets, an increase in interest rates does not necessarily have an expansionary effect on consumer expenditure. In the first place, adjustments in interest rates paid and received may not take place at the same time following a change in monetary policy. Secondly, within the household sector, creditor and debtor households may exhibit asymmetric behaviour: net debtors are more likely to be credit constrained, while net creditors may have a lower marginal propensity to consume out of changes in disposable income. The likelihood that the responses of firms and households to changes in the debt service burden will be larger in the case of net debtors than in that of net lenders suggests that data on net interest payments by the household or corporate sector (which make no distinction between interest paid by net borrowers and interest received by net lenders) may not fully capture the importance of the cash-flow channel.

the responsiveness of interest rates to policy;

The second major factor determining the cash-flow effects of monetary policy is the responsiveness of the interest rates set by banks and in capital markets to changes in the rates controlled by the central bank. Since the importance of the cash-flow channel probably hinges disproportionately on

the behaviour of net borrowers, the degree to which the interest rates that apply to the stock of borrowing by the non-financial sector are affected by monetary policy is particularly relevant. The importance of the cash-flow channel therefore depends critically on the maturity structure of borrowing, and the extent to which contractual lending rates are adjustable. Furthermore, since the responses of interest rates charged by banks to monetary policy may differ from those of interest rates determined in the capital markets, the share of bank borrowing in total borrowing is also of relevance in assessing the cash-flow implications of monetary policy.

and borrowing constraints

The third factor that influences the importance of the cash-flow channel is the extent to which firms and households are able to adjust their borrowing in response to increases in interest rates. Since the ability to borrow is constrained by the capacity to service interest payments, the cash-flow effect is likely to be particularly strong in the case of households and firms which are already heavily indebted and/or have low net worth. Increases in interest rates that are accompanied by declines in asset prices which erode borrowers' ability to post collateral will have particularly large macroeconomic effects, as recent experience in Japan, the United States and the Nordic countries suggests. Furthermore, changes in asset prices that affect the value of banks' loan portfolios, and thus influence banks' willingness to undertake further lending, also play an important role in determining the cash-flow effects of monetary policy.

The structure of indebtedness

Differences in the structure of indebtedness are difficult to assess ...

Because of the limited availability of data on the relative importance of fixed and variable rate financing, it is difficult to assess how far the structure of private indebtedness in this regard differs across countries. Moreover, the distinction between fixed and variable rate lending is itself unclear since interest rates on some lending classified as fixed rate may be adjusted occasionally, while in the case of variable rate loans the interest rate may be reset only infrequently, or may be linked to a longer-term capital market rate which is not very sensitive to the short-term rates determined by central banks. In addition, since the distinction between short and long-term lending differs between countries, the data are not easily comparable internationally. Furthermore, capital market innovations have increased the scope for borrowers and lenders to use derivative instruments to transform the character of the stream of payments or receipts under the primary borrowing or lending contracts.

... but appear significant

These caveats should be borne in mind when interpreting the table opposite, which presents some estimates of the structure of borrowing in a number of countries. It suggests that there are significant differences between countries. In Germany and France a substantial proportion of lending is at predominantly fixed interest rates. In contrast, variable rate lending is predominant in the United Kingdom, and is also common in Japan, the United States and Canada. Differences in the maturity structure of borrowing appear less pronounced. With the exception of Canada and the United States, the relative importance of banks as a source of financing

The structure of indebtedness of the non-financial private sector, end-1992

Countries	Shares of		
	fixed rate indebtedness*	longer-term indebtedness*	bank credit
Canada	40% of total loans to private corporations.	42% of total loans to private corporations.	27% of total loans to private corporations.
France	87% of bank credit to households; 31% of bank credit to firms.	68% of companies' indebtedness; 87% of household indebtedness.	82% of companies' indebtedness.
Germany	53% of bank credit at relatively rigid rates.	69% of enterprises' indebtedness; 85% of housing indebtedness.	89% of enterprises' indebtedness.
Italy		37% of companies' indebtedness; 71% of household indebtedness.	68% of companies' indebtedness.
Japan	19% of bank loans.	43% of bank loans.	74% of corporations' indebtedness.
United Kingdom	15% of bank lending to small firms.	67% of large companies' indebtedness.	63% of companies' indebtedness.
United States	47% of all bank credit.	60% of corporations' indebtedness; 69% of household indebtedness.	30% of corporations' indebtedness.

Note: Stocks of indebtedness, excluding trade credit and equities. Based on national data; definitions differ between countries; figures should be regarded as estimates.

* For the United States, mortgages and bonds.

Sources: Central banks and BIS estimates.

is also broadly similar in the countries included in the table. To the extent that interest rates set by banks for loans to businesses respond more quickly to changes in monetary policy than those set in capital markets, the fact that firms in Canada and the United States use the capital markets for a large part of their financing may tend to dampen the impact of monetary policy.

A high proportion of long-term fixed rate lending slows down the transmission process and ...

The existence in some countries of a large proportion of long-term loans with fixed interest rates suggests that the average interest rate on private debt outstanding evolves sluggishly over time. Even substantial changes in the interest rates that apply to new lending will therefore have only a modest impact on the cash-flow positions of borrowers. Widespread use of long-term fixed rate lending, and the resulting stickiness of the average interest rate on the stock of loans, therefore has important implications for the conduct of monetary policy. With interest rates on the outstanding stock of loans largely determined by past lending agreements, the effects of any given change in short-term interest rates are delayed or, to the extent the policy change is temporary, reduced. On the other hand, increases in interest rates that are of sufficient duration to become embedded in the average interest rate on the outstanding stock of loans can exert a

contractionary influence on aggregate demand for considerable periods of time.

The differences between countries reviewed above also raise important and difficult questions regarding the relationship between financial structure and long-term economic performance. One such question concerns the costs and benefits of fixed as against variable rate long-term lending, or, more precisely, whether interest rate risk is efficiently allocated between debtors and creditors, and also among individual creditors.

... affects the allocation of interest rate risk

The ability and willingness to assume such risk is likely to vary among both borrowers and lenders, which suggests that a well-functioning financial system should allow creditors and debtors to assume the level of interest rate risk they desire. This can be done by financially sophisticated borrowers by using interest rate swaps, futures and options. For smaller borrowers, who typically do not participate in derivatives markets, it is important that the financial system should offer a sufficiently broad menu of borrowing contracts to enable them to adjust their exposure to interest rate risk to the desired level.

It is difficult to know whether borrowers and lenders are exposed to too much (or too little) interest rate risk, and whether the financial structure is sufficiently rich to allocate the interest rate risk appropriately. While the absence of long-term fixed rate lending in many countries suggests that borrowers assume too much interest rate risk, as illustrated by the recent experience of mortgage borrowers in the United Kingdom, a prevalence of long-term fixed rate lending can cause problems for lenders, as indicated by the difficulties of thrift institutions in the United States. However, the development of derivative instruments is having the effect that borrowers and lenders are no longer constrained to accept the amount of interest rate risk embodied in primary lending instruments.

Derivative instruments and interest rate risk

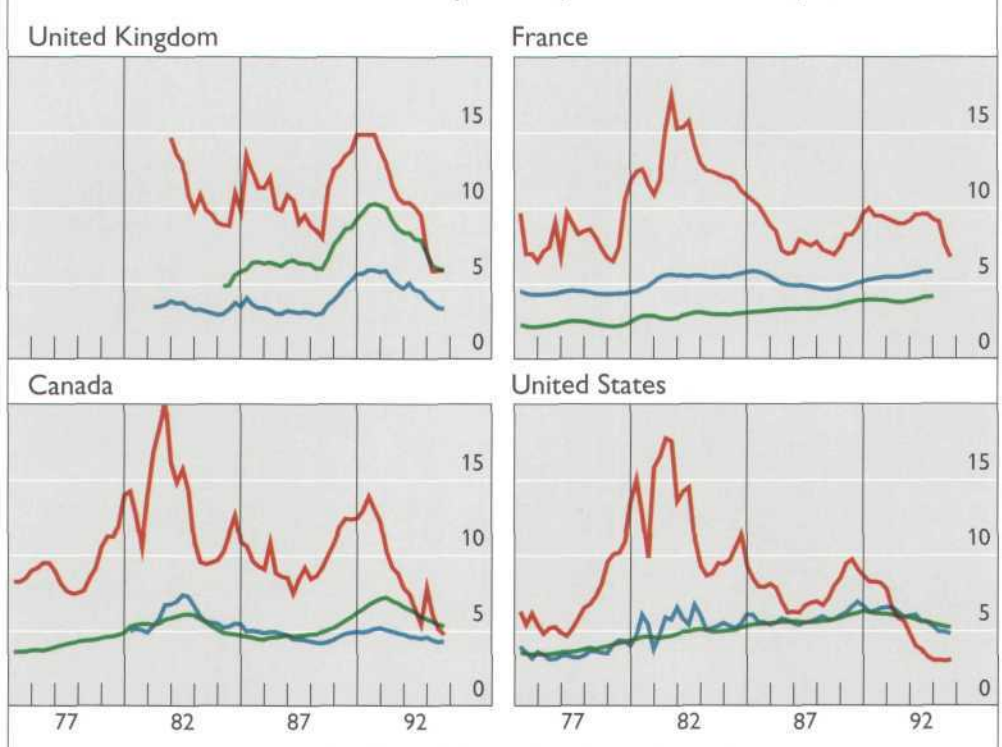
Monetary policy and interest payments

Further indications of the differences between countries in the importance of the cash-flow channel can be obtained by studying the responses of interest payments by firms and households to changes in monetary policy. The graph opposite shows gross interest payments by households and the non-financial corporate sector in relation to nominal GDP in four countries for which relevant quarterly data are available. An interest rate which serves as an indicator of the stance of monetary policy is included in the graph to highlight the role of monetary policy. The graph clearly reveals differences between countries in the responses of interest payments to a tightening of monetary policy. In Canada, the United Kingdom and the United States, in which a large proportion of loans tends to be at variable rates, interest payments appear to respond relatively quickly and strongly to a tightening of monetary policy. In France, on the other hand, the responses appear limited and delayed. To the extent that the results for France are representative of other countries with substantial long-term fixed rate financing, the behaviour of interest payments illustrates how financial structure plays an important role in the monetary policy transmission process.

Financial structure and the response of interest payments to monetary policy

Interest rates and gross interest payments relative to nominal GDP

Quarterly averages, in percentage points and percentages



[1] For the United Kingdom, Bank of England Band 1 (bill purchase) rate; for France, Bank of France tender rate; for Canada, Bank rate; for the United States, federal funds rate. [2] For the United Kingdom and the United States, payments by non-financial corporations.

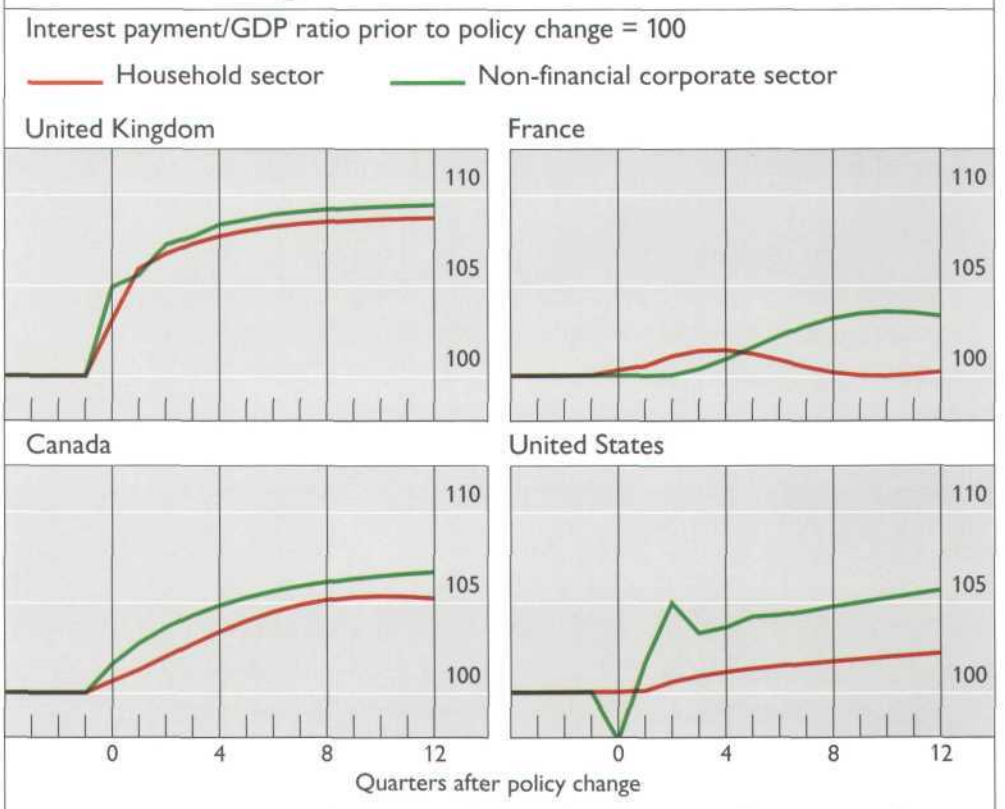
Source: Central banks.

Responses of sectoral interest payments

A more formal analysis of the data in the graph underlines these conclusions. The graph overleaf uses the historical information contained in the graph above to simulate responses of interest payments to a permanent increase of 100 basis points in the interest rate indicating the stance of monetary policy. To permit comparability between sectors and countries, the interest payments are expressed in index form. The graph illustrates that the pass-through of changes in official interest rates to the cash flows of both firms and households in the United Kingdom is both rapid and large. By comparison, in France the pass-through is smaller and more delayed. Indeed, the interest payments of firms and households in France appear fairly insensitive in the short run to changes in official interest rates. It should be noted that the above effects of interest rate changes for France were obtained from estimates over the period 1976–92. The elimination of the system of bank credit ceilings in 1987 and the increased liberalisation of the French financial system suggest that these simulations would tend to understate the current cash-flow effects of interest rate changes.

The responses of interest payments in Canada and the United States are, particularly for the corporate sector, larger and quicker than those in

Responses of gross sectoral interest payments to interest rate changes*



Note: Calculated from estimated error-correction models comprising interest payments and interest rates, using the data in the graph on page 141. The estimation periods start in 1976 (for the United Kingdom, 1982–84) and end in 1993 (for France, 1992).

* Responses to a 100 basis point permanent increase in interest rates.

France, but slower than those in the United Kingdom. The limited pass-through of changes in the federal funds rate to mortgage interest payments is notable in the United States, where long-term fixed rate financing of housing is still common, despite the increased share of adjustable rate mortgages.

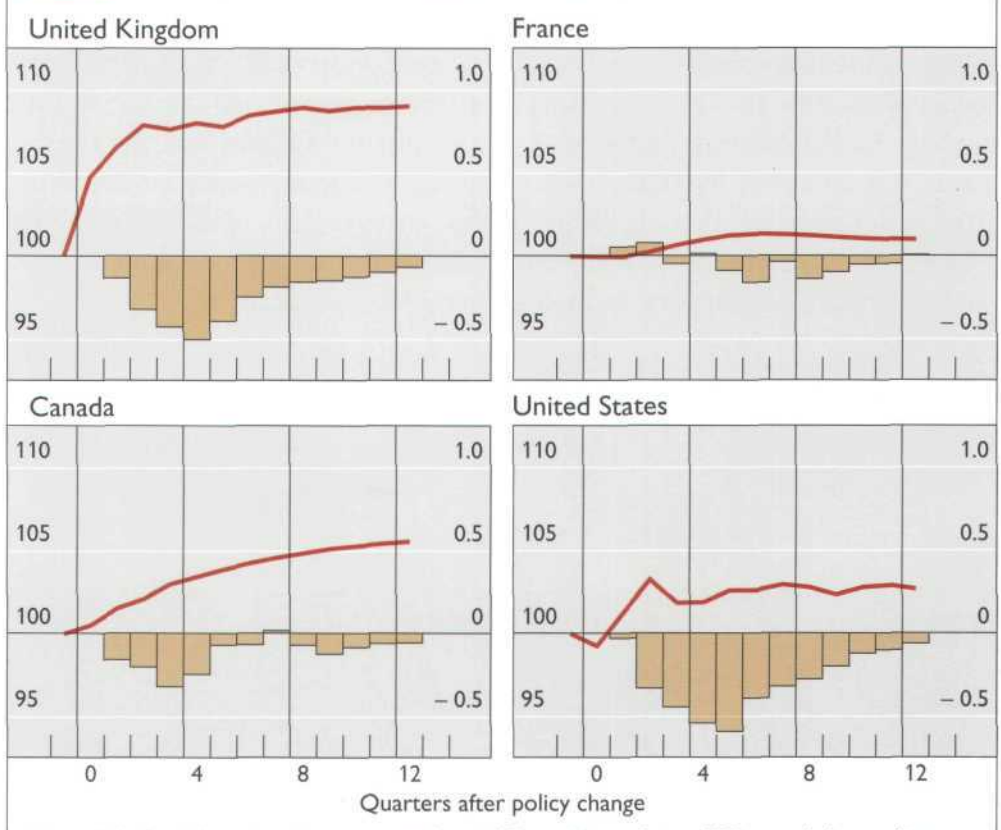
Interest rates and economic activity

The evidence reviewed above suggests that differences in financial structure affect the extent to which interest payments respond to changes in monetary policy. Monetary policy is therefore likely to have a quicker effect on the demand for goods and services, and hence real economic activity, in countries in which borrowing is largely at variable interest rates or at short term. Some indications that this may be the case are given in the graph opposite.

Responses of real GDP

The graph shows estimates of how interest payments and real GDP respond to a 100 basis point increase in a short-term interest rate. All estimates of economic relationships are sensitive to the choice of data, sample period and methodology. The results should therefore be viewed as illustrative of possible differences between countries in the importance

Responses of gross interest payments and GDP to interest rate changes[1]



Note: Calculated from impulse responses from VAR models, ordering GDP growth first and interest payments last. The results for the United Kingdom and Canada assume that interest rates and GDP in the United States remain constant; the results for France assume that interest rates and GDP in Germany remain constant. Interest payments are totals for households and non-financial corporations (except for Canada, where interest payments by households are used). The estimation periods are the same as in the graph on page 142, except for the United Kingdom, for which the initial year is 1985.

[1] Responses to a 100 basis point permanent increase in interest rates. [2] Interest payments/GDP ratio prior to policy change = 100. [3] Over four quarters, in percentage points.

of the cash-flow channel, and not as precise estimates of the likely effects of monetary easing in particular cases.

The results for France and the United Kingdom are particularly indicative of the role played by financial structure in the monetary policy transmission mechanism. Although the assumed interest rate changes are of the same size in the two countries, the behaviour of interest payments by the private non-financial sector is very different. In the United Kingdom interest payments increase in the same quarter as the interest rate is changed, and reach a new plateau after approximately two quarters. In contrast, in France the change in the interest rate induces little immediate response of interest payments, and the effect reaches its maximum after six quarters. Moreover, it is much smaller than in the United Kingdom. The graph also illustrates that the response of real GDP growth is much more

limited in France than in the United Kingdom. While the estimates suggest that the increase in the interest rate depresses real GDP growth in the United Kingdom by 0.5% after four quarters, in France the response is again smaller and more delayed.

The differences in the estimated effects of interest rate changes on interest payments and economic activity in France and the United Kingdom highlight the constraints imposed by a preponderance of variable rate financing on the use of interest rate policy in periods of exchange rate turmoil. Furthermore, together with the results for Canada and the United States, the estimates illustrate how the effect of monetary policy on economic activity depends on the extent to which changes in interest rates affect interest payments by firms and households, which in turn depends on the relative importance of long-term fixed interest rate financing.

VII. Capital flows and exchange rates

Highlights

Following extensive deregulation and liberalisation over the past decade or so, international capital movements have increased enormously and now dwarf transactions on current account. In one respect – namely the freedom of private sector agents to transact international financial business – the situation is not entirely unprecedented, though it has never been experienced to the present degree, even before the First World War. Indeed, in some respects it is entirely novel, in that the whole pace and complexity of international capital transactions have been transformed by data-processing and communications technology, and by the financial innovation which that has facilitated. The ramifications of these developments are potentially profound and, in this chapter, are considered in two broad areas.

The first concerns the recent revival of capital flows to developing countries. This major redirection of capital flows is welcome in that funds are flowing to areas where the potential real return should be very high. Major economic reforms and improved performance in the recipient countries have played a big part in attracting foreign capital. However, three considerations suggest a need for caution. First, if foreign inflows are accompanied by increases in consumption (public or private) – rather than investment – they may not be sustainable for very long. Secondly, inflows have in some cases put upward pressure on real exchange rates and this has contributed to large current account deficits. There has been substantial exchange market intervention to counter this pressure. Foreign exchange reserves in the developing world rose by $240 billion over the period 1990–93 and the associated increases in domestic liquidity have created difficulties in a number of countries. Finally, the risk that capital inflows may reverse themselves has increased vulnerability to macroeconomic shocks in some countries.

The second broad area concerns exchange rate regimes, especially in the industrial world. The new situation was again graphically illustrated in the period under review, firstly by the 1993 ERM crisis in Europe, which resulted in a sharp widening of the mechanism's permitted fluctuation bands, and secondly, though less spectacularly, by the steep rise in the international value of the yen. One important difference from the turmoil in European exchange markets in 1992 and early 1993 was that the latest crisis resulted, in the end, in remarkably little change in actual exchange rates. Instead, European policy-makers demonstrated that careful implementation of policy can help achieve exchange rate stability, even in the absence of binding fixed rate commitments, at least where the underlying fundamentals are sound. There may be broader lessons here for the international monetary system

in general, and in particular for the merits of different types of exchange rate arrangements.

One important conclusion, for developing and developed countries alike, is that a sound and internationally consistent macroeconomic policy framework has been made even more necessary by the integration of the world's capital markets. Exchange rates are now much less likely to be kept stable by official exchange market intervention alone. In the developing world, sound policies are necessary not just to attract capital inflows per se, but also to help avoid their undesirable side-effects, and to ensure that the resources provided are put to the most productive use.

Capital flows: an overview

Increased capital market integration ...

In recent years world capital markets have become more integrated than at any time since the pre-1914 gold standard period. Indeed a comparison with that period serves to bring certain aspects of recent experience into sharper focus. One evident similarity concerns currency convertibility. The scope of convertibility has been considerably widened during the past decade or so – both in terms of the number of countries and in terms of the range of transactions covered. The adoption of effective currency convertibility and trade liberalisation – important pillars of recent reforms in the transition economies and in the developing world – have increased the pressure on countries to set realistic exchange rates. Capital transactions have also been progressively liberalised. Even as recently as the mid-1970s, currency convertibility in most industrial countries applied only to current external transactions; by the early 1990s, however, residents in all major industrial countries enjoyed almost complete freedom to acquire and dispose of foreign assets – as they had before 1914. Capital markets in the industrial world are open to non-residents, and those in the developing world have become increasingly so. The easing of restrictions on the acquisition of assets by foreign residents, improved settlement and clearing procedures and reduced taxes and transactions costs have been the main measures facilitating foreign investment in developing countries. This has been particularly true in Latin America; a number of Asian countries continue to restrict foreign investment in their capital markets.

... convertibility ...

... and greater freedom of capital movements

However, three aspects of the recent period of increased international capital mobility set it apart from the pre-1914 period of free capital movements: the monetary and exchange rate regime, the range of financial assets and the role of institutional investors.

Flexible exchange rates ...

The first, and perhaps biggest, difference is that exchange rates are more flexible than they were then. In current circumstances, the liberalisation of capital flows has proved hard to reconcile with fixed exchange rates, as experience since the breakdown of the Bretton Woods system has shown. Why did the heavy capital flows in the earlier period not upset fixed exchange rates? One reason was the much greater credibility of the gold standard commitment. This meant that only small interest rate differentials were required to finance current account imbalances: highly interest rate elastic

capital flows thus supported the fixed exchange rate. In such a situation capital mobility helps to stabilise a fixed rate regime as capital flows smoothly finance ex ante balance-of-payments imbalances. An additional reason why heavy capital flows were consistent with exchange rate stability in the earlier period was their orientation towards real investment, often with a high import content. Hence the transfer of capital could be effected without putting pressure on the fixed exchange rate. Moreover, it yielded real returns that could be used to service the debt incurred. These elements are relevant also for analysing developments in the recent period: where foreign investment is associated with rising imports, capital inflows will not necessarily put upward pressure on the exchange rate. For example, a large proportion of Asian capital inflows has been closely linked to increased domestic investment and imports of investment goods. This has contributed to real exchange rate stability in the region and has also helped to prevent excessive increases in domestic liquidity. In Latin America, by contrast, the influx of foreign capital – dominated by portfolio and short-term financial flows – was less directly associated with increased imports of investment goods and there was a greater degree of upward pressure on real exchange rates.

… wide range of financial assets …

The second difference from the pre-1914 period is the much wider range of financial assets that can be readily traded nowadays – in domestic as well as in international markets. Moreover, such assets (notably in different currencies) have yielded much more divergent real returns than during the gold standard period. Then, there was less of a need for the financial diversification and risk-hedging which lies behind the high turnover in modern securities markets. Total international securities transactions in the six Group of Seven countries that compile such data amounted to $6 trillion per quarter in the second half of 1993 – about five to six times the value of international trade. As a result, portfolio-related transactions in the foreign exchange market now dominate trade-related transactions. In the United States, Japan and the United Kingdom this change had already occurred about a decade ago; in continental Europe, it has been more recent (see also the table on page 175). This increased volume of portfolio capital movements has made foreign exchange markets much more sensitive to changes in sentiment in financial markets, an important factor behind recent developments in European exchange rates.

… and importance of institutional investors

A third difference is the much greater weight of institutional investors. It was the diversification of institutional investors' portfolios that was a major driving force of capital flows in the 1980s (see the table overleaf). The progressive relaxation of restrictions on foreign investment by Japanese insurance companies during this period set in train a major diversification into foreign securities. The consequence of this was that for several years the heavy demand of Japanese investors for foreign financial assets exceeded Japan's large current account surplus, thus putting downward pressure on the yen. By 1990 this process of diversification had apparently run its course. In the 1990s, Japanese institutional investors have sought, if anything, to reduce their foreign exposure. Institutional investors in a number of European countries also increased the share of foreign securities in their

portfolios during the 1980s. In the United States, however, investment by residents in foreign securities remained relatively small. Only in the 1990s did US institutional investors' diversification become a significant force. The heavy foreign investment by US pension and mutual funds has added to US capital outflows during the past two years, with a major impact on exchange rates.

Very large capital movements, both gross ...

One indicator of the vastly increased scale of capital movements is that gross capital outflows from the main industrial countries (excluding official and short-term banking transactions) came to about $850 billion in 1993. Such flows averaged around $500 billion during the 1985–93 period as a whole, compared with only about $100 billion a year in the first half of the 1980s. The persistence of such sizable capital flows for almost a decade has resulted in a sharp increase in the proportion of financial assets held by non-residents. According to one calculation, non-resident holdings now amount

Institutional investors' holdings of foreign securities

Countries and items	1980	1985	1990	1991	1992	1993
	as a percentage of total securities holdings at year-end					
Austria						
Insurance companies	14.1	11.6	10.1	9.4	10.5	9.9
Investment funds	27.0	13.2	18.7	22.4	22.8	25.1
Australia						
Life insurance and pensions			14.0	16.2	16.8	18.8
Belgium						
Insurance companies	5.5	8.6	5.2	4.2	4.1	..
Canada						
Life insurance companies	2.2	2.3	2.4	2.8	2.7	3.1
Pension funds	6.1	6.6	7.0	8.5	10.2	10.6
Italy						
Insurance companies			13.6	12.2	13.2[1]	12.2[1]
Japan						
Private insurance companies	8.1	23.2	29.9	28.4	27.0	22.3
Postal life insurance	0.0	6.7	11.6	12.1	13.1	12.3
Netherlands						
Insurance companies	6.9	22.9	20.2	20.4	22.6	26.0
Private pension funds	26.6	28.1	36.6	38.2	39.2	36.9
Public pension funds	14.7	9.9	16.6	17.2	18.9	20.2
Sweden						
Insurance companies			10.5	12.1	11.0	12.3
United Kingdom						
Insurance companies[2]	6.3	14.1	14.6	15.8	15.5	..
Pension funds[3]	10.8	17.3	23.2	25.2	23.8	..
United States[4]						
Mutual funds				4.0	5.1	8.0
Private pension funds[5]			4.1	4.6	5.0	7.1

[1] Preliminary. [2] Long-term funds. [3] Pension funds exclude the central government sector but include other public sectors. [4] As a percentage of total assets. [5] Tax-exempt funded schemes (excluding IRAs).

Global net capital flows

Countries	1976–80	1981–85	1986–90	1991	1992	1993[1]
	in billions of US dollars, annual averages					
United States	–9.3	55.9	99.7	–13.5	24.4	41.3
Japan	–0.3	–23.0	–63.9	–90.0	–118.9	–108.0
Western Europe	27.1	2.6	15.3	75.0	55.7	– 20.6
Developing countries	15.8	40.9	37.4	126.4	143.0	159.5
of which: Asian NIEs[2]	*4.1*	*3.5*	*– 6.0*	*3.5*	*5.0*	*7.2*
Other Asia	*6.4*	*15.2*	*22.3*	*36.0*	*48.1*	*50.0*
Latin America	*22.6*	*12.5*	*8.8*	*34.2*	*57.5*	*67.4*

Note: Changes in net official monetary position are excluded. A minus sign indicates a capital outflow.
[1] Partly estimated. [2] Excluding Hong Kong.

to around 20–25% of total outstanding government bonds in the Group of Ten countries other than Japan. Such holdings are very sensitive to shifts of sentiment in international financial markets. Economic policies – in particular attempts to maintain unrealistic exchange rates or inadequate macroeconomic policies – are now more subject to the sanction of capital markets.

... and net

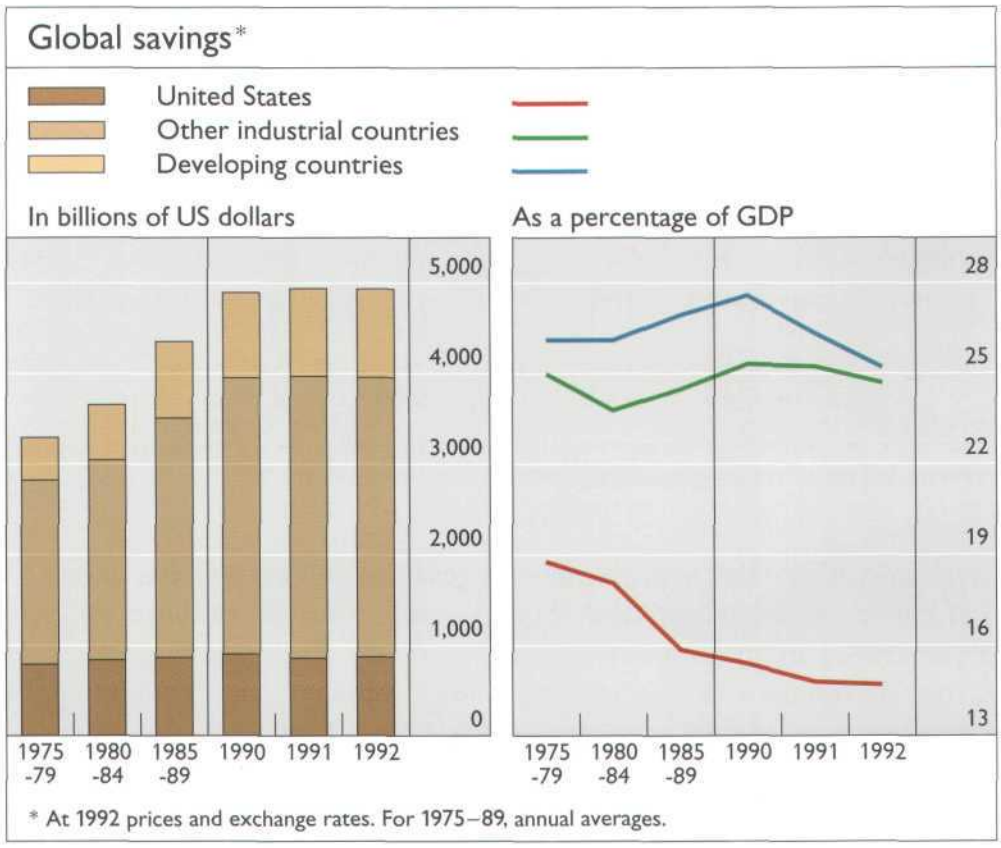
Net capital flows have also become large (see the table above). In the 1980s, the net movement of funds was mostly between the industrial countries, with Japan being the main capital exporter and the United States the principal capital importer. Relatively little capital flowed to the developing world, partly because the international debt crisis had made foreign investors more reluctant to invest there. In addition, poor economic policies in a number of developing countries kept actual returns on investment well below their full potential.

Resumption of flows to developing countries ...

But this pattern was reversed in the early 1990s, with net flows into the developing world rising to about $160 billion in 1993. Capital was directed in particular to Latin America (where flows amounted to almost 5% of GDP last year) and to lower-wage Asian developing countries (about 4%). As is discussed in Chapter III, the pursuit in much of the developing world of policies conducive to sustainable growth served to restore the classical direction of capital flows. Relative cyclical positions have also played a role as output has continued to expand in the developing world while economic activity has been subdued in the industrial world and US short-term interest rates have remained very low. Unlike the 1970s, the private sector, not the public sector, has been the main user of funds.

... supplemented by high domestic savings

Nonetheless, despite the resumption of capital inflows domestic savings have played a far more important role in the financing of investment. Aggregate saving/GDP ratios have on the whole been significantly higher than in industrial countries, largely reflecting very high saving propensities in Asia (see the graph overleaf). Almost 25% of world savings now comes from the developing countries, compared with 15% in the early 1970s. The coincidence of strong inflows of foreign capital with much increased domestic savings in the developing countries means that the recent restoration of the developing world as a major capital importer is more likely to be sustainable.



Developing countries

Increased capital inflows

Most remarkable in the recent resurgence of investor interest in the developing world was the scale on which foreign capital returned to Latin America, where net flows have caught up with those into the Asian developing countries (see the table on page 149). While inflows into Latin America are dominated by portfolio and privatisation-related flows, those into Asia have mainly taken the form of direct investment capital.

Inflows into Latin America exceed those into Asia

As in previous years, around one-half of net inflows into Latin America went to Mexico, where they were the equivalent of 8% of GDP last year. Argentina was the second most important recipient, with inflows rising to 7% of GDP. Although there were also sizable inflows into the higher-income Asian countries – notably Singapore and, more recently, South Korea – the bulk of flows went to those lower-income countries where industrialisation is proceeding very fast. Since 1990, Malaysia and Thailand have imported capital at an average rate of more than 10% of GDP. A new development last year was a marked rise in investment in India, where foreign capital was attracted by the liberalisation of enterprise borrowing abroad, progress towards currency convertibility and other reforms.

Short-term flows attracted by high interest rates

The resurgence of inflows in a number of developing countries was in part due to improved monetary discipline. In particular, higher real interest rates in Latin America encouraged the repatriation of flight capital,

stimulated residents to borrow in foreign currencies and attracted funds from non-residents. In the area as a whole (but excluding the countries with very high inflation) real interest rates, which had been negative by very wide margins in the 1980s, turned slightly positive in the early 1990s. Brazilian real interest rates also turned sharply positive. The fact that the depreciation of most nominal exchange rates against the dollar did not fully reflect inflation differentials made investing in short-term assets denominated in local currency attractive at a time when US short-term interest rates were unusually low (see the graph below). There was a broadly similar interest rate advantage in holding domestic currency deposits in some of the more recently industrialising Asian countries (Indonesia, Malaysia and Thailand) though not in the "older" NIEs. These high dollar-adjusted interest rates are likely to be a transitional phenomenon; as they fall back, short-term capital inflows may tend to reverse.

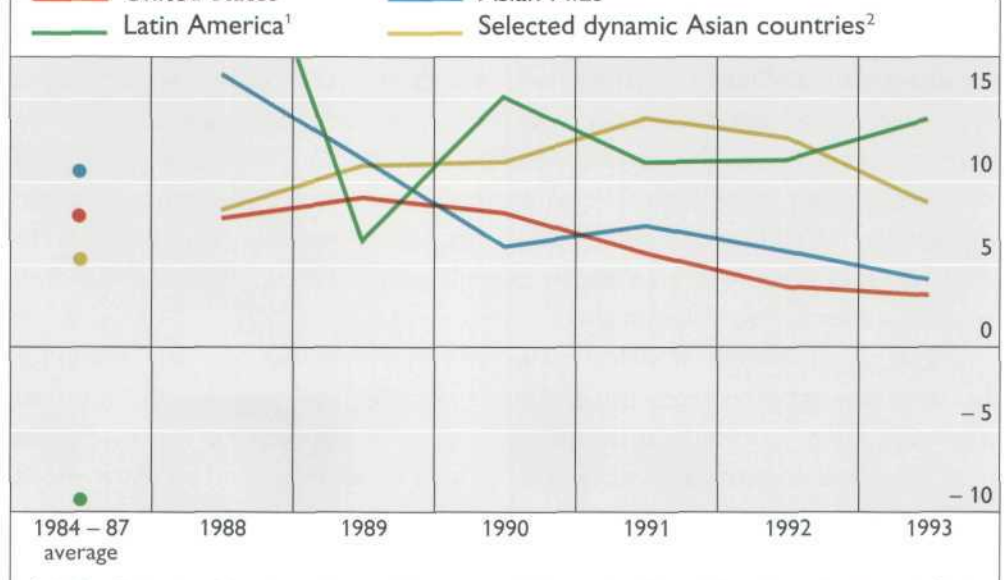
Portfolio flows

As for the identified components of capital flows, the main forces behind foreign direct investment flows are discussed in Chapter IV. According to balance-of-payments statistics, gross portfolio flows into developing countries amounted to more than $90 billion last year, compared with well below $10 billion a year in the second half of the 1980s (see the table overleaf). Such inflows took many forms – the tapping of international bond and equity markets by developing country governments and enterprises, and foreign purchases of equities and other securities on developing country exchanges.

As is discussed in more detail in Chapter V, net international debt issues by developing countries amounted to about $30 billion last year, compared with around $13 billion in 1992. Latin American entities accounted for about two-thirds of the issues. In addition, the use of American

US dollar returns on domestic bank deposits

Annual returns, in percentages



[1] Chile, Colombia, Ecuador, Mexico, Uruguay and Venezuela. The dollar-adjusted return in Latin America in 1988 (outside the range of the graph) was 30.6%. [2] Indonesia, Malaysia and Thailand.

Portfolio capital flows

Countries	1976–80	1981–85	1986–90	1991	1992	1993[1]
	in billions of US dollars, annual averages					
	Outflows					
United States	5.3	6.5	13.6	44.7	48.0	125.4
Japan	3.4	25.0	85.9	74.3	34.4	51.7
Western Europe	6.2	27.7	82.1	148.1	168.4	260.6
of which: United Kingdom	*2.3*	*13.5*	*26.6*	*51.6*	*55.4*	*142.4*
Developing countries[2]	8.7	3.6	3.5	10.7	10.5	20.5
of which: Asian NIEs[2]	*0.1*	*0.2*	*1.2*	*2.3*	*2.3*	*3.1*
Other Asia	*0.0*	*0.0*	*0.2*	*0.3*	*0.5*	*2.0*
Latin America	*0.2*	*0.1*	*2.3*	*7.7*	*6.4*	*14.8*
	Inflows					
United States	5.2	29.4	44.7	54.0	67.2	103.9
Japan	5.1	12.6	26.9	115.3	8.2	–11.1
Western Europe	16.7	25.9	99.1	185.5	221.8	396.5
of which: United Kingdom	*2.3*	*3.5*	*24.7*	*34.4*	*35.7*	*61.5*
Developing countries[2]	1.9	4.1	8.2	27.9	50.7	91.9
of which: Asian NIEs[2]	*0.1*	*0.5*	*0.3*	*4.2*	*7.3*	*13.8*
Other Asia	*0.2*	*1.7*	*1.3*	*0.9*	*0.4*	*9.7*
Latin America	*1.3*	*1.2*	*5.4*	*22.0*	*39.7*	*67.9*

[1] Partly estimated. [2] Excluding Hong Kong.

Depository Receipts has made it easier for developing country entities to raise equity capital in the US market.

Emerging equity markets ...

But the most important element was increased investment in the emerging equity markets. These markets have enjoyed a considerable boom in the last four years, with Latin America recording a particularly vigorous rise. The picture for Asia was more differentiated, with the more open markets as well as the newer stock exchanges showing the largest rises. Hong Kong has played an increasingly important role because it has given foreign investors the chance to buy into companies with assets in China but at the same time hold shares that can be readily sold for convertible currency. Share price increases were relatively moderate in South Korea and Taiwan, where significant restrictions still inhibit foreign participation. One consequence of some importance was that this boom took market capitalisation/GDP ratios to levels at least comparable to those prevailing in the developed world – and in some cases a good deal higher.

... arouse enduring interest

The sharp decline in share prices in early 1994 was a timely reminder that the emerging markets can be more volatile than markets in industrial countries. Also, pricing in these markets does not appear to be as efficient as in industrial country markets in that price movements tend to show more marked "bandwagon" effects, and may be more subject to speculative bubbles. Yet the improvement in the economic prospects of much of the developing world has been such that the incentives for portfolio managers in industrial countries to diversify into developing country equities remain powerful.

In addition, the fact that fluctuations in their prices are not closely correlated with fluctuations in equity prices in industrial countries has made them appear ideal vehicles for diversification. Moreover, the development of country funds portfolios managed by professional managers has made it much easier to invest in many, quite different, markets without detailed knowledge of the performance of individual companies.

Exchange rates and macroeconomic effects

The revival of capital inflows has enabled highly indebted countries to expand imports and overall output growth. Capital inflows have also provided a complementary source of financing for investment, notably in countries with low income and limited scope for raising domestic saving.

Capital inflows may lead to a real appreciation

However, not all the effects of net capital inflows are necessarily favourable. Real effective exchange rates may appreciate, causing a deterioration in the competitive position of the tradables sectors and increasing vulnerability to external shocks, in particular higher international interest rates. Exchange rate policies play a key role in transmitting the effects of capital inflows. Countries which rely on an exchange-rate-based nominal anchor as the principal anti-inflation instrument and manage to maintain a stable nominal rate may experience a real appreciation if capital inflows induce an excessive rise in domestic credit, leading to higher rates of inflation. Countries with more flexible exchange rate policies have some scope for a temporary absorption of inflationary pressures through a nominal appreciation of the currency but will, in the face of sustained inflows, also experience a loss of competitiveness.

Other policies to counteract exchange rate pressures

Governments may address such problems by using other policies to counteract upward pressures on the exchange rate. Restrictive fiscal policies, for instance, reduce the risk of higher inflation. They can also lower nominal interest rates and so limit inflows that were mainly attracted by a favourable interest rate differential. Moreover, tight fiscal policies combined with trade liberalisation and other structural reforms may help to shift demand towards import-intensive investment, inducing a rise in the current account deficit and thus attenuating upward pressure on the real exchange rate. The monetary authorities, through exchange market intervention and sterilisation, can attempt to insulate domestic credit and money supply growth from capital inflows and so reduce the risk of inflationary pressures. However, this will require an increase in government bond issuance and keep domestic interest rates high, stimulating continued inflows and holding up the fiscal cost of debt service.

Divergent real exchange rates in Asia and Latin America, owing to ...

Capital inflows and exchange rate developments. Although capital flows have recently been of a similar order of magnitude in Asia and Latin America, in general real effective exchange rates have not risen in Asia during the 1990s as they have in Latin America. This is partly because several Latin American currencies were undervalued when stabilisation programmes were implemented, but the difference is mainly accounted for by four other factors.

The first is the very different inflation history of the two regions (see also Chapter III). Relatively low inflation in countries such as Malaysia,

Singapore, Taiwan and Thailand meant that policy-makers could keep nominal exchange rates fairly stable without having to accept a real appreciation. They were further helped by the appreciation of the yen, which, given the scale of their trade with Japan, resulted in a nominal as well as a real effective depreciation of their currencies. In Latin America, by contrast, high inherited rates of inflation meant that anti-inflation policies using exchange-rate-based nominal anchors (as in Argentina and Mexico) led to sizable real appreciation even though the rate of inflation declined during the period of large capital inflows. Secondly, nominal exchange rate policies tend to be more flexible in Asia than in Latin America, and a number of Asian countries have kept tighter controls on both inward foreign investment and domestic financial markets. Thirdly, foreign direct investment inflows in Asia have been associated with high, and in some countries increasing, real investment, generating imports of capital goods and, therefore, some offsetting current account deterioration. Finally, Asian countries have succeeded in sterilising a larger proportion of foreign reserve increases than have Latin American countries. Their sterilisation policies, together with remaining (or additional) financial market and exchange controls, also appear to have left a relatively wide scope for independent monetary policies.

... different inflation history ...

... and policy-related factors

Exchange rate policies. The exchange rate policies pursued by Asian and Latin American countries receiving the bulk of capital inflows can be classified into three groups (see the table opposite): those that have adopted quasi-currency board arrangements to sustain a fixed rate against the US dollar (Argentina and Hong Kong); those that have pegged their exchange rates or maintained a high degree of stability against the US dollar (Mexico, Thailand, Malaysia and Taiwan); and those that have had more flexible arrangements, mainly aimed at achieving a stable or depreciating real effective exchange rate (Chile, Indonesia and South Korea). Singapore is in a category of its own, having sought a nominal appreciation of its currency to dampen the effect of import price increases on the domestic rate of inflation. As a result of this policy the nominal exchange rate has appreciated by some 15% over the last four years, while the real appreciation has been less than 10%.

Features of exchange rate policies in different countries ...

Hong Kong is a rather special case in that it has maintained its fixed exchange rate since 1983. This long period of stability and the sheer size of the Exchange Fund available to defend the currency (almost $45 billion at the end of 1993) have given this commitment almost unparalleled credibility. Argentina has had a currency board arrangement since March 1991. Mexico, like Argentina, has experienced a marked real appreciation of its currency because the exchange rate adjustments only partially compensated for the inflation differential against the United States. Indonesia and South Korea, by contrast, relying on more flexible exchange rate policies, were able to offset the effects of their relatively high rates of inflation through nominal depreciation. Singapore's experience, compared with that of Argentina and Mexico, provides perhaps the sharpest illustration of the importance of the lingering effects of past price performance. With a historically very low rate of inflation Singapore was able to use nominal appreciation to help reduce consumer price inflation even further.

... and their implications for real exchange rates

Developments in nominal and real effective exchange rates: selected countries in Latin America and Asia

Countries		1985	1989	1991	1992	1993	Memorandum item: Exchange rate regime
		indices, 1990 = 100					
Argentina	N	*	1,152	51	49	49	Pegged to US$ since 1991
	R	113	78	133	141	155	
Hong Kong	N	100	100	100	100	100	Pegged to US$ since 1983
	R	117	99	106	110	118	
Thailand	N	94	100	100	101	101	Pegged to basket since 1984
	R	120	98	100	97	94	
Mexico	N	1,095	114	93	91	90	Linked to US$
	R	94	97	111	120	128	within band since 1987
Chile	N	185	114	87	84	75	Adjustment based on set
	R	140	105	101	106	106	of indicators within band
Indonesia	N	166	104	95	91	88	Managed float
	R	180	104	99	95	100	
Malaysia	N	137	102	97	102	101	Managed float
	R	147	104	97	103	103	
Singapore	N	102	93	104	107	107	Managed float
	R	126	97	103	105	106	
South Korea	N	111	108	95	86	84	Managed float
	R	100	104	99	93	93	
Taiwan	N	91	104	99	103	98	Managed float
	R	96	105	98	103	98	
Brazil	N	*	2,440	17	1.5	0.1	Independently floating
	R	65	90	85	78	87	

* 812,667 (Argentina) and 1,101,613 (Brazil).

Note: N = nominal effective exchange rate or exchange rate against the US dollar (decline indicates depreciation). R = real effective exchange rate (decline indicates depreciation), using consumer prices as deflator.

Sources: Asian Development Bank, UN Commission for Latin America and the Caribbean, International Monetary Fund and BIS estimates.

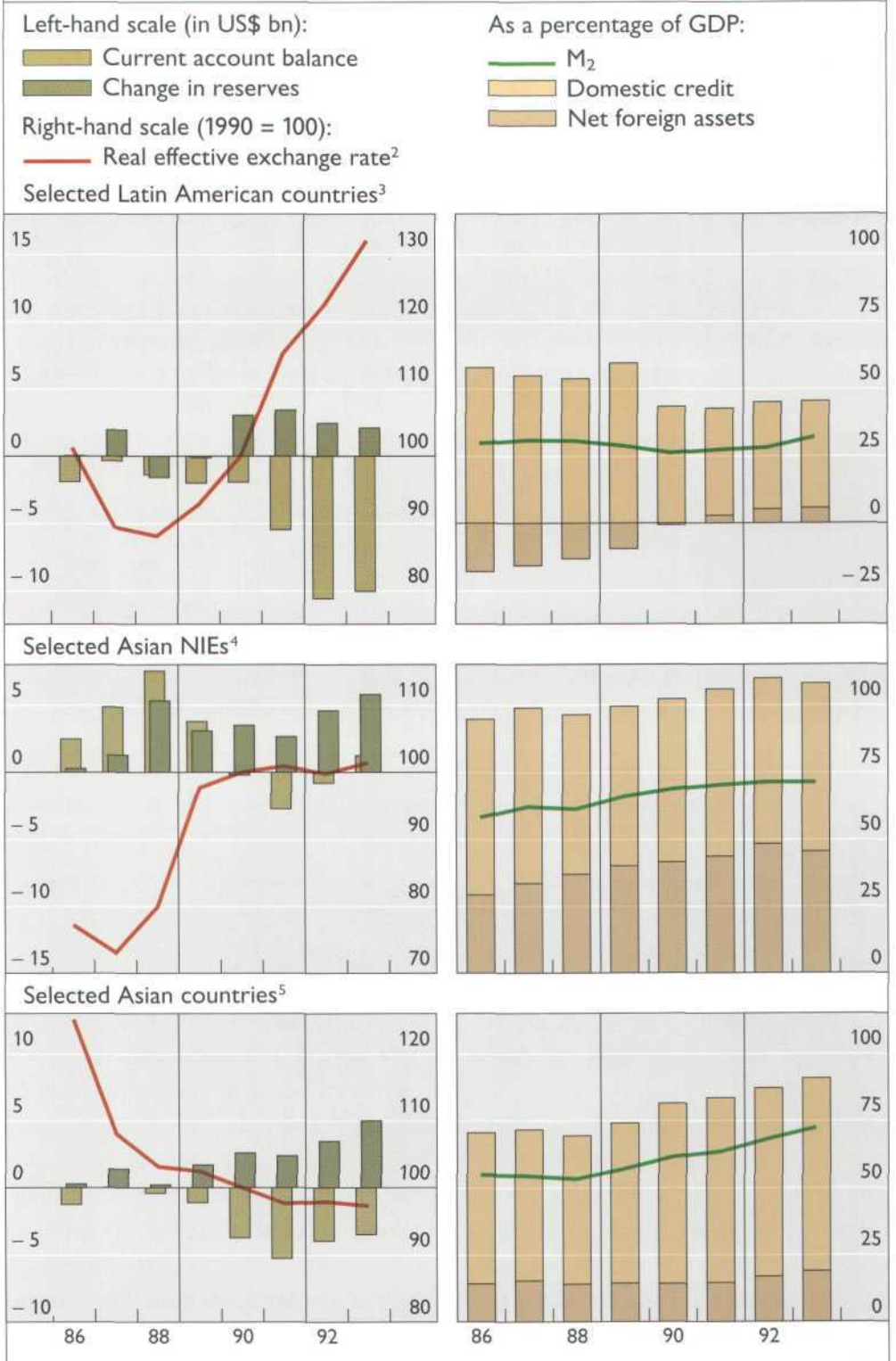
Interdependence of capital inflows and exchange rates

The precise impact of capital inflows on nominal and real effective exchange rates is difficult to assess as the causal sequence can run both ways. On the one hand, the exchange-rate-based nominal anchors typical of Latin American countries, combined with tight monetary policies and the consequent favourable interest rate differentials, have provided an important incentive for capital inflows. On the other hand, in certain periods capital inflows can be an autonomous factor, putting upward pressure on nominal and real effective exchange rates and forcing the authorities to introduce special measures, as is discussed further below. Under such conditions some countries also modified their exchange rate targets, seeking to maintain the idea of a fixed rate by widening the bands within which the exchange rate was allowed to fluctuate, or by revaluing the reference rate in the hope that greater exchange rate uncertainty would deter short-term speculative inflows.

Real exchange rates and current account changes

Saving, investment and the composition of capital inflows. Differences in external current account imbalances provide another reason for the diverse movements of real effective exchange rates in Asia and Latin America.

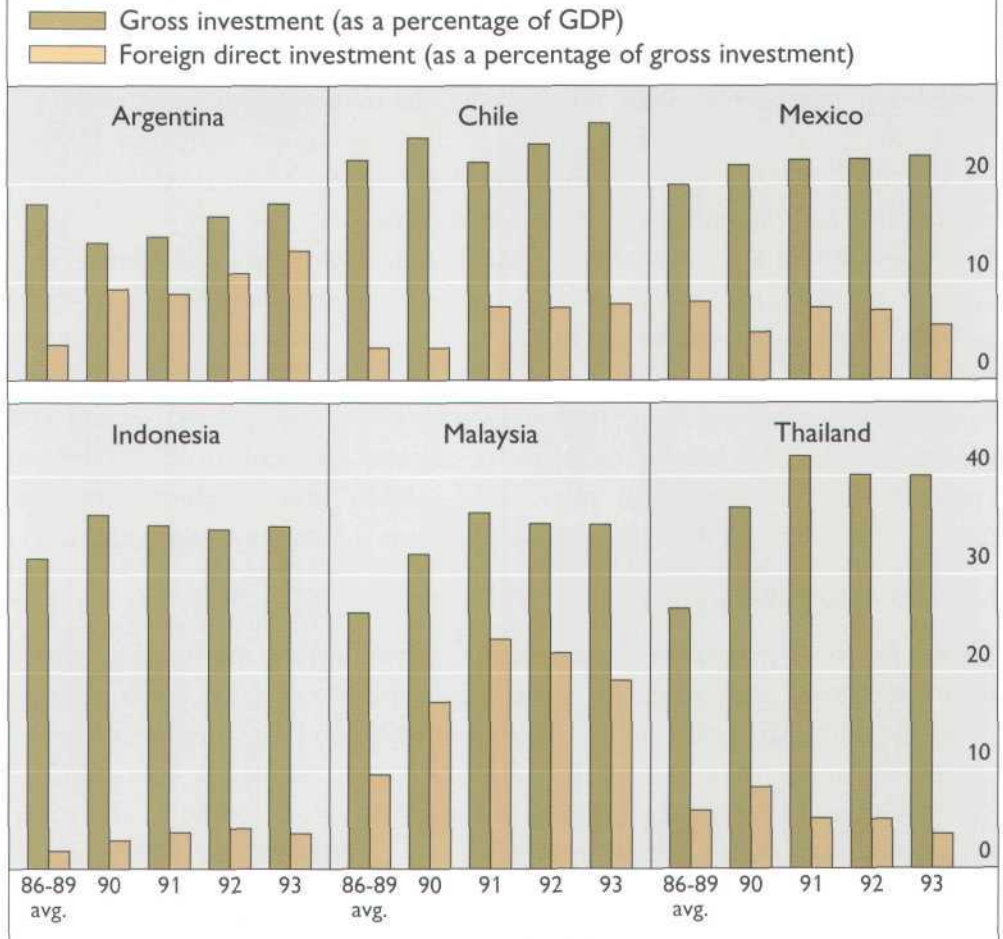
Absorption of net capital inflows, real exchange rates and developments in money and credit aggregates[1]



[1] Unweighted averages. [2] In terms of relative consumer prices. [3] Argentina, Chile and Mexico. [4] Singapore and South Korea. [5] Indonesia, Malaysia and Thailand.

As can be seen from the graph above, Latin American countries have experienced a marked rise in their current account deficits, which seems to reflect both the real appreciation of their currencies and also other factors

Gross domestic investment and foreign direct investment in selected developing countries



Sources: IMF International Financial Statistics and national data.

such as the liberalisation of foreign trade. The principal factor behind the widening imbalances has been much increased imports rather than falling exports; there is little evidence of excessive domestic demand growth. Some Asian countries have also recorded high current account deficits recently but these coincided with growing capital inflows and took place against a background of stable exchange rates.

The influence of real investment ...

A second striking fact is that investment, which tends to be more import-intensive than other demand components, has accounted for a much larger share of GDP in Asia than in Latin America. Investment ratios in Latin America have shown some increase as capital inflows have been accompanied by stronger private investment, while public investment was cut as part of fiscal consolidation efforts; the productiveness of aggregate investment may, therefore, have improved. Nevertheless, in Asia the boom in imports was more clearly related to strong investment growth, notably in export-creating manufacturing sectors. The deterioration in the current account attenuated upward pressure on exchange rates, while investment growth created the basis for a subsequent narrowing of current account imbalances.

The *composition* of capital inflows has probably also played a role in determining their macroeconomic consequences. The share of foreign direct investment in both gross capital formation and capital inflows has been higher in Asia than in Latin America (see the graph on page 157). But what has been most important is the *nature* of foreign direct investment. In Latin America it has mainly taken the form of debt/equity swaps and privatisations, which do not necessarily generate additional capital formation. In Asia, by contrast, foreign direct investment has mostly been in the form of acquisitions or the setting-up of new enterprises.

... the composition of capital inflows ...

One additional source, though mainly of an indirect nature, of divergent current account and exchange rate movements may be changes in fiscal policies. Most Asian countries, having had a long tradition of small budget deficits, had little need for further consolidation in the 1990s. In Latin America, by contrast, earlier lax fiscal policies were reversed only towards the end of the 1980s. This fiscal improvement undoubtedly enhanced confidence among foreign investors and encouraged reflows from residents' accounts held abroad, thus reinforcing upward pressures on real exchange rates.

... and fiscal policies

Implications for monetary policy

Recent exchange market developments in Latin American and Asian countries raise two questions. First, by what means have countries been able to reconcile exchange rate stability objectives with domestic aims of monetary policy? Secondly, to what extent have the countries which succeeded in maintaining a relatively fixed nominal exchange rate been forced to surrender some monetary policy autonomy?

Even in those countries that have removed most foreign exchange and domestic financial market controls, and which pursue a fixed nominal exchange rate policy, domestic and foreign financial assets are probably not perfect substitutes. This provides the authorities with some scope for varying domestic interest rates relative to those of other countries. In addition, there are large differences in the extent to which countries have actually removed capital controls and liberalised financial markets. Hong Kong did so at a very early stage, and with a completely fixed nominal exchange rate the monetary authorities probably sacrificed some degree of policy autonomy. This became evident during the early 1990s when real interest rates turned negative owing to a combination of low US rates and a relatively high domestic rate of inflation. As a result, property prices rose sharply, prompting the authorities recently to consider measures to curb excess demand for real estate. Singapore also liberalised its financial system early, but opted for a flexible exchange rate as a means of achieving lower inflation. At the other end of the spectrum, South Korea and Taiwan have kept a number of internal and external restrictions and, in addition, have more flexible exchange rate policies.

Asset substitution and interest rate policies

The case of Hong Kong

Elsewhere effective intervention and sterilisation policies have been implemented by combining some, albeit limited, exchange rate flexibility with controls on either capital flows or domestic financial markets. Several countries apply an exchange rate band rather than a completely fixed rate and can

Sterilisation policies and monetary autonomy

thus pursue an autonomous monetary policy as long as the actual rate is within the band. In periods of large inflows some of these countries have widened the band and thus their room for manoeuvre. The composition of capital inflows and government debt/asset operations may also help. In Thailand a large proportion of inflows has been in the form of long-term direct and equity portfolio investment and foreign bank loans. In combination with remaining financial controls, this has enabled the authorities to keep the nominal exchange rate within a relatively narrow range against the US dollar while expanding credit in step with the needs of a rapidly growing economy. In several Latin American countries capital inflows in the form of debt/equity swaps and purchases of equities related to privatisation have essentially been sterilised without any involvement on the part of the central banks and without any measurable effect on interest rates. Malaysia and Singapore have absorbed excess liquidity by shifting deposits of the government or compulsory saving schemes from private banks to the central bank.

Special measures in periods of large inflows

Nonetheless, during periods of exceptionally large capital inflows the target of maintaining financial stability and international competitiveness has called for additional, though mostly temporary, measures. In such periods a number of countries have introduced higher reserve requirements for banks or negative interest rates on non-residents' deposits (Chile, Malaysia and South Korea) and have imposed limits on banks' liabilities in foreign currencies (Mexico) or on portfolio investment by non-residents (South Korea and Malaysia). In some countries, non-residents have been excluded from certain markets and operations (Malaysia) or policies encouraging capital outflows have been adopted (Chile, South Korea, Taiwan and Thailand). In cases where government bond markets were not sufficiently developed the authorities have relied on sales of central bank bonds and advance repayments of foreign debt (as for instance in South Korea during 1985–89) have also been used to insulate domestic credit and liquidity developments from increases in reserves.

Conflicts with domestic targets ...

These measures have been quite effective as temporary expedients but run the risk of distorting financial developments, notably to the disadvantage of banks. There have also been several instances in which capital inflows and associated downward pressures on domestic interest rates came into conflict with attempts to reduce inflation and prevent excessive demand growth. This largely explains Chile's introduction of measures restricting inflows and encouraging outflows in 1992 when the economy was growing at 10% and approaching full capacity. Similarly, during 1990–92 Indonesia was pursuing a tight monetary policy under which relatively high interest rates attracted foreign inflows. On the other hand, in the course of 1993 some central banks were helped by a coincidence of internal and external needs. For example, Indonesia, South Korea and Thailand adopted more expansionary policies and the reduction of interest rates and interest rate differentials helped to stem a rise in capital inflows which might have threatened price stability. In Singapore higher interest rates directed against overheating were consistent with the aim of strengthening the nominal exchange rate and thus dampening the influence of import prices on consumer price inflation.

... but also coincidence of targets

Industrial countries: exchange markets in 1993 and early 1994

The dollar, the yen and the Deutsche Mark

Relative stability of the dollar overall ...

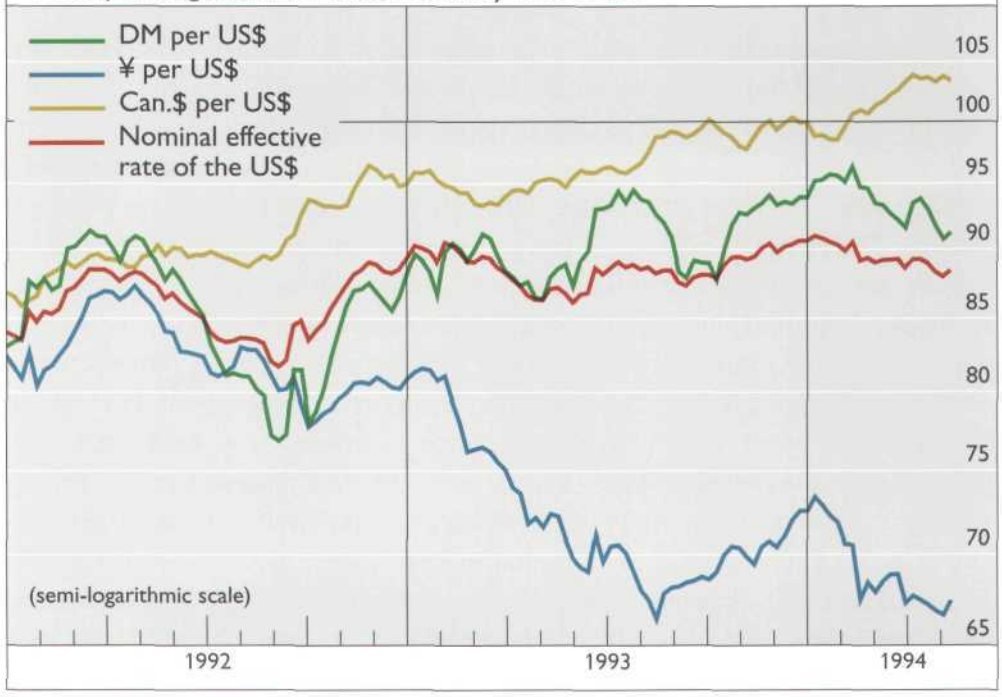
Despite the exchange rate instability experienced from time to time as international financial integration advanced, the international value of the *dollar* was relatively stable during the period from early 1993 to early 1994, its nominal effective rate fluctuating within a fairly narrow range until a weakening began during April this year and pressures intensified – at least temporarily – at the beginning of May. This was in some contrast to the experience of the previous few years during which the uncertain ebb and flow of confidence in the US recovery had been positively correlated with more noticeable short-term cycles in the dollar's value.

... but sharp fall against the yen, offset by a rise against some other currencies

More significant than the dollar's overall stability for most of the period were its contrasting sharp fall against the Japanese yen and rise against the Deutsche Mark and other European currencies, as well as against the Canadian dollar. On several occasions the US authorities joined those in Japan to intervene in the exchange markets against the yen's rise. Thus, taking the period as a whole, earlier market expectations that a continuing recovery of the US economy and a decline in interest differentials would strengthen the dollar proved unfounded. In February–April 1994 the dollar weakened despite indications of continuing firmness in the economy early in the new year, and despite steps towards a less accommodative US monetary policy stance. The latter were accompanied, however, by a sharp fall in dollar bond prices, greater than for example in Germany, and fears of further falls may

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

Weekly averages, third week of February 1987 = 100



Official foreign exchange reserves[1]

Items	1989	1990	1991	1992	1993	Amounts outstanding at end-1993
	in billions of US dollars					
	Changes, at current exchange rates					
Total	54.4	125.0	43.0	24.4	104.7	962.9
of which:						
Industrial countries	*32.5*	*82.1*	*–24.3*	*–25.9*	*28.5*	*459.8*
Asian NIEs	*8.1*	*11.6*	*19.5*	*15.5*	*20.9*	*195.0*
Other developing countries	*11.4*	*37.1*	*54.6*	*32.9*	*47.9*	*285.7*
	Changes, at constant exchange rates[2]					
Total	57.2	90.9	42.0	46.5	109.3	962.9
Dollar reserves	6.8	39.7	30.8	47.5	60.0	577.1
of which held:						
In the United States	*–4.2*	*29.9*	*22.3*	*32.8*	*78.3*	*418.0*
With banks outside the US[3]	*1.7*	*3.4*	*5.8*	*9.2*	*1.4*	*95.0*
Non-dollar reserves	50.4	51.2	11.2	– 1.0	49.3	385.8
of which held with banks[3]	*7.2*	*16.9*	*–29.2*	*– 6.9*	*4.2*	*95.7*
Memorandum item:						
Identified reserves in:						
Deutsche Mark	*24.0*	*10.0*	*– 8.2*	*– 7.1*	*38.7*	*159.5*
Japanese yen	*10.8*	*16.0*	*4.2*	*– 4.4*	*3.3*	*92.0*
Pound sterling	*2.8*	*4.2*	*3.9*	*4.9*	*4.1*	*31.4*
Private ECU	*7.3*	*13.7*	*2.3*	*–12.0*	*3.7*	*24.8*
French franc	*2.6*	*7.4*	*4.6*	*– 1.0*	*1.1*	*18.8*

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

Reversal of the relationship between the dollar and the strength of the US economy eventually leads to coordinated intervention

have contributed to some shift away from the dollar. In other words, once the upturn had become sufficiently well established that markets were persuaded that the trough in the American interest rate cycle had clearly been passed, the positive relationship between the exchange rate and the indicators of real recovery was – at least for a time – reversed. The situation intensified in early May to such an extent that the US authorities led internationally concerted intervention in support of the dollar, and the Treasury Secretary announced that the US authorities had no interest in an undervalued dollar.

Large increase in official dollar holdings in the United States partly offsets deficits on US current and long-term capital accounts

During 1993, as the table overleaf shows, the rising US current account deficit had as its main counterpart net official monetary movements. This was not the consequence of a decline in reserves, which in fact grew by $2 billion despite occasional US exchange market intervention. It stemmed rather from an increase of $78 billion in other countries' official holdings of US dollars in the United States, in large part reflecting strong reserve growth in developing countries. It may also have been a result of portfolio shifts into US Treasury bills, as the already low interest advantage of Euro-dollar deposits declined further for a time. Private financing (excluding the statistical discrepancy), by contrast, fell to just $6.7 billion, entirely on account of

another large drop (of $47 billion) in banks' net foreign claims as, in particular, the retrenchment of Japanese banks' international activity continued. Record capital flows in the form of securities transactions were registered last year, but resulted in a net outflow of only $21.4 billion – international portfolio diversification not being confined to US investors. Finally, with growth picking up in the United States, foreign direct investment inflows rose markedly: in 1992 these had dropped to their lowest level in twenty years, but they recovered to over $30 billion last year, and the net outflow declined.

Sharp appreciation of the yen

A major feature of the period under review was the sharp rise in the international value of the *yen*. Between mid-January and mid-August last year the Japanese currency rose by around 24% against the dollar and by 33% against the Deutsche Mark. It then fell back somewhat during the last four and a half months of 1993 before strengthening again in the new year to around its earlier levels, particularly after the breakdown of the US-Japanese trade talks in mid-February, and again in late April and early May as political uncertainty intensified in Japan and the dollar weakened more generally. In real effective terms, this means that the yen has recently been some 70% above its temporary low point in early 1990, or about 30% above its level in early 1987 following the correction of the dollar's massive overvaluation in the early 1980s.

Already in March and April of last year, starting to fear too sharp a rise of the yen, the Bank of Japan reportedly intervened to contain its

The external accounts of the United States and Japan

	1989	1990	1991	1992	1993	1993 I	1993 II	1993 III	1993 IV
	in billions of US dollars								
United States									
Current account	–101.6	–91.9	– 8.3	– 66.4	–109.2	–14.7	–25.7	–35.0	–33.9
Capital account[1]	118.6	62.0	–13.5	24.4	41.3	4.3	7.6	17.4	12.0
of which:									
Direct investment	*30.9*	*20.9*	*– 5.1*	*– 32.4*	*– 18.7*	*– 1.5*	*– 2.1*	*– 6.1*	*– 9.0*
Securities[2]	*46.3*	*–29.7*	*9.2*	*19.2*	*– 21.4*	*– 3.9*	*– 9.7*	*–25.1*	*17.2*
Banks, other than above	*5.2*	*32.4*	*– 5.1*	*43.6*	*46.8*	*9.2*	*3.9*	*33.4*	*0.2*
Statistical discrepancy	*– 17.4*	*30.8*	*–15.1*	*– 12.2*	*26.7*	*3.1*	*13.5*	*7.2*	*3.0*
Net official monetary movements[3]	– 17.0	29.9	21.8	42.0	68.0	10.3	18.1	17.6	21.9
Japan									
Current account	57.2	35.8	72.9	117.6	131.4	35.9	31.4	32.0	32.1
Capital account[1]	– 81.9	–56.6	–90.0	–118.9	–108.0	–31.4	–26.5	–18.0	–32.1
of which:									
Direct investment	*– 45.2*	*–46.3*	*–29.4*	*– 14.5*	*– 13.6*	*– 3.0*	*– 3.9*	*– 2.2*	*– 4.5*
Securities	*– 28.0*	*– 5.0*	*41.0*	*– 26.2*	*– 62.7*	*– 4.4*	*–20.9*	*– 2.5*	*–35.0*
Banks, other than above	*8.6*	*–13.6*	*–93.5*	*– 73.0*	*– 15.0*	*–25.1*	*– 4.2*	*0.3*	*14.0*
Statistical discrepancy	*– 22.0*	*–20.9*	*– 7.8*	*– 10.5*	*– 0.3*	*4.2*	*5.3*	*– 9.0*	*– 0.7*
Net official monetary movements[3]	24.7	20.9	17.1	1.4	– 23.5	– 4.5	– 4.9	–14.0	– 0.1

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

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

Weekly averages, third week of February 1987 = 100

appreciation, after having previously lowered the official discount rate to 2½% in February. The US authorities themselves also intervened in modest amounts. In addition, they issued a statement declaring that "exchange rates should reflect fundamentals and attempts to artificially influence or manipulate exchange rates are inappropriate". Nevertheless, joint intervention was reportedly undertaken on several occasions up to 8th June, and again in mid-August following the ERM crisis.

Joint intervention undertaken

After that the dollar strengthened somewhat, and the yen lost ground until around the end of the year, partly because of signs of a quickening of the US recovery, and partly in anticipation of a successful outcome of the US-Japanese trade negotiations.

Early in the new year however, the yen again turned upwards as US dissatisfaction with the progress of the trade talks became apparent and it was assumed, rightly or wrongly, that this would lead to action to strengthen the yen. This situation became acute in mid-February when the talks actually broke down, and again the Bank of Japan reportedly intervened to sell yen. Even so, the yen remained relatively strong and began to rise once more until in early May concerted intervention was undertaken in support of the dollar designed to prevent it from falling through the psychologically important barrier of ¥100.

The $27 billion increase in Japan's non-gold reserves in 1993 reflected repeated recourse to official intervention. By the end of 1993 Japan's official holdings stood at $99 billion, the largest in the world.

Like the dollar, the Deutsche Mark displays overall stability

Despite record inflows of portfolio capital into Germany, only part of which was related to the ERM crisis, the overall value of the *Deutsche Mark,* like that of the dollar, changed remarkably little during the period under review. As other European currencies had succumbed to overwhelming speculative pressures, the Deutsche Mark's nominal effective value had appreciated by 3½% during 1992. Last year, however, the Deutsche Mark fell slightly on average even though it did rise for a time during the crisis in the European exchange rate mechanism. The crisis, however, did not lead to major or sustained devaluations of other currencies as in 1992 and early 1993, although the lira, the Swedish krona and the peseta, inter alia, generally drifted further downwards.

Large gross portfolio capital flows in Germany

Even so, for the second year in succession, gross inflows of portfolio capital into Germany nearly doubled, reaching DM 242 billion. These inflows were motivated by continuing relatively high levels of interest rates in Germany and by expectations of future reductions, as well as by the strong speculative pressures in the ERM. Gross portfolio capital outflows almost halved to just DM 40 billion last year. As in 1992, some two-thirds of the portfolio inflows went into public sector bonds. Purchases of domestic bonds by German residents channelled through Luxembourg investment funds also played an important role in inflating both inflows and outflows.

The German external accounts

Periods	Current account	Capital account					Net official monetary movements*
		Total (*including* errors and omissions)	of which				
			Net direct investment	Foreign investment in German securities	German investment in foreign securities	Commercial banks' short-term transactions	
	in billions of Deutsche Mark						
1992							
January–June	–18.5	28.8	–8.8	9.7	–34.4	56.8	–10.3
July	– 7.4	8.9	–1.5	12.4	– 5.7	– 8.6	– 1.5
August	– 1.2	4.5	–1.3	10.4	– 2.7	3.0	– 3.3
September	– 2.0	84.5	–3.5	32.8	3.2	33.0	–82.5
October	– 2.1	–35.9	–0.2	20.6	–11.1	–24.9	38.0
November	– 0.2	– 0.9	–0.6	8.0	– 9.7	– 2.2	1.1
December	– 3.1	13.2	–8.1	29.6	–10.1	6.7	–10.2
1993							
January–June	–12.9	–38.1	–6.6	135.2	–58.3	–40.0	51.0
July	– 7.8	21.0	–1.7	30.2	– 4.1	10.9	–13.2
August	– 5.7	49.9	–0.8	1.3	– 5.3	30.8	–44.1
September	– 3.1	–29.7	–2.4	19.0	3.1	–29.7	32.8
October	– 3.7	– 8.3	–1.0	20.2	– 2.0	2.0	12.0
November	1.1	0.8	–0.7	13.5	4.8	–25.0	– 1.9
December	– 3.1	3.9	–6.6	22.3	21.5	–51.6	– 0.8

* Changes in gold and foreign exchange reserves less changes in liabilities to foreign monetary authorities. A minus sign indicates an increase in official assets.

The introduction of a withholding tax on interest income had much inflated capital outflows (mainly purchases of Luxembourg investment certificates mentioned above) from Germany in 1992, but the process seemed to have run its course by the middle of 1993. Additional changes in the tax legislation (seeking to capture interest income received from abroad) became known in September and further reduced the attractiveness of investing in Luxembourg funds, and even induced brisk net sales of such investment certificates in the final months of the year.

The large surplus on long-term capital account was to some extent offset by non-bank short-term capital outflows. Partly reflecting their desire to avoid the withholding tax on interest earnings, non-bank residents greatly increased their short-term bank deposits abroad, particularly during the first quarter of 1993. Nevertheless, banks' short-term cross-border claims also rose sharply, although major swings took place in the course of the year, given heavy speculative pressures in the ERM during the summer.

In contrast to Japan's experience, Germany's official non-gold reserves fell during 1993, by $13 billion. Reserves had been swollen by the turbulence in the exchange market in the autumn of 1992 and their decline by the end of 1993 represented a return to more normal levels, despite a temporary rebound during the 1993 ERM crisis.

The 1993 crisis in the European exchange rate mechanism (ERM)

The outcome of the 1992 ERM crisis as a backdrop to the latest one

Last year's Annual Report (Chapter VIII) described in detail the protracted period of exchange market turmoil in Europe which continued intermittently through the period then under review up to mid-May 1993, when the Portuguese escudo and the Spanish peseta were again devalued in the ERM. By that time, a total of ten European fixed or pegged rate currencies (including the three non-ERM Nordic ones) had come under unprecedented and repeated *downward* attack in the exchange markets (others had of course experienced counterpart upward pressures). And despite record levels of official intervention, only three – the French and Belgian francs and the Danish krone – had avoided either devaluation or enforced floating. In all these cases the authorities considered the so-called "fundamentals" to be sound as inflation appeared to be well under control and current accounts were in surplus. Although the international competitiveness of all three countries had been adversely affected by the aftermath of the 1992 exchange market turmoil, it had not got out of line with the levels prevailing after the previous major change in parities in early 1987 (see the graph overleaf); Denmark was perhaps an exception, but to a relatively minor extent. Therefore by 1993 not only did there seem to be no reason for these currencies to be devalued, there was also good reason *not* to depreciate, in that price stability and the credibility of policy might well have been compromised.

At the same time, however, another outcome of the earlier crises (in addition to their competitiveness implications) had been to harm the credibility of rigid exchange rate commitments. In other words, some major implications of the integration and development of international capital markets had again been very clearly demonstrated. In this regard the summer 1993

ERM crisis was not a novel phenomenon; but its outcome has so far been quite different from those in 1992 and early 1993.

Following the devaluation of the Irish pound at the beginning of February 1993, tensions persisted intermittently in the ERM, with the French franc in particular near its floor in the narrow band until well into April, as the Bundesbank cut interest rates fairly steadily but cautiously. The decisive result of the French elections in late March helped to lift pressure off the French franc, and a little later the Bundesbank reduced interest rates again. Indeed, so much did sentiment about the French franc change that the authorities were able to lower interest rates by 3% in two months and even, for a time during late June and early July, to permit French short-term interest rates to fall below German ones. In addition, the positive outcome of the second Danish referendum on the Maastricht Treaty had added to confidence more generally. The Danish authorities reportedly made some purchases of foreign exchange, and both they and the French and Belgian authorities were able to lower short-term interest rates further. In the case of the lira – now outside the ERM – a similar opportunity also presented itself at times during May and into June, in part because of some weakening of the Deutsche Mark.

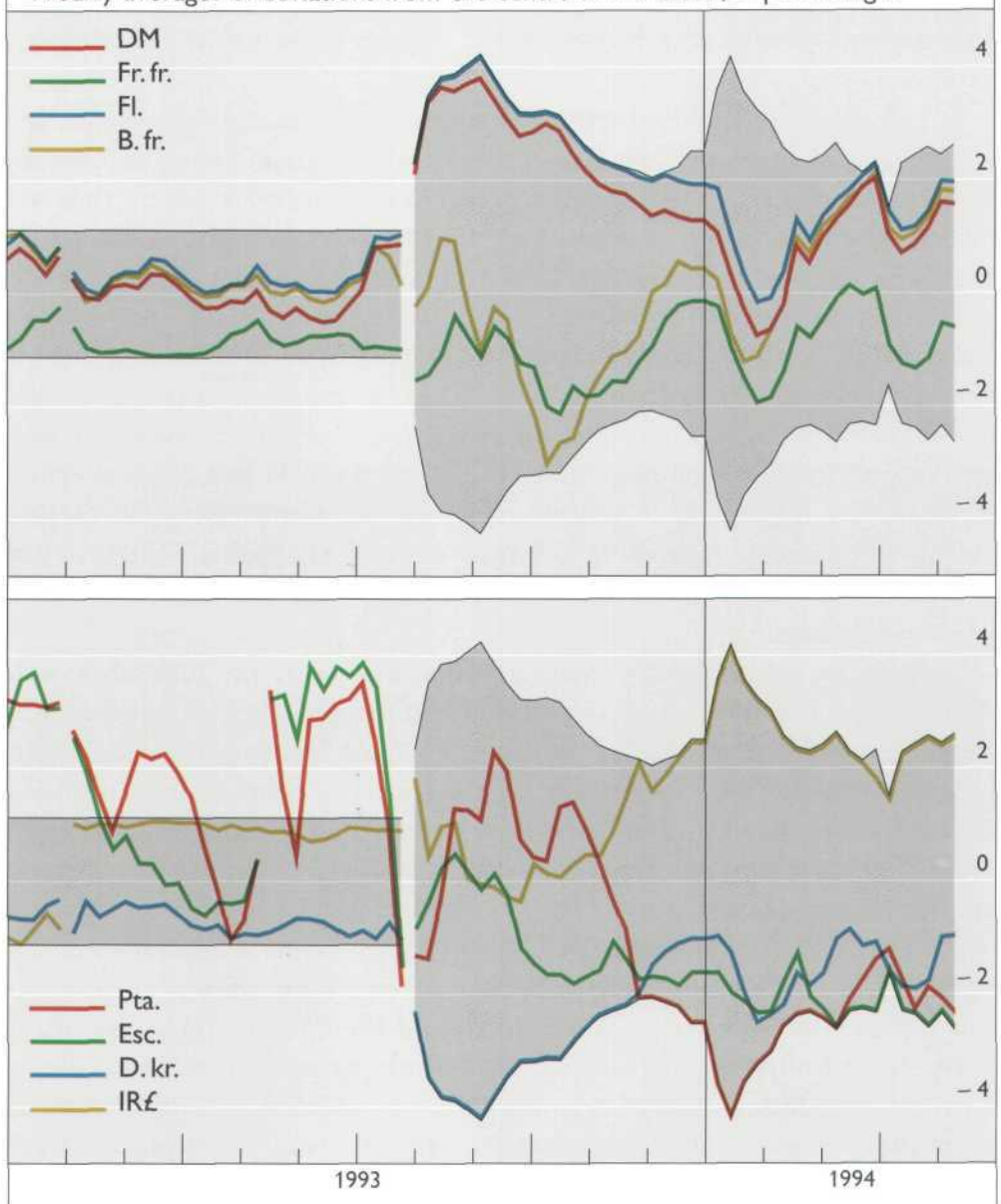
Cautious cuts in German interest rates are accompanied, for a time, by larger cuts in some other countries

Towards the end of June, however, a further rise in French unemployment was announced. This seemed to serve as a reminder to the markets of the limits to which domestic interest rates could be raised to defend fixed parities in depressed economies, no matter how sound the "traditional" fundamentals. Thus, although the Bundesbank gradually reduced interest rates further, and France, Denmark and Belgium among others all followed suit, the size of the resulting interest rate changes was necessarily such that they could not by themselves have been expected to increase significantly the margin of manoeuvre for combating exchange rate strains. Indeed it may well be that the episode merely served to underline the fact

A new crisis threatens ...

Positions of member currencies in the ERM

Weekly averages of deviations from the centre of the bands, 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 since 2nd August and the horizontal lines the limits of the narrow band of the ERM in use prior to that date.

that the road to appreciably lower real interest rates in Europe was going to be a long one, and pressures reappeared.

... and comes to a head on 30th July

In the final week of July the French franc started to come under massive selling pressure and the Bank of France raised interest rates. The selling pressure also spread to the Danish krone again, as well as to the peseta, the escudo and the Belgian franc. In spite of very heavy official intervention, the tensions continued as the markets waited to see what action the Bundesbank would take. When expectations as to the scale of German interest rate cuts were disappointed, turmoil broke out in the markets. On Friday,

30th July both the French franc and the Danish krone fell to the floor of the narrow band, from which it seemed that no feasible amount of intervention could lift them, even after the Bundesbank had let it be known that it would not resist some fall in market interest rates below the discount rate.

Massive intervention is unable to prevent ...

The situation paralleled that in September 1992 in the following sense. In the face of massive capital flows – rational or not in terms of conventional fundamentals – the defence of narrow exchange rate margins, via increases in short-term interest rates and intervention, had become simultaneously an engine of deflation in already depressed economies, and one of potentially even higher inflation in Germany. For it was the Bundesbank alone which could provide the necessary volume of resources for intervention, but only by risking an unacceptable rise in the German money supply and imposing onerous repayment obligations on countries borrowing under the very short-term financing facility (VSTF) of the EMS and bilateral credit facilities. The markets took the view that neither further deflation outside Germany nor higher inflation in Germany were at all credible policies in the degree which would have been necessary to counter the potential volume of currency sales.

... a large pre-emptive widening of the ERM's fluctuation margins

After the overwhelming exchange market pressure on 30th July it was decided over the following weekend to widen temporarily both existing ERM bands to a pre-emptive ±15%. The Deutsche Mark/Dutch guilder fluctuation margin remained unchanged at 2¼%. At the same time, the official communiqué stressed that the existing grid of central rates was still thought to be "fully justified", and expressed confidence that market rates would soon approach these parities again.

Thereafter, policies are eased only cautiously...

To back this up, no immediate or significant advantage was taken of the apparently increased room for manoeuvre in interest rate policy. For example, the French authorities only gradually lowered the 24-hour rate from 10 to 7¾%. Apart from a commitment to the former parities per se, and a desire to avoid the inflationary consequences of any devaluation, another important motivation for this policy caution was the need in several countries to attract capital inflows, in part to meet obligations incurred under the short-term financial support operations. A further major concern was to keep long-term interest rates on a downward path. For a time in August and part of September, this policy orientation was made even more difficult to maintain as the Deutsche Mark strengthened against the dollar. Nevertheless, the stance was maintained.

Apart from the fact that the situation was deliberately not exploited to try to bring about a faster reduction in interest rates, this cautious policy approach proved remarkably successful. The spread of the former narrow band currencies around their unchanged central rates increased for a time to over 8% in August and to almost 9% in September, mainly as a result of the relatively slow recovery of the Danish krone, due partly perhaps to the announcement of a relatively expansionary budget in Denmark. The French and Belgian francs, by contrast, never fell very far and, albeit with some fluctuation, have occasionally risen above the mid-point of the band. This has

... and ERM exchange rates remain relatively stable vis-à-vis unchanged central rates

been particularly true more recently in the case of the Belgian franc – although at one point in September interest rates had to be raised again before, in November, a major austerity package was agreed. The Belgian franc began to rise quite sharply, and interest rates were then reduced again in several small steps.

Short-term interest rates have in fact been reduced significantly over time, in Germany as well as in other ERM member countries, albeit at a rather slow pace. Finally, reserves have been significantly reconstituted: the Bundesbank reported that EMS partner central banks had been able to repay almost all of their intervention-related obligations under the VSTF and bilateral credit facilities by the end of the year. Support operations by the Bundesbank had resulted in purchases of EMS partner currencies equivalent to almost DM 60 billion ($35 billion) in July, which, while less than during the September 1992 crisis, had of course been much more concentrated, particularly on the French franc. The Bank of France later announced that the whole of the Fr.fr. 107 billion borrowed through the European Monetary Co-operation Fund had been repaid on 14th January 1994, one month ahead of schedule.

A further demonstration of the power of capital flows ...

One of the general lessons to be drawn from the latest European exchange rate crisis was not new. The crisis simply reconfirmed the fact that, in today's international capital markets, potential capital flows are of such a magnitude that they cannot always be credibly countered by official intervention to maintain a fixed exchange rate commitment. Even where the "fundamentals" are deemed to be sound, as in the latest episode in Europe, the underlying monetary policy changes implicitly required to hold a fixed exchange rate can, apparently, quickly come to be seen as "non-credible" – especially where unemployment is very high. And for strong-currency countries, even the mere possibility of an exchange rate change can require policy changes that risk impairing, not improving, the credibility of the stance of their monetary policies.

... to pose an uncomfortable policy dilemma

Importance of sound policies underlined ...

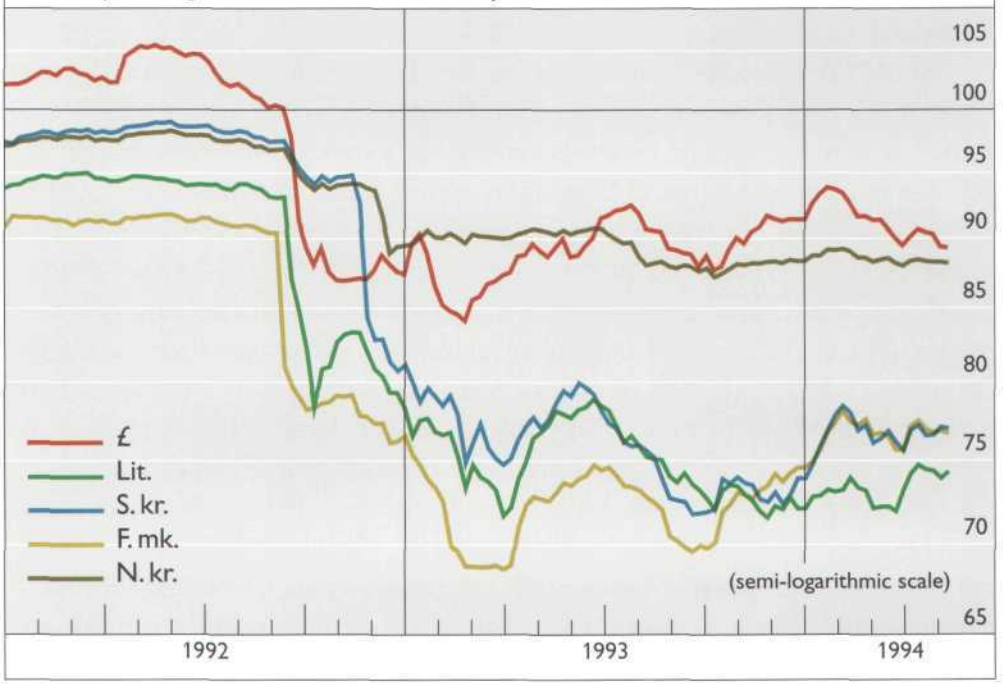
A second lesson was also not new, having already been demonstrated both at the time of the breakdown of the Bretton Woods system in 1971–73 and again in the ERM in 1992. This is the importance – in fixed rate systems – of the anchor currency's being sound, not only in terms of low inflation but also in terms of a background of a well-balanced macroeconomic policy mix.

For the European Community itself the crisis seemed at the time to imply more far-reaching consequences, political as much as economic, than the earlier one. The "core" EC exchange rate relationship had apparently been overwhelmed, and much pessimism was voiced as to the prospects, in particular for the existing EMU timetable.

Yet in one respect at least, hindsight should now be tempering this pessimism. While ERM exchange rates have certainly fluctuated since early August 1993 over a wider range than that of the previous bands, the fluctuations have been quite restrained. In the event – and in contrast to the outcome of the earlier crisis – the latest one did not in the end result in a major realignment of real effective exchange rates. Indeed, there might here be a third lesson to be drawn from the crisis. It is true that one reason

Bilateral exchange rates of selected currencies against the Deutsche Mark

Weekly averages, third week of February 1987 = 100



for the unexpected stability of ERM exchange rates after August 1993 is likely to have been the restoration of two-way risk in the market. But another may well have been the careful setting of individual countries' monetary policies: the fact that, in the circumstances, they could achieve so much relative exchange rate stability might be taken as an encouraging sign. Indeed, it raises the question of whether, in today's world, the maximum possible degree of exchange rate stability might not be achieved by a combination of sound and internationally coordinated macroeconomic policies in a context of relatively less constraining, formal, exchange rate arrangements. The preservation of unchanged central rates may have made this stability all the more achievable in that it maintained a credible focus for exchange rate expectations despite the de facto absence of fixed margins. A final lesson may be that the structural policies needed to bring about a lasting reduction in unemployment in Europe (see Chapter II and the Conclusion) are also made urgent by exchange rate considerations. The reason is the role apparently played by unemployment in influencing market participants' views about the ability of central banks to keep exchange rates at their desired levels.

... and demonstrated by the relatively benign outcome of the 1993 crisis

Sterling, the lira and the floating Nordic currencies

During the 1992 exchange market turmoil a total of five European currencies had been forced from a fixed or pegged rate regime to one of floating. With the exception of the Norwegian krone, all these currencies fell sharply further during the early months of 1993 before recovering rather fitfully. Nevertheless, over the period from the start of 1993 to mid-April 1994 as

Some currencies forced to float in 1992 lose further ground for a time

a whole, the lira and the Swedish krona in particular tended to fall somewhat further in nominal effective terms. Sterling, too, weakened again during the first quarter of 1994 as interest rates were reduced further and as renewed political uncertainties appeared.

In the background, all five countries faced the need to tread a careful path between, on the one hand, making further cuts in interest rates (see Chapter VI, page 125) and, on the other, trying to restore their net external reserve positions without resort to additional depreciation of their currencies, given the inflationary risks involved. But in contrast to the countries most affected by the 1993 crisis, neither did they make any attempt to push exchange rates back to their former levels, in part because the cost of doing so might have been high but also because some correction of their competitive positions had been justified.

The Canadian dollar

The Canadian dollar comes under pressure as policy credibility is questioned

The final noteworthy feature of exchange rate developments in 1993 and early 1994 concerned the *Canadian dollar,* which continued to decline until, in March-April 1994, a sharp sell-off suddenly occurred. There were several factors in the background. For example, earlier Canadian cost and price performance had been such that, by late 1991, the Canadian dollar's real effective exchange rate had appreciated by some 25% compared with its level at the time of the Louvre Accord. By late March 1994, the whole of this rise had been reversed.

A combination of budgetary (federal and provincial) and political and constitutional uncertainties (see Chapter II) weighed on the exchange rate. Then in February 1994 the US authorities began to move to a less accommodative policy stance, and the Bank of Canada brought about a very sharp 2% rise in Canadian short-term interest rates in late March and early April.

Perhaps two lessons emerge from this experience. First, the markets again displayed their potential for imposing pressures for policy discipline. Secondly, and less reassuringly, the episode demonstrated that, even under virtually free-floating conditions, the markets can sense, and may possibly try to exploit, the authorities' room for interest rate manoeuvre in defence of an exchange rate in an underemployed economy.

VIII. Payment and settlement systems: trends and risk management

Highlights

Payment and settlement systems are to economic activity what roads are to traffic: necessary but typically taken for granted unless they cause an accident or bottlenecks develop. Economic transactions give rise to settlement obligations to be discharged through the transfer of money between the contracting parties. The organisation and mechanics of this process attracted no particular attention on the part of policy-makers or market participants until about a decade ago. Since then, the unprecedented surge in financial activity, both within and across national borders, and the emergence of episodes of financial distress have generated considerable interest in payment and settlement systems.

The spectacular growth in the value of transactions has put pressure on existing systems; against a background of heightened competition in the financial industry, it has also radically altered the scale of the liquidity and credit risks involved. A number of episodes of financial strain, such as the stock market crash of 1987, have highlighted their potential for propagating and amplifying financial shocks. The management of payment system risks, at both firm and system-wide level, is now high on the agenda of public authorities and private agents. In recent years a broad range of initiatives have been taken with a view to ensuring the efficiency and soundness of the arrangements. As the institutions generally responsible for safeguarding the integrity of the payment system, central banks have played a key role.

It now seems appropriate to take stock of these developments from a longer-term perspective. This chapter first outlines the main changes that have taken place in the structure and workings of payment and settlement systems over the last decade or so. It then turns to the nature of payment system risks and reviews the steps taken to contain them. The main focus is on systemic risk, that is, the risk which arises from the linkages between institutions or markets. Finally, the chapter considers the common ground between the oversight of payment and settlement systems, on the one hand, and the prudential regulation and supervision of banks and securities firms, on the other.

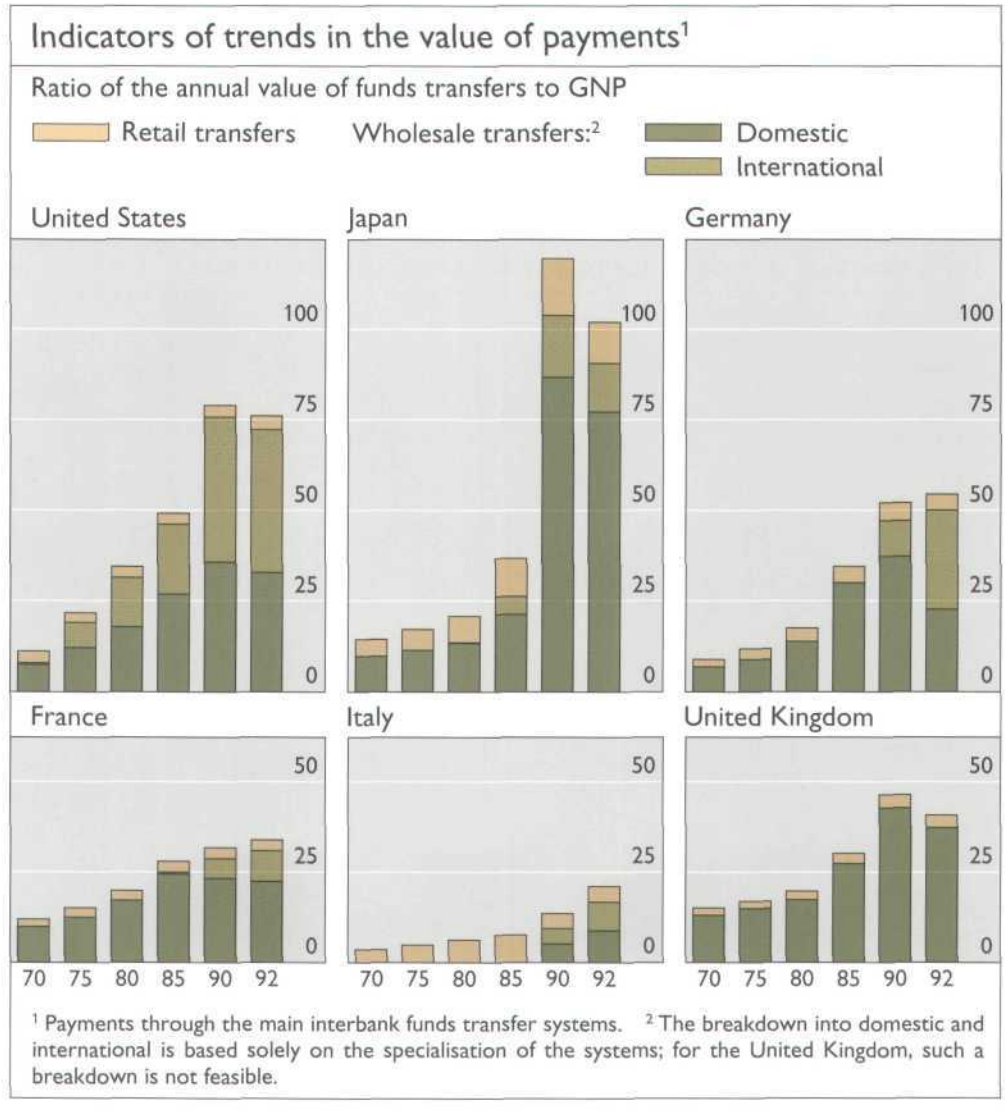
The transformation of payment and settlement arrangements

The profound changes that have occurred in the structure and workings of payment and settlement arrangements since the early 1980s have mirrored the transformation of the financial industry more generally. Some of these developments are readily visible to retail customers. Examples include a wider

spectrum of instruments available for executing payments; the application of information technology, for instance in the form of automated teller machines; a greater ability to economise on cash balances, such as through credit cards; a better remuneration of transactions deposits; and the introduction of explicit charges on hitherto free services. However, highly visible though they are, these developments have been less significant than those in the "wholesale" segment, which involves large-value transactions between banks, other financial institutions and non-financial companies.

Surge in the overall value of payments ...

Reflecting a surge in the number and average size of economic transactions, the period under consideration has witnessed an unprecedented increase in the value of payments. Since commercial transactions grow in line with economic activity, it is the expansion in financial activity that has been responsible for this trend. While figures on the overall value of payments are difficult to obtain, the trend is captured by the sharp rise in the ratio of interbank funds transfers to GNP in the Group of Ten countries (see the graph below). The rise has been especially pronounced in Japan, where the ratio jumped from around 20 in 1980 to 120 in 1990, before falling



[1] Payments through the main interbank funds transfer systems. [2] The breakdown into domestic and international is based solely on the specialisation of the systems; for the United Kingdom, such a breakdown is not feasible.

somewhat subsequently. Moreover, historical statistics for Japan confirm the unprecedented nature of the increase: estimates suggest that the ratio in the mid-1970s was still of the same order of magnitude as it had been in the early part of the century.

The overall value of payments is now very large in all countries. The figures indicate, for instance, that it takes only about two and a half business days for the interbank funds transfer systems in Japan to generate a turnover equivalent to the country's annual GNP. In the case of the United States and Germany, it takes a little over three and four days respectively. Moreover, albeit to an extent that differs across countries, these numbers underestimate the value of payment flows: they exclude payments that take place between accounts held at the same bank and the rapidly growing funds transfers in respect of securities and derivatives transactions carried out in separate sub-systems.

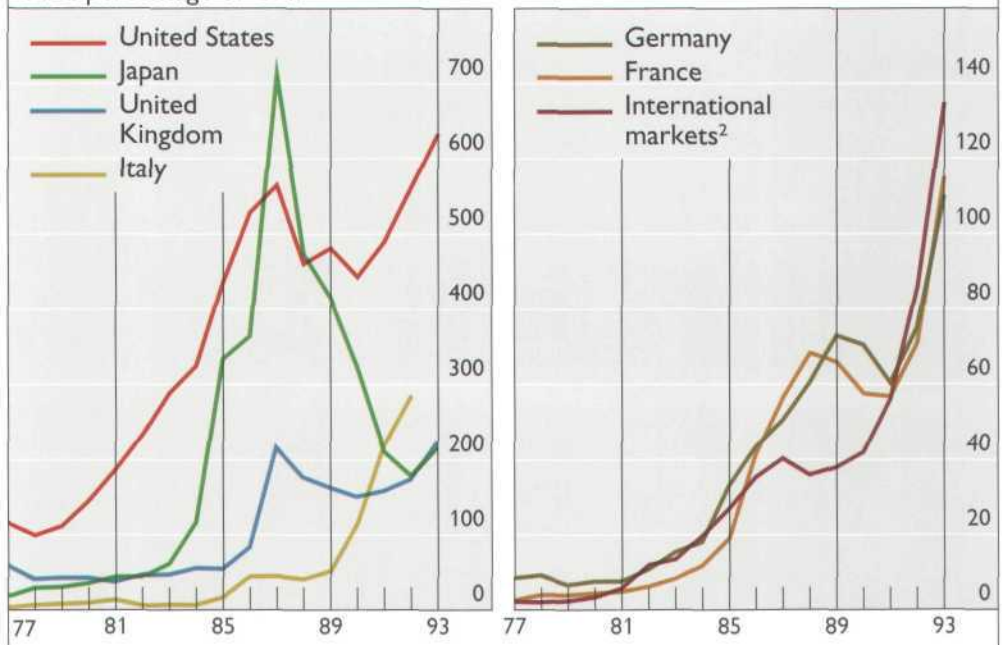
... reflecting the rise in money market ...

A large part of the increase in interbank funds transfers relates to domestic money market transactions, reflecting the introduction of new short-term instruments and the greater breadth and depth of existing markets. However, a typically larger share is associated with foreign exchange transactions, which have mushroomed as a result of the dismantling of foreign exchange controls and the internationalisation of finance. Independent evidence is provided by the Group of Ten central banks' survey of foreign exchange market activity, according to which daily net turnover was close to US$ 900 billion in April 1992, almost three times its value in 1986, and

... foreign exchange ...

Indicators of trends in turnover on securities markets[1]

As a percentage of GNP



[1] Estimates of the annual value of secondary market transactions in equities and bonds, including in some cases those carried out over the counter. A purchase and corresponding sale are counted as a single transaction. [2] Total transactions settled through Euroclear and Cedel as a percentage of total GNP (in US dollars) in the Group of Ten countries.

International portfolio capital flows and underlying transactions[1]						
Countries		1975	1980	1985	1990	1993
		as a percentage of GDP				
United States	CF	0.9	0.7	2.1	0.9	3.8
	T	4.2	9.3	36.4	92.1	134.9
Japan	CF	0.6	1.6	5.7	2.5	1.5
	T	1.8	7.7	62.5	121.0	78.7
Germany	CF	0.4	0.6	3.8	1.6	8.9
	T	5.1	7.5	33.9	54.9	169.6
France	CF	0.7	0.7	2.2	4.3	5.2
	T	3.3	6.7	29.1	58.7	196.0
Italy	CF	0.1	0.2	0.4	3.5	7.1
	T	0.9	1.1	4.0	26.6	274.6
United Kingdom	CF	0.2	2.0	7.4	4.4	21.7
	T	n.a.	n.a.	366.0	689.0	1,015.8[2]
Canada	CF	0.2	0.7	1.1	0.5	3.1
	T	3.3	9.6	26.7	64.2	152.7

Note: CF = capital flows; T = underlying transactions.

[1] Capital flows are defined as the absolute value of the sum of gross portfolio inflows and outflows; underlying transactions include all purchases and sales by residents and non-residents. [2] 1991; the series has since been discontinued.

Source: National balance-of-payments data.

around twelve times the combined GDP of OECD countries on an annualised basis. In some countries the settlement of foreign exchange transactions makes up the lion's share of activity in the interbank funds transfer systems. An extreme case is that of Switzerland: the value of the traffic handled falls to as little as 10% of its normal level on US bank holidays.

... and securities transactions

An additional factor behind the rise in the overall value of payments has been the rapid growth of turnover in securities markets, especially government securities (see the graph opposite). In line with the evidence on foreign exchange transactions, a significant part of this growth has taken place in international markets and has represented cross-border investments. Indeed, the increase in international capital flows, which has attracted so much attention in recent years, pales in comparison with that in the value of the underlying transactions, that is, all sales and purchases by residents and non-residents (see the table above).

Payment and settlement systems have been extensively modified in order to accommodate the sharp rise in the number and average size of funds transfers and the growing complexity of financial activity. In particular, in all countries there has been a tendency towards greater specialisation of settlement systems and a shortening of settlement lags.

Greater specialisation of payment and settlement systems

Greater specialisation has taken a variety of forms. Special arrangements have been developed to handle different types of financial transaction, including the clearing and settlement of trading in securities and derivatives. Automated clearing houses now generally process bulk small-value payments related to commercial and retail transactions. In each Group of Ten country there is currently at least one wholesale (large-value) electronic interbank funds

Salient features of selected large-value interbank funds transfer systems[1]

Countries and systems		Type	Launch date	Turnover (1992)	
				in billions of US dollars	as a ratio of GDP
Belgium	(ELLIPS)	RTGS	planned	–	–
Canada	IIPS	Net	1976	8,359	14.7
	(LVTS)	Net	planned	–	–
France	SAGITTAIRE	Net	1984	10,981	8.5
	(TBF)	RTGS	(1994)	–	–
Germany	EIL-ZV	RTGS	1987	8,728	4.9
	EAF (EAF2)	Net	1990/planned	53,237	29.7
Italy	BISS (BISS2)	RTGS	1989 (1995)	80	0.1
	ME	Net	1989	8,480	6.9
	SIPS	Net	1989	9,733	8.0
Japan	BOJ-NET	Net + RTGS	1988	283,462	77.2
	FEYCS	Net	1989	49,029	13.4
Netherlands	FA (FA2)	RTGS	1985 (1995)	7,860	13.9
	BCH-8007	Net	1982	8,055	14.3
Sweden	RIX	RTGS	1986	7,660	31.0
Switzerland	SIC (SIC2)	RTGS	1987 (1994)	23,774	98.6
United Kingdom	CHAPS	Net	1984	36,969	35.2
	(CHAPS)	RTGS	(1995)	–	–
United States	CHIPS	Net	1970	238,255	39.5
	Fedwire	RTGS	1982	199,175	33.0
EU countries					
Private ECU clearing		Net	1986	15,235	2.2[2]

[1] Planned systems in brackets. [2] GDP of the European Union.

transfer system. While some of these systems may also handle the payment leg of small transactions, their architecture has been conceived to deal with large, time-critical and hence mainly financial operations, which account for most of the traffic. An increasing number of these systems have been designed specifically to support the domestic counterpart of foreign exchange and Euro-market dealings. Settlement takes place on the books of the central bank.

Large-value funds transfer systems were established or substantially modified with the introduction of information technology during the 1980s (see the table above). Virtually all of them now provide at least same-day settlement. Most of the systems settle on a multilateral net basis at the end of the day: transfer orders are accumulated in the course of the settlement cycle and only the net balance of each participant vis-à-vis all other participants is finally transferred. A growing number of them now also offer intraday settlement: in so-called real-time gross settlement systems (RTGSs) funds transfers are settled individually as soon as the corresponding orders are sent. As will be discussed below, the introduction of RTGSs has to a large extent reflected concerns about the risk management characteristics of systems which settle on a multilateral basis only at fixed intervals.

Change in the nature and scale of risks

The structural trends described above have gone hand in hand with far-reaching changes in the nature of the risks involved in the settlement process. First, the surge in financial transactions has substantially increased the scale of the credit and liquidity risks faced by participants. The failure by a counterparty to fulfil its delivery or payment obligations can result in sizable losses to the agent on the other side of the trade. Secondly, heightened competition in the financial industry, coupled with the use of more sophisticated cash management techniques by customers, has tended to lead to a higher concentration of credit and liquidity risks among payment intermediaries, mainly banks. For instance, banks have increasingly offered overdrafts as part of their payment services and large customers have routinely come to expect funds to be available within the course of the day regardless of whether interbank settlement has taken place. Thirdly, the rapid growth in cross-border and foreign exchange transactions has meant that a greater proportion of the exposures are across national boundaries. This has highlighted the problems arising from the coexistence of separate domestic settlement systems, each governed by its own rules and legal framework.

The nature and management of payment system risks

Systemic risk

The fundamental policy concern in the context of payment and settlement systems is not so much the risks run by individual institutions or confined to particular market segments. Rather, it is systemic risk, namely the risk that the failure of a participant to meet its contractual obligations may in turn cause other participants to default, with the chain reaction leading to broader financial difficulties.

The potential of the arrangements for propagating financial strains ...

Payment and settlement systems are potentially a key institutional channel for the propagation of systemic crises. The failure of one or more institutions to settle or the fear that they might be unable to do so can trigger and spread a financial disturbance. And disruptions to the payment system can have repercussions throughout the economy: all economic activity is predicated on the ability to settle transactions and confidence that counterparties will do likewise.

Several characteristics of the risks incurred through payment and settlement systems suggest that their potential for exacerbating any particular disturbance is especially high. Since the value of transactions to be settled is so large at any given point in time and there is generally imperfect synchronisation between payments and receipts or between the cash and delivery leg of trades, credit and liquidity exposures, albeit short-lived, can be very large in relation to the capital of participants. This is especially true in the case of those providers of payment services, such as banks, whose task is precisely that of absorbing liquidity risks which would otherwise have fallen on their customers. In addition, owing to the pace of financial activity, notably trading, it is extremely difficult for agents to form a view of the indirect exposures they face through the settlement position of their counterparties vis-à-vis others.

Large and unpredictable exposures, together with limited information about their true size and distribution, make up the mixture which could spread and intensify financial shocks. The concern is that, unable to distinguish short-run liquidity problems from underlying solvency difficulties, participants would naturally tend to curtail the availability of funds and withdraw from transactions. This could in turn force distress sales of assets, leading to general price declines and undermining the solvency of institutions. In a worst-case scenario, a vicious circle of induced defaults on settlement obligations, falling prices and insolvencies could ensue. Temporary failures to settle can thus lead to insolvencies as agents act on the limited information available.

... as highlighted by several episodes ...

That these risks should be taken seriously has been confirmed by the unfolding of events during several episodes of financial distress. As is described below, signs of self-reinforcing spiralling pressures were evident following the failure of Bankhaus Herstatt in 1974: even though typical exposures were much smaller then than they are today, the bankruptcy of this medium-sized bank, quite active in foreign exchange trading, caused serious disruptions to CHIPS, the main settlement system for the dollar leg of the trades in the United States. At the time of the stock market crash of 1987, the tendency for money centre banks to limit the provision of credit to securities firms threatened to force some of them into default and to exacerbate the crisis. Even in the case of the failure of Drexel Burnham Lambert, a medium-sized non-bank financial firm, it was only through major efforts by the authorities and market participants that systemic problems were contained. Counterparties refused to deal with subsidiaries of the firm despite public assurances regarding their solvency and there was an incipient generalised decline in confidence in counterparties. This pattern of behaviour threatened to produce a wider liquidity squeeze and settlement "gridlocks" in a range of markets, including those for government securities, derivatives and foreign exchange.

... has prompted a policy response ...

The foregoing analysis points to several dimensions in which action may be taken to reduce the risks inherent in the settlement process, quite apart from safeguarding the operational integrity of the arrangements in place. One is improvements in the ability of participants to monitor and control their direct exposures to counterparties, possibly complemented by more centralised monitoring facilities. A second is a shortening of settlement lags commensurate with technical possibilities. A third is the reduction of "involuntary" credits arising from asynchronous payments and receipts or from lags between the execution of the delivery and payment legs of trades. A fourth, crucial one is the implementation of arrangements to limit the impact of a failure to settle by one participant on the ability of others to do likewise, commonly achieved through some form of risk-sharing. A fifth is ensuring that participants have the necessary incentives to control the risks they incur; limiting the reliance on central bank support to resolve a settlement failure is especially important in this context. A final dimension is the reduction of legal uncertainties which may impinge on the settlement process, such as those surrounding netting schemes and bankruptcy laws;

this is a source of risk in its own right to the extent that it generates doubts about, or incorrect perceptions of, exposures and hence potential losses.

... in a number of areas

Action along all these lines has been taken in recent years. The complexity of payment and settlement arrangements in modern economies has contributed to a selective approach to risk reduction. Attention has centred on areas of risk concentration and where the potential systemic implications of disruptions have become forcefully apparent. The analysis that follows addresses four such areas: large-value interbank funds transfer systems and the settlement of three different types of transaction, namely securities, foreign exchange and derivatives. In the case of large-value transfer systems, only the payment leg of transactions is considered. Particular attention is paid to the risks incurred by banks as payment intermediaries. In the other three cases, the focus is primarily on the relationship between the delivery and payment legs and hence on the risks incurred by the counterparties.

Large-value interbank funds transfer systems

Multilateral net settlement systems:

Interbank funds transfer systems have traditionally settled on a multilateral net basis at fixed intervals, at present generally at the end of the day. This procedure permits a reduction in settlement flows which is typically of the order of 90% or more of the underlying gross transfers, with substantial gains in terms of lower settlement balances and operating costs (see the table below). It does imply, however, that transfer orders are allowed to accumulate over time and that any settlement failure necessarily affects the backlog of instructions. A settlement failure gives rise to a liquidity shortfall for banks participating in the system. Moreover, it entails a direct credit exposure to the extent that banks have already advanced funds to their customers ahead of interbank settlement or that the funds transfers represent one leg of transactions entered into for their own account.

general risks;

At least until recently, risk management in multilateral net settlement systems has relied almost exclusively on membership criteria and, indirectly, on the prudential regulation and supervision of the individual participants. Banks have generally not monitored their intraday positions and settlement

Reduction of settlement flows through netting in selected interbank funds transfer systems[1]

Systems	Gross transactions	Net settlement flows	Reduction through netting (in %)
CHIPS	1,040.7	6.9	99
CHAPS[2]	94.8	1.7	98
SAGITTAIRE[3]	236.9	57.4	76
Clearing systems (Italy)[3]	116,212.0	9,645.6	92
Private ECU clearing	47.4	3.0	94
FEYCS	24,200.0	2,600.0	89
EAF	511.1	17.4	97

[1] 1993 daily averages, in billions of local currency units. [2] October. [3] 1992.

has been open-ended: there has been no inbuilt mechanism designed to ensure that the *original* set of funds transfers could be settled in the event of the inability to settle by one or more of the participants. Most of the systems have allowed transfer orders to be made conditional on successful settlement. Such "unwinding" clauses were originally intended to give individual participants protection. However, they fail to address the basic problem, namely the system-wide liquidity shortfall implied by the settlement failure.

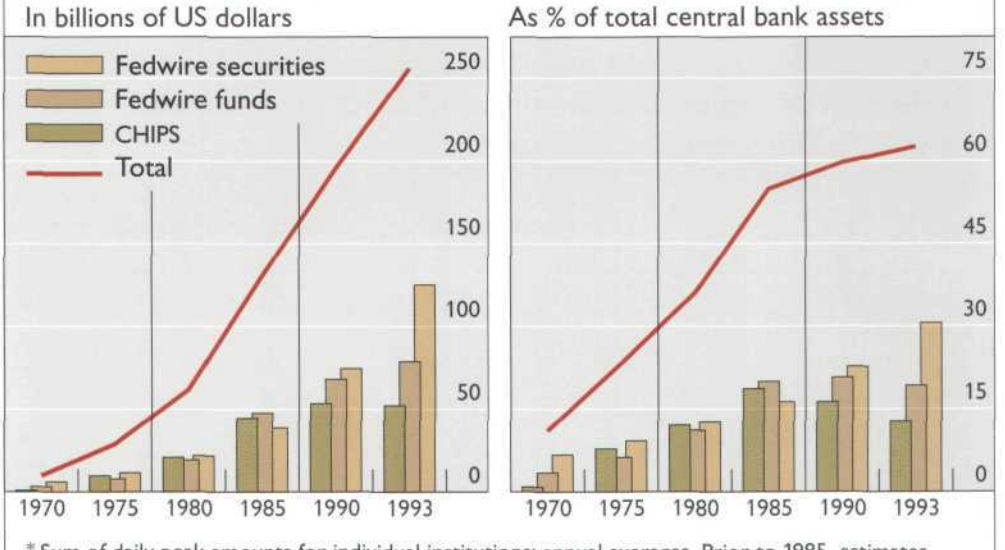
inadequacy of unwinding clauses;

Comparatively informal arrangements of this kind were acceptable in a financial system generating limited interbank settlement traffic among a few institutions which could disregard the risk of unexpected defaults. They are less well-suited to the landscape that has been taking shape in recent years. This is best illustrated by CHIPS, in which the value of intraday multilateral net balances has been rising rapidly since the early 1970s (see the graph below). Simulations carried out in the mid-1980s revealed that the unexpected settlement failure of a major participant could result in close to half of all participants being unable to settle, with as much as one-third of the total value of transfers remaining unsettled. Moreover, it was not possible to predict which institutions would be affected and, because of the knock-on effects, even participants without direct dealings or in a net debit position vis-à-vis the failing institution might be unable to meet their obligations. Admittedly, owing to the large volumes handled in relation to the participants' size, CHIPS is probably an extreme case. Nevertheless, the example makes clear that as intraday exposures rise, so does the reliance of participants on emergency liquidity support from the central bank. In other words, the central bank faces something akin to a contingent liability, difficult to control and of uncertain magnitude.

There are several ways in which risk management can be improved in multilateral net settlement systems. These include a shortening of the settlement lag, the introduction of real-time monitoring facilities and the setting

and risk management

CHIPS multilateral net debit positions and Fedwire overdrafts*



* Sum of daily peak amounts for individual institutions; annual averages. Prior to 1985, estimates.

Risk control measures in selected interbank net settlement systems

Measures	US CHIPS	UK CHAPS	Japan FEYCS	Germany EAF/EAF2	Canada LVTS	ECU clearing
	year of implementation					
Same-day settlement	1981	1984[1]	1989[1]	1990[1,2]	planned	1988
Real-time monitoring	1970[1]	1984	1989[1]	planned	planned	planned
Bilateral debit caps[3]	1984	1992	1989[1]	planned	planned	–
Multilateral debit caps	1986	1993	–	–	planned	1993
Loss-sharing rule	1990	–[4]	1989[1]	–	planned	1993
Collateral requirement	1990	–	–	planned	planned	–

Note: – = not envisaged.

[1] Year in which the system was launched. [2] The planned EAF2 procedure envisages bilateral net settlement at the end of twenty-minute cycles and multilateral net settlement of residual balances at the end of the day. [3] Sometimes called net sender or credit limits. [4] Since 1992 losses have been explicitly related to bilateral exposures.

of caps on the bilateral and multilateral net debit positions of participants. The most important safeguard, however, consists in liquidity-pooling and loss-sharing arrangements among participants aimed at ensuring settlement despite the failure of individual institutions. Such mechanisms attempt to decouple illiquidity from insolvency problems, that is, to eliminate the cash-flow shortfall and to allow the losses on the underlying contracts to be dealt with separately through the courts. The risk management measures adopted or in prospect cover the whole range just outlined. The pace of the initiatives, while uneven across countries, has quickened in recent years (see the table above).

Real-time gross settlement systems ...

An alternative way of mitigating the problems entailed by delayed settlement is to introduce systems that settle on a real-time gross basis. In this case, funds transfer orders are settled as soon as they have been sent provided that the sending bank has sufficient cover in its account with the central bank. The individual transfers are thus unconditional and irrevocable ("final"); intraday finality is then possible and the uncertainty surrounding unwinding provisions is eliminated. Exposures become more transparent: participants should technically be in a position continuously to monitor their settlement accounts and credit limits, if any. The obvious gains in terms of risk management come at the cost of higher intraday liquid balances and operating outlays for participants.

... can significantly improve risk management

The residual risks associated with RTGSs depend crucially on the mechanisms in place to deal with the tighter liquidity constraint implied by the arrangements in comparison with multilateral net settlement systems. At one end of the spectrum, if the central bank provides unlimited uncollateralised intraday credit at zero cost, settlement risk is entirely eliminated; the central bank, however, absorbs all the credit risk. This situation, which applied to Fedwire in the United States until 1986, is hardly conducive to prudent risk management on the part of participants. At the other end, if settlement balances are inadequate and intraday borrowing facilities and procedures to

manage the traffic of funds transfers not well-developed, there is a risk that orders may not be executed. Knock-on effects can lead to a generalised gridlock with potential systemic consequences. Incipient gridlocks were not infrequent in the early days of SIC, the Swiss system, in which the central bank does not provide an intraday overdraft facility: at times banks did not have enough funds to complete their transfer orders and the system risked grinding to a halt. Partly encouraged by an appropriate fee structure, participants have adjusted by spreading transfers more evenly during the day and breaking up large orders.

Need for proper design

The fundamental issue underlying the operation of RTGSs is the need to strike a balance between the availability of central bank lending to supply liquidity to the system and the preservation of participants' incentives to prudently manage risks. Among the Group of Ten countries, intraday central bank overdrafts in support of RTGSs are available everywhere except in Switzerland, where a few banks account for the bulk of the interbank transfers, and Japan, where only a very small fraction of transfers are channelled through the gross system and an intraday interbank credit market has emerged. Elsewhere, overdrafts are generally granted at a zero interest rate but are limited by ceilings and/or by eligible collateral. Concern about the comparatively lax terms on which the rapidly increasing volume of daylight credit was granted through Fedwire (see the graph on page 180) has prompted a series of risk reduction measures. The programme, launched in 1986, has introduced self-imposed caps and, since April 1994, the pricing of overdrafts.

There is a growing consensus on the benefits that RTGSs can yield in terms of risk management provided that the systems are properly designed. Several RTGSs have been introduced recently and more are planned to begin operating in the near future or are in the process of being upgraded, notably through the introduction of more sophisticated queuing facilities for the regulation of order traffic (see the table on page 176). Moreover, RTGSs have been endorsed in a report by the Ad Hoc Working Group on EC Payment Systems to the Committee of EC central bank Governors, published in 1992. The report addresses the main issues raised in the field of payments by the single market and economic and monetary union. It calls, inter alia, for "minimum common features" for domestic payment systems. A follow-up document published in late 1993 recommends more specifically that "as soon as possible, every member state should have a real-time gross settlement system into which as many large-value payments as possible should be channelled".

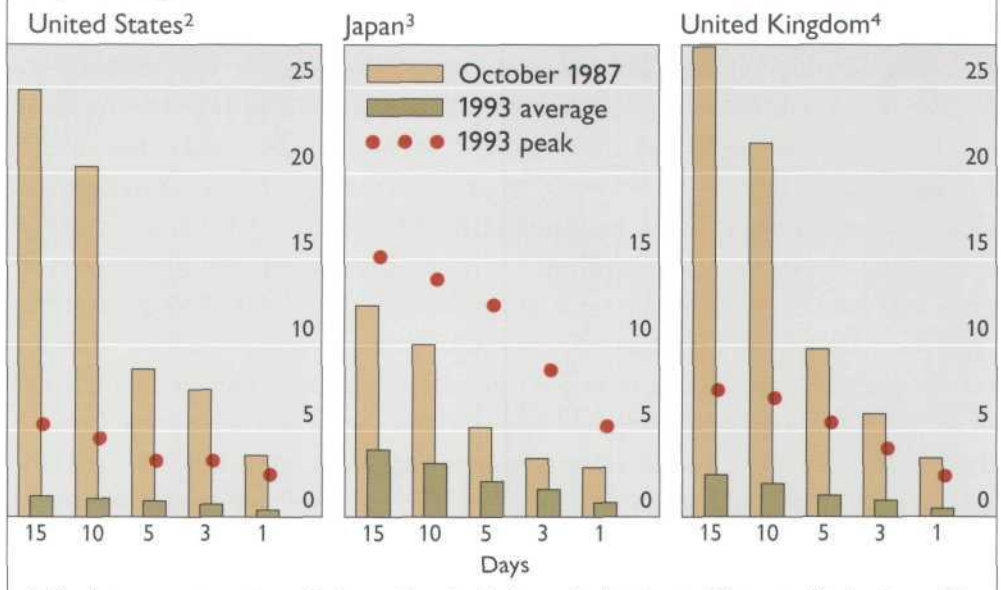
The settlement of securities transactions

The two main sources of risk for counterparties in securities transactions are the time-lags between trading and settlement ("settlement lags") and the non-simultaneous execution of the delivery and payment legs of the trades. The settlement lag not only makes the assessment of indirect exposures more difficult, it also exposes counterparties to the risk that the trade may fail to be settled. In that event, one of the two parties would suffer a loss if the price of the security had moved against it ("forward replacement

The risks in securities transactions ...

Forward replacement cost risk[1] for alternative settlement lags

In percentages



[1] Absolute percentage change in the equity price indices calculated over different rolling horizons. The actual settlement lags for equities in the United States, Japan and the United Kingdom are currently five, three and between six and fifteen days respectively. [2] S & P 500. [3] TOPIX. [4] FT-SE 100.

cost risk"). This risk can be especially large at times of turbulence in the markets, when price volatility is high. A shortening of the settlement lag can considerably reduce this form of risk (see the graph above). In addition, unless the settlement of the two legs of the transaction is simultaneous ("delivery versus payment", or DVP), the party performing its obligation first runs the risk that the counterparty may fail to perform its own obligation. This is by far the more serious concern because the potential loss is equal to the full value of the transaction ("principal risk").

Market participants and public authorities had been aware of the risks involved in the settlement of securities transactions for some while, but the severe settlement problems experienced at the time of the global stock market crash prompted a series of policy initiatives. Several reports have been published since then by domestic and international bodies with a view to improving risk management procedures, including the Group of Thirty (1989), the Fédération Internationale des Bourses de Valeurs (1989), the International Organisation of Securities Commissions (1992) and the Committee on Payment and Settlement Systems of the central banks of the Group of Ten (1992). In all of these reports, the shortening of the settlement lag and the introduction of DVP mechanisms are given high priority.

... can be better managed ...

Settlement lags have traditionally been rather long in securities markets, primarily reflecting the need to process, confirm and match trades as well as to transfer the securities and legal title to them. In recent years considerable progress has been made towards reducing such lags. A vital step facilitating this process has been the progressive introduction of central securities depositories (CSDs). This has made it possible to immobilise physical securities

... through shorter settlement lags ...

or to transform them into pure book entries, thereby avoiding the need for physical transfers. However, the three-day target recommended in the Group of Thirty report, to be achieved by the end of 1992, has proved too ambitious in many cases, especially for equities.

... and DVP mechanisms

The development of CSDs has also paved the way for the achievement of DVP. As late as the mid-1980s very few systems included DVP mechanisms; the Fedwire book-entry securities system in the United States was one of the exceptions. By now, however, a majority of Group of Ten countries have at least one system which meets this standard. There are a number of ways in which DVP may be attained. One is to settle irrevocably and simultaneously both legs of the transaction on a gross basis, as in the Fedwire securities system or Cedel and Euroclear, the two international CSDs. A more common procedure is to net all the payments of each participant and, possibly, some of its trades. The payment leg is then generally settled via a large-value funds transfer system. An alternative arrangement achieves quasi-DVP through the issuance of a third-party (bank) guarantee for the payment leg of the transaction ("assured payment", as in the Central Gilts Office system (CGO) in the United Kingdom).

As the last example makes clear, the introduction of DVP is not just a matter of technical possibilities; more fundamentally, it may require substantial extensions of credit, typically collateralised by the underlying securities, as well as the active use of securities lending facilities. The need for this form of liquidity is especially acute in the case of cross-border transactions, because of time gaps between the processing cycles of both delivery and payment legs in national systems. Its main suppliers are central banks, participating banks and CSDs. The risks involved in its provision need to be adequately managed if the benefits of DVP are not to be undermined.

Certain risks also arise from the methods of aggregation of transactions and the arrangements for the resolution of settlement failures. Just as in large-value interbank funds transfer systems, a common way of resolving a settlement failure is through partial unwinds of trades. Moreover, the unwind may in principle result from settlement difficulties in the large-value funds transfer systems which channel the payment leg of the transactions, not from defaults on the securities trades as such. An increasingly favoured way of limiting these risks is to settle the payment leg through an RTGS, which guarantees irrevocability and finality. A complementary approach is to put in place system guarantees through loss-sharing arrangements, possibly backed by collateral. Very few systems at present have such facilities.

The settlement of foreign exchange transactions

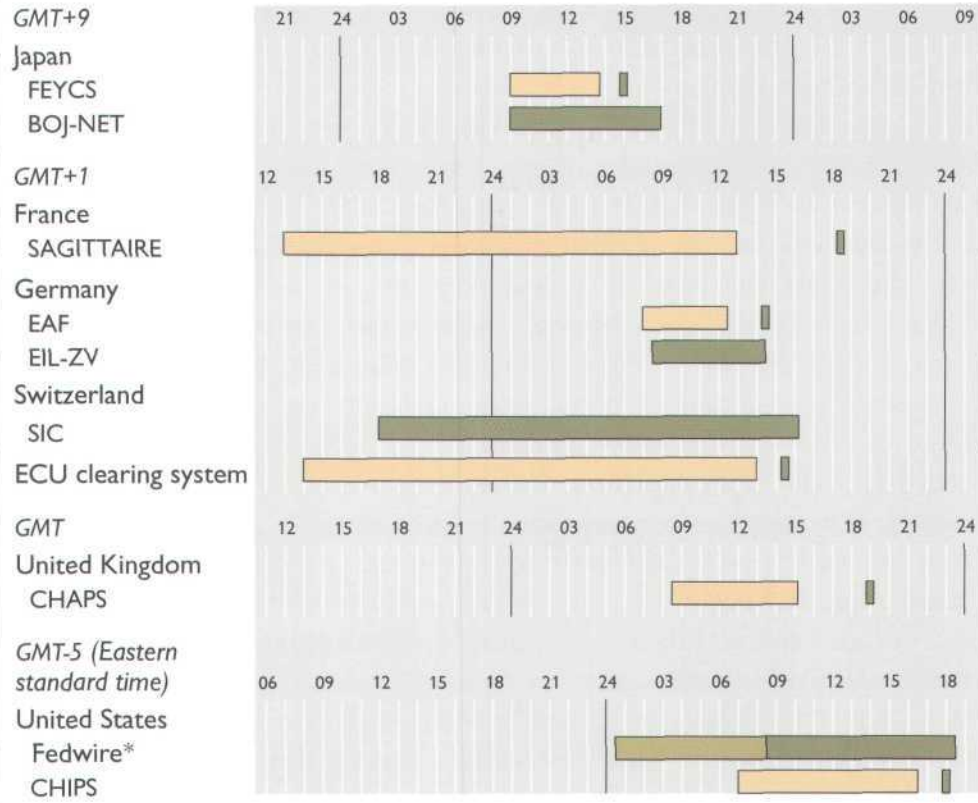
Herstatt risk:

Most foreign exchange transactions are settled two days after the trade date. Since the exchange rates between the major currencies can easily move by a significant amount in that interval, the potential forward replacement cost is not inconsiderable. However, by far the most important risk again stems from the non-simultaneous settlement of the two legs of the transaction ("cross-currency settlement risk" or "Herstatt risk"). This risk has been a source of greater concern than that associated with the settlement of

Operating hours of selected large-value interbank transfer systems

For same value day

Net settlement system (final settlement indicated)
Gross settlement system (intraday settlement)



* The lighter shading indicates the approved extension, to become operational in early 1997.

securities for several reasons: the amounts involved are much larger; the risk necessarily has an international dimension; it is more difficult to manage; and the trades giving rise to it are mainly between banks. According to the latest survey of foreign exchange market activity by the Group of Ten central banks, around 80% of total net foreign exchange market turnover can be estimated to be interbank.

A key constraint at the origin of Herstatt risk is that there is no effective overlap between the operating hours of the large-value interbank funds transfer systems of the countries of the three most actively traded currencies, namely the US dollar, the Deutsche Mark and the yen (see the graph above). Since settlement typically takes place in the country of issue of each currency, one of the parties to the trade is exposed to credit risk. In the case of a yen/dollar transaction, for instance, the party delivering the yen would have to wait between five and a half and seventeen hours before receiving the corresponding dollar amount.

illustration;

Herstatt risk derives its name from the risk vividly illustrated by the failure of Bankhaus Herstatt in 1974. The closure took place after the irrevocable settlement of the Deutsche Mark leg of foreign exchange transactions but before settlement of the dollar leg. This left Herstatt

counterparties expecting the dollars facing non-payment and caused major disruption to the operations of CHIPS. General confidence in counterparties was badly shaken. Banks in New York refused to make payments on their own account or for their customers, triggering a chain reaction across the system. It was only with great difficulty that normal operations could be resumed. Estimates indicate that the value of daily gross funds transfers declined from the usual $60 billion to around $36 billion during the three days following the failure.

and risk management

There are several ways in which the management of Herstatt risk can be improved. First, the safety of the settlement mechanisms of each of the two legs can be enhanced. The Herstatt episode, for instance, was a powerful motivation for the risk control measures subsequently adopted in CHIPS (see the table on page 181). Secondly, the settlement flows between counterparties associated with the original trades can be reduced. Although partly aimed also at limiting traditional credit exposures, several private schemes for the netting of foreign exchange contracts, either recently introduced or planned, also imply a significant reduction in the amounts to be settled (see the table opposite). Thirdly, payment arrangements outside the country of issue of a currency can be used to limit interbank settlement flows across borders. One such scheme is based on correspondent bank relationships and clears the dollar leg of yen/dollar transactions in the books of a private bank in Tokyo; any related overdrafts granted by the bank are subsequently repaid and settled in New York during the US business day. Finally, full DVP mechanisms can be introduced. This would generally call for the upgrading of central bank services as a complement to private initiatives.

The role of central banks

Although cross-border netting and settlement schemes can make a significant contribution to the management of risks, their potential benefits will remain beyond reach if they are poorly designed. In 1990 a report on interbank netting schemes by the central banks of the Group of Ten countries (the "Lamfalussy Report") addressed these issues. The report recommends a set of minimum standards for the operation of cross-border multi-currency netting schemes and sets out the principles for cooperative central bank oversight. It stresses the importance of a well-founded legal basis and well-structured mechanisms for the management of credit and liquidity risk. In particular, the arrangements "should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single net debit position". The standards have served as the blueprint against which all recent schemes have been assessed; given their compass, they have also been applied to a variety of purely domestic settlement systems.

The central banks of the Group of Ten countries are also studying ways of upgrading their services to support DVP mechanisms. The range of possibilities was described in a report published in September 1993. An important, though limited, step is the introduction of procedures permitting intraday final settlement in the domestic interbank funds transfer systems, most notably through RTGSs. A second step could be the extension of their operating hours so as to narrow or eliminate time zone gaps. In February 1994, for

Salient features of selected cross-border netting arrangements					
Features	FXNET	ISDA master agreement	ICSI	Multinet	ECHO
Netting	bilateral	bilateral	bilateral	multilateral	multilateral
Contracts	forex	swaps	forex	forex	forex and other
Participants					
Type	banks	all market participants	banks	banks	banks
Number	±40	±200	15	15	15
Location	–	–	Chicago	Chicago/ New York	London
Area of operation	global	global	North America/ London	OECD	OECD
Year of introduction	1987	1987	1992	planned	planned

Note: ISDA: International Swaps and Derivatives Association; ICSI: International Clearing Systems Inc.; ECHO: Exchange Clearing House Organisation.

instance, the Federal Reserve announced that it would bring forward the daily opening of Fedwire by six hours as from early 1997 (see the graph on page 185). Taken together, such measures would facilitate the achievement of DVP by private agents. They would not, however, guarantee that participants would make the necessary investments to take advantage of the new opportunities. Securing DVP on central bank accounts requires operational linkages between them. The central banks could conceivably provide such multi-currency settlement services directly, either individually or through a specialised international institution which would settle irrevocably and simultaneously both legs of the cross-currency trades on its books (a "common agent"). These services, however, would represent a major departure from existing arrangements, call for much closer cooperation and raise a host of difficult issues, ranging from the monetary policy implications to the need for agreement on the appropriate balance between public involvement and market discipline.

The settlement of derivatives transactions

The settlement lag in spot transactions arises from technological and operational frictions; by contrast, the relationship between the buyer and the seller of a derivative instrument is by definition longer-lived. Derivative contracts involve commitments to transfer cash or perform exchanges at future dates. Just as in the case of the extension of a loan, credit risk between the two counterparties is inherent in the nature of the transaction. It is the result of frictions only to the extent that the mandated future *spot* exchanges of cash for financial or real assets are themselves subject to settlement lags or are not on a DVP basis.

Derivative instruments limit settlement flows ...

The expansion of derivatives markets in recent years has been truly remarkable in terms of both turnover and notional amounts outstanding (see the tables on pages 112 and 113 in Chapter V); nevertheless, the impact on settlement flows has been much smaller than those figures might suggest.

By design, the settlement techniques for many types of derivatives limit settlement flows. Some transactions, for instance currency futures and interest rate swaps, involve no exchange of principal. In addition, netting mechanisms are extensively used and positions may be closed simply by reversing trades, as in the case of exchange-traded derivatives. For example, the average daily payments made by members to the Chicago-based Options Clearing Corporation in 1993 amounted to $71 million, or only some 0.4% of estimated turnover.

... but settlement risk remains significant

This does not mean, however, that settlement risk is unimportant; rather, its management is more difficult to disentangle from procedures aimed at limiting the forward replacement cost risk implied by the contracts. Indeed, the related settlement flows may be highly variable and unpredictable: not only are the exposures longer-lived than those in spot transactions, the market values of some types of derivatives, such as options, are more volatile than those of the underlying instruments. The management of the forward replacement cost risk and the associated settlement risk differs substantially depending on whether the derivatives are traded on exchanges or over the counter.

Risk management for exchange-traded and OTC instruments

Risk management for exchange-traded instruments is centralised. A clearing house acts as counterparty to all the trades between its members, which enter into transactions for their own account and on behalf of their customers. The underlying credit exposures are thereby effectively netted on a multilateral basis. In order to protect itself from the risk of default, the clearing house requires the posting of collateral ("margin") and, as in the case of futures, daily settlement of the amounts due ("variation margin"). When price volatility is especially high, intraday margin calls are also possible. The actual settlement of these obligations generally takes place the following day. In many respects, the additional risk management mechanisms resemble those found in some large-value funds transfer systems: limits on members' positions (multilateral caps), the power to assess members (loss-sharing agreements) and backup credit lines (interbank and central bank standing credit facilities).

By contrast, the credit risk in over-the-counter (OTC) markets is managed on a bilateral basis. Participants typically rely on credit limits on their mutual exposures and netting, as in the case of the ISDA master agreement for swaps. They have also made increasing, though still limited, use of collateral requirements, adjustable in relation to the size of the exposures or the creditworthiness of the counterparty. Daily settlement is rare.

Extending clearing house arrangements to OTC products ...

A major current policy issue is the desirability and feasibility of extending clearing house arrangements to OTC products. By their very nature, such arrangements tend to concentrate risk on the clearing house, whose soundness underpins the whole market. They also imply greater short-run liquidity pressures because of the daily margining of contracts. Both factors were evident during the 1987 stock market crash in the United States: a liquidity squeeze developed as margin calls and settlements jumped from less than $1 billion to around $4 billion in certain key derivatives markets and the severe financial difficulties of a large clearing member of the Options Clearing

Corporation threatened to force the closure of the market. In the wake of that episode a number of large institutions have begun to treat clearing houses like other counterparties, setting exposure limits and diversifying their trades across exchanges. Similarly, several steps have been taken to avoid unnecessary pressures on liquidity, notably through greater reliance on the netting of margins across contracts ("cross-margining"). Nevertheless, as the Lamfalussy Report concludes, provided clearing house arrangements are properly designed they can yield considerable benefits in terms of risk management.

... can yield considerable benefits

At the same time, a number of practical obstacles stand in the way of their extension to OTC markets. A large proportion of OTC products are highly customised; prices are not observable and there are considerable difficulties in agreeing on valuations. The instruments are often traded across borders, which raises serious legal and regulatory problems. In addition, the introduction of multilateral netting may not be in the individual interest of all participants. The most creditworthy players, which now dominate the market, may find their comparative advantage being undermined. The scheme would only be attractive to them to the extent that it resulted in a compensating increase in activity in a broader, more efficient and liquid market.

Overall assessment

The foregoing analysis indicates that much has been set in motion in recent years to improve risk management in payment and settlement systems. The risks involved are now better understood and concrete steps have been taken or are planned to contain them. At the same time, progress has been neither easy nor uniform; the agenda for the future is still a full one.

Much still needs to be done

Several purely economic factors have contributed to slowing down progress. The necessary changes are costly. They typically call for heavy investment in new technology, which may in turn undermine the profitability of past investment decisions. They may also involve the posting of considerable amounts of collateral. While the costs are easily quantifiable, the benefits are not. The costs are generally private, the benefits a common good. The distribution of the costs is clear, that of the benefits less so. For example, while the merits of RTGSs have been acknowledged by banks, there has sometimes been resistance to their introduction or active use. Similarly, cost considerations largely explain the limited progress made in the implementation of mechanisms aimed at avoiding unwinds in systems for the settlement of securities and in setting up multilateral netting schemes for cross-border transactions.

Obstacles have hindered progress ...

A second factor hindering progress is the difficulty of adapting the legal framework to the new market realities. The framework has failed to keep pace with the rapid changes that have taken place in payment and settlement arrangements. As a result, considerable legal uncertainty surrounds the rights and obligations of participants. For example, present laws regarding the ownership, transfer and pledging of securities often date back to the period when securities were held only in physical form. Similarly, in some countries "zero-hour" rules may render void all transactions entered into

by the failing institution on the day of bankruptcy, hindering the achievement of intraday final settlement.

... especially with respect to international transactions

It is perhaps not surprising that progress has been slowest in the area of international transactions. It is there that competitive forces are strongest and voluntary cooperation indispensable. It is there, too, that the tension between the borderless nature of finance and essentially national, not necessarily consistent legal frameworks is most apparent. The complex choice-of-law and conflict-of-law questions that beset cross-border netting and settlement schemes are a vivid illustration of these difficulties.

Prudential regulation and supervision

Common concerns

The oversight of payment and settlement systems and the prudential regulation and supervision of banks and securities firms have much in common. In particular, they share a fundamental concern for the solvency of financial institutions and, ultimately, for the stability of the financial system. As already discussed, it is the insolvency of participants, or the threat thereof, that typically lies at the origin of disruptions to payment and settlement arrangements. Conversely, the propagation of distress through these arrangements can lead to multiple insolvencies. Pure liquidity problems, *provided they are correctly and unambiguously identified as such*, represent less of a concern. For example, owing to a technical failure affecting its transfers of securities, in November 1985 a New York bank accumulated a daylight overdraft of almost $30 billion with the central bank and borrowed over $20 billion through the discount window at the end of the day, almost double its balance sheet and over twenty times its capital. The episode highlighted the speed and ease with which credit exposures vis-à-vis the central bank could be incurred under existing arrangements and the potential knock-on effects that would otherwise be involved. It also made clear, however, that when the solvency of an institution is secure problems are manageable.

The major differences in approach ...

While the concerns overlap considerably, there are major differences in approach between the two areas of oversight. Prudential regulation and supervision focuses on individual institutions; to an extent that depends on the institutions' business, it tends to give higher priority to the risks outstanding after settlement; it pays limited regard to intraday risks. By contrast, the focus of risk management in payment and settlement systems is the interrelationship between institutions; particular attention is paid to settlement risks; intraday risks play a dominant role.

... are being eroded

That being said, the profound changes in the nature of financial activity over the last decade or so have tended to erode some of these distinctions. Although prudential regulation and supervision has maintained its emphasis on the financial strength of individual institutions, it has come to attach greater weight to some of the risks arising in the process of settling transactions and to the mechanisms partly aimed at reducing them. Mention need only be made here of two examples, both in the context of capital standards: the treatment of unsettled trades and the recognition of contract netting.

Historically, the capital standards for banks have largely ignored the credit risk associated with unsettled trades, just as they have made no allowance for market risk; by contrast, similar requirements for securities firms have given high priority to both forms of risk. As banks have become increasingly active in trading, pressures for a greater harmonisation of capital standards have grown. In the EC Capital Adequacy Directive of March 1993, which applies to both credit institutions and securities firms, certain unsettled obligations are explicitly taken into account. The Directive is due to be implemented by January 1996 at the latest.

The issue of the recognition of contract netting in formulating the standards has gained greatly in importance with the spread of the use of netting procedures. In April 1993 the Basle Committee on Banking Supervision issued proposals for amendments to its 1988 Capital Accord, partly in the light of the publication of the Lamfalussy Report. The amendments put forward extend the recognition of bilateral netting schemes to all those deemed to be effective under the relevant laws and in compliance with the minimum standards set forth in that Report. The document also provides an analysis of the considerations that might guide the Committee's future assessment of multilateral schemes.

Key role of the central bank

Given the similarity in the concerns of the oversight of payment and settlement systems, on the one hand, and prudential regulation and supervision, on the other, it is not surprising that in many cases both functions are at least in part performed by the same institution, namely the central bank. Although to different degrees, central banks in all Group of Ten countries play an active role de jure or de facto in the oversight of the payment system. In a majority of them they are also involved in the supervision of individual banks. Historically, both functions have their origin in the role of the central bank as ultimate supplier of a risk-free settlement medium to the financial system: the provision of liquidity is the last line of defence in the containment of systemic crises.

Regardless of whether the central bank has specific responsibility for prudential regulation and supervision, access to information about the financial soundness of participants in the payment system is crucial for the performance of its oversight function and crisis management. Distinguishing solvency from mere liquidity problems is a difficult task; it becomes practically impossible without the necessary advance knowledge of the financial condition of participants. Lack of information narrows considerably the range of options open to the central bank. These problems have become more acute as a result of the profound changes that have taken place in the nature of financial activity: the rapidly changing size and often greater opaqueness of market and settlement exposures; the greater range of markets and market participants, some of which are further removed than the central bank's "privileged interlocutors" (the banks); and the increased speed with which disturbances can be transmitted across market segments, institutions and national borders.

The information needs of the central bank are an important dimension of the problem of the organisation of the lines of defence to deal with systemic risk. This issue is in the forefront of current policy discussions in

the United States, where there are plans to reallocate the responsibility for banking supervision, at present divided among several bodies, including the central bank. It is also topical in Europe. The creation of the single market for financial services in the European Union implies a shift from host to home-country supervision and the possibility of cross-border ("remote") direct participation in domestic large-value funds transfer systems; the existence of appropriate channels for the exchange of information between national authorities becomes all the more essential. Looking ahead, the precise contours of central bank involvement in the oversight of payment systems and prudential regulation and supervision in the future European monetary union are still to be decided.

Prospects

As the nature of financial activity continues to evolve, the years ahead are likely to see an intensification of the cooperative efforts between the authorities in charge of prudential supervision and those responsible for the oversight of payment and settlement systems. The progressive expansion in the sphere of markets and hence in trading can be expected to further heighten the risks involved in the execution of financial transactions, whether these are incurred by the counterparties to the trades or by the intermediaries facilitating their completion. The challenge is to put in place a series of lines of defence capable of containing systemic risk without impairing, and indeed if possible improving, the efficiency of the arrangements. In the present financial landscape meeting that challenge will inevitably call for close international cooperation.

IX. Activities of the Bank

1. Cooperation between central banks and international organisations

During the past year the Bank has played its traditional role in fostering international monetary cooperation.

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 also contributed to the work of the Deputies of the Group of Ten Ministers and Governors.

The Bank organised periodic meetings of central bank officials on a wide variety of subjects. As in the past, it also provided the secretariats for various committees and groups of experts.

The Basle Committee on Banking Supervision devoted most of its attention during the period to the supervisory treatment of risks in financial markets. In recent months it has been reviewing banks' comments on three consultative papers issued in April 1993, addressing netting, market risk and interest rate risk. The Committee is working on a guidance paper for bank supervisors on banks' management and control of the risks arising from derivatives activities and is also seeking to extend its knowledge of banks' in-house models for measuring these risks. Another aspect of the Committee's work has been to act as the focal point for intensifying regional cooperation between bank supervisors in non-Group of Ten countries, especially those with responsibility for banks in emerging markets. To this end, a survey on national supervisory practices has been conducted and the results are in the process of being distributed to those supervisors who would find them useful. In September 1993 Dr. T. Padoa-Schioppa, Deputy Director General of the Bank of Italy, was appointed Chairman of the Committee following the resignation of Mr. E. Gerald Corrigan in June 1993.

The Euro-currency Standing Committee continued to monitor developments in international banking and capital markets and to discuss issues bearing on their functioning and stability. In particular, the Committee continued its assessment of the implications of the growth of markets for derivative financial instruments. In addition, the Committee discussed issues relating to changes in the scale and direction of international capital flows and recent changes in investment management and trading practices. The Bank also continued to compile, analyse and publish statistical data on developments in international banking and other financial markets.

The Committee on Payment and Settlement Systems continued to review developments in domestic and cross-border payment, netting and settlement

arrangements in the Group of Ten countries. In September 1993 the BIS published a report prepared by the Committee entitled Central Bank Payment and Settlement Services with respect to Cross-Border and Multi-Currency Transactions. This report is a follow-up to the Report of the Committee on Interbank Netting Schemes, which was published by the BIS in 1990. It reflects the analysis carried out by a special working group, chaired by Mr. T. Noël of the Bank of Canada, of a range of options that central banks might consider in an effort to help reduce risk and increase efficiency in the settlement of cross-border and multi-currency interbank transactions. Another working group, chaired by Mr. P. Parkinson of the Board of Governors of the Federal Reserve System, is conducting a study of settlement arrangements relating to cross-border securities transactions. In December 1993 the BIS published a new edition of the reference work on payment systems in the Group of Ten countries (known as the "Red Book"). This extensively revised edition includes comprehensive statistical information on payment systems, a special chapter on cross-border payment system arrangements and a glossary of terms. In February 1994 the Group of Ten central bank Governors appointed Mr. W. McDonough, President of the Federal Reserve Bank of New York, to succeed Mr. W. Angell as Chairman of the Committee.

The Service for Eastern European Countries and International Organisations extended its work of coordinating the technical assistance and training provided by a substantial number of central banks to their counterparts in eastern European countries and the states of the former Soviet Union, some of which now themselves also provide assistance. In particular, the Service maintains a database on the technical assistance and training received by these countries; these records, which are for the most part updated on a monthly basis, are an important means of helping avoid duplication of effort. The information is forwarded to the Organisation for Economic Co-operation and Development for inclusion in its Register. The Service continued to organise meetings and seminars for representatives from most of the central banks in its area. The BIS also participated actively in the work of the Joint Vienna Institute (whose courses, since its inception in September 1992, have been attended by approximately 2,000 participants), for example by contributing to the first Comprehensive Course. This five-month course is designed to help junior officials give policy advice in a wide variety of areas. In addition, the Service continued to organise specialised seminars on central banking topics, with the help of lecturers from the BIS and various central banks, including some in eastern Europe.

The discussions held by the Group of Computer Experts at its twice-yearly meetings focused on the changes required of central banks, and their information technology (IT) departments in particular, in adapting to the developments that have taken place in recent years. The two main topics to which the Group devoted attention were, first, the distribution of IT resources and the related questions of cost control, staff adaptation and the division of responsibilities between user and IT departments and, secondly, open systems, one of the potential advantages of which is to offer greater independence from IT suppliers. The Working Party on Security Issues

examined these subjects from its own perspective. It also completed a survey of systems for non-payments-related data exchanges between central banks and the outside world by drawing up a list of measures to safeguard against the risks posed by this type of exchange.

The Group of Experts on Monetary and Economic Data Bank Questions addressed ways of strengthening the Data Bank Services of the BIS, particularly in the context of issues concerning data supply and access by the central banks of the Group of Ten countries. Attention was centred on continuing efforts to improve the timeliness of reporting, data quality control, access techniques and information security. Progress was made on broadening the coverage of the database, especially through bilateral arrangements with central banks of countries outside the Group of Ten. Questions involving international standards in the field of data transmission were also examined.

Until their dissolution at the end of December 1993, the Committee of Governors of the Central Banks of the Member States of the European Economic Community and the Board of Governors of the European Monetary Co-operation Fund (EMCF) as well as their sub-committees and working groups continued to hold most of their meetings at the BIS, where the Committee of Governors' permanent Secretariat was also located. A detailed account of the activities of the Committee of Governors, which was the principal forum for monetary cooperation in the European Community for nearly thirty years, can be found in the Committee's annual reports to the European Parliament, the Council of the European Communities and the European Council.[1]

On 1st January 1994, the date set for the commencement of stage two of economic and monetary union (EMU) under Article 109e of the Treaty on European Union (the "Maastricht Treaty"), both the Committee of Governors and the EMCF were replaced by the European Monetary Institute (EMI). The main tasks of the new body, established with its own legal personality under Article 109f of the Treaty, are to strengthen the coordination of EU member states' monetary policies and to prepare for the transition to stage three of EMU in the monetary field. The EMI took up its duties on 1st January 1994 and for a short transitional period will continue to use the infrastructure which supported the Committee of Governors and the EMCF in the past. It is expected to become fully operational at its seat in Frankfurt as from the autumn of 1994, once the necessary practical and organisational arrangements have been made.

2. Functions as Agent and Trustee

During the past financial year the Bank continued to perform various Agency functions in connection with international financial settlements.

[1] The most recent annual report was published in April 1993 and essentially covered developments in 1992. Developments in 1993 will be covered in the first annual report of the European Monetary Institute, which is expected to be published in April 1995. Copies of the annual reports of the Committee of Governors can be obtained by EU residents from their national central banks and by non-EU residents from the EMI at its provisional postal address in Basle.

(a) Agent for the European Monetary Co-operation Fund (EMCF) – Agent for the European Monetary Institute (EMI)

Up to 31st December 1993 the Bank continued to perform the functions of Agent for the EMCF[2] which it had been executing since 1st June 1973. With effect from 1st January 1994, pursuant to Article 109f(2) of the Treaty on European Union, the tasks performed by the EMCF were taken over by the European Monetary Institute (EMI) and the EMCF was thereby dissolved. In accordance with Article 1.3 of the Statute of the EMI, all assets and liabilities of the EMCF automatically passed to the EMI. The EMI and the BIS agreed that the latter 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.

These functions, on the one hand, are connected with the operation of the EMS and, on the other, relate to the execution of financial operations in connection with Community borrowing and lending for the purpose of balance-of-payments support for EC member countries.

The volume of ECUs issued by the EMCF/EMI through three-month swap operations with each of the EC central banks that are signatories to the Agreement of 13th March 1979 and with the Luxembourg Monetary Institute rose from approximately ECU 51 billion at 1st April 1993 to ECU 58 billion at 31st March 1994. This expansion of ECU 7 billion over the year was primarily due to a sharp rise in the price of gold in terms of ECUs and in the US dollar/ECU exchange rate, partially offset by a slight reduction in the US dollar and gold reserve contributions received from EC central banks.

As regards the Community borrowing and lending operations referred to in Council Regulation (EEC) No. 1969/88 adjusting the Community loan mechanism designed to support the balance of payments of member states,[3] particulars of which were given in the fifty-sixth, fifty-seventh, sixty-first and sixty-third Annual Reports on pages 171, 183, 205–206 and 205 respectively, 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.

By virtue of the Decision of the Council of the European Communities of 18th January 1993 and under the terms of the aforementioned Regulation (EEC) No. 1969/88, the Community granted to the Italian Republic a loan in four tranches for a total amount of ECU 8 billion, or its equivalent in other currencies. The first tranche of ECU 2 billion had been made available in March 1993 and had involved two financial operations (see the sixty-third Annual Report, page 205); the second tranche was made available in November 1993 and involved the following three loans: an

[2] For a description of the structure and functions of the EMCF, see the fifty-fourth Annual Report, pages 162–164.

[3] With effect from 24th June 1988 this Regulation replaced Regulation (EEC) No. 682/81 of 16th March 1981, which had previously been the legal basis for the EMCF's activity in connection with Community borrowing and lending operations.

ECU 1 billion loan 1993–2000 at 6% per annum, a DM 1 billion loan 1993–98 at 5⅝% per annum and an ECU 475 million floating rate loan 1993–98 (corresponding to the issue of bonds in the same amount at 5½% per annum). The financial transactions connected with these three operations were carried out value 3rd, 10th and 26th November 1993 respectively.

In addition, at the final maturity date of 25th February 1994, the Agent carried out, value the same date, the financial transaction relating to the repayment by Greece of the ECU 200 million loan 1987–94 at 7⅝% per annum (second tranche of the ECU 350 million loan in two tranches), corresponding to the second tranche of the issue of notes in the same amount and at the same rate.

The following table shows, as at 31st March 1994, the total of outstanding Community lending operations.

Outstanding Community loans as at 31st March 1994

Borrowing countries	Deutsche Mark	ECUs
	in millions	
Greece	536	740
Italy	3,900	1,975
Total	4,436	2,715

(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.[4] Member banks of the EBA may be granted the status of clearing bank on the basis of criteria drawn up by that body. One new bank joined the system on 21st March 1994, bringing the number of participating clearing banks to forty-five.

(c) Trustee for international government loans

The Bank has assumed 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 and the Bank's functions may be found in the Bank's sixty-third Annual Report, pages 205–207.

The Deutsche Bundesbank, as Paying Agent for all uncertificated bonds of all issues of the Dawes and Young Loans, notified the Bank that it had paid out approximately DM 7.5 million to bondholders in respect of the interest maturity dates of 3rd April and 3rd October 1993, as well as interest

[4] For a description of the structure and operation of the clearing system, see the fifty-sixth Annual Report, page 172.

arrears. The newly calculated redemption values and conversion factors in respect of the aforementioned interest maturity dates were published by the German Federal Debt Administration (Bundesschuldenverwaltung) in the Federal Journal.

Concerning the application of the exchange guarantee clause for the Young Loan by the German Federal Debt Administration, the Bank has repeated its earlier reservations (see the Bank's fiftieth Annual Report, pages 168–169, and its announcement published in various financial newspapers on 30th/31st May 1980) and has stressed that they also extend to the funding bonds 1990–2010. The 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

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

During the financial year 1993/94 only one very short-term facility was set up, in favour of the central bank of the FYR of Macedonia. This operation, for an amount of US$ 30 million, took the form of a bridging loan and was linked to transactions concluded by the World Bank; it was backed by a group of central banks.

4. Operations of the Banking Department

The Balance Sheet of the Bank and the Profit and Loss Account, expressed in gold francs,[5] have been certified by the auditors; they are reproduced at the end of this Report.

At the close of the financial year 1993/94, on 31st March 1994, the balance-sheet total stood at GF 64,975,713,443

On 31st March 1993 it had amounted to GF 59,966,449,459

There was thus an increase of GF 5,009,263,984

or 8%, compared with 12 billion gold francs, or 25%, during the preceding financial year.

[5] The gold franc (abbreviated to GF) is the equivalent of GF 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 1 gold franc = US$ 1.941 49...); all other items in currencies are converted on the basis of market rates against the US dollar.

This rise was due to the growth of resources in currencies, while liabilities in gold declined. The impact of exchange rate movements, in gold franc terms, was minor; it affected the balance-sheet items denominated in currencies other than the US dollar. Over the financial year the Deutsche Mark depreciated by 2.9%, the pound sterling by 0.5% and the ECU by 3.4%; on the other hand, the Swiss franc and the Japanese yen appreciated by 5.6% and 13.2% respectively. Had it not been for the exchange rate effect, the increase in the balance sheet would have been approximately 150 million gold francs greater.

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
1990	41,291	– 943	– 2
1991	45,719	+ 4,428	+ 11
1992	47,961	+ 2,242	+ 5
1993	59,966	+ 12,005	+ 25
1994	64,976	+ 5,010	+ 8

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 960 million gold francs on 31st March 1994, compared with 1,059 million on 31st March 1993.

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			
1990	1,476	38,673	1,142	41,291
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

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

(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 732,216,157

On 31st March 1993 this Fund had stood at 703.1 million gold francs; it is proposed that a sum of 29.1 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 50,530,055

It is recommended that this Fund be raised from 47.5 million gold francs to 50.5 million by allocation of 3 million from the net profit.

(4) Free Reserve Fund GF 733,666,872

This compares with 668.8 million gold francs at the end of the previous financial year, representing an increase of 64.9 million.

On 31st March 1994 the total of the Bank's reserves will thus stand at GF 1,546,483,397

compared with 1,449.5 million on 31st March 1993, showing a rise of 97 million, transferred from the net profit for the financial year 1993/94. The reserves had been raised by 101 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
	1993	1994	
	in millions of gold francs		
Deposits of central banks	54,686	59,211	+ 4,525
Deposits of other depositors	1,829	2,015	+ 186
Total	56,515	61,226	+ 4,711

The total of borrowed funds – gold and currencies taken together – increased by 8%, compared with 26% in the preceding financial year. The rise was due mainly to an expansion in the holdings of central banks (+ 8%), but also to an increase in deposits received from other depositors (+ 10%).

The share of "Deposits of central banks" in total borrowed funds remained stable, amounting to 96.7%, compared with 96.8% on 31st March

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
	1993	1994		1993	1994		1993	1994	
	in millions of gold francs								
Sight	4,334	3,927	– 407	1,845	1,233	– 612	6,179	5,160	– 1,019
Not exceeding 3 months	30	44	+ 14	49,437	53,951	+ 4,514	49,467	53,995	+ 4,528
Over 3 months	3	90	+ 87	866	1,981	+ 1,115	869	2,071	+ 1,202
Total	4,367	4,061	– 306	52,148	57,165	+ 5,017	56,515	61,226	+ 4,711

1993; that of funds placed by other depositors (mostly international institutions) thus rose slightly from 3.2% to 3.3%.

The increase in liabilities in currencies was mainly in US dollars; resources in Deutsche Mark and pounds sterling decreased. During the financial year the total of each currency fluctuated appreciably.

Deposits in US dollars represent 69% of resources in currencies, those in Deutsche Mark 18% and those in ECUs 4%. The share of each of the other currencies is smaller.

The total of deposits in gold declined by 7%, whereas those in currencies increased by 9.6%. As a result, the share of gold in total borrowed funds stands at 6.6%, compared with 7.7% on 31st March 1993, and that of currencies at 93.4%, compared with 92.3% previously.

Sight deposits declined by 33.2%, while funds with a maturity not exceeding three months rose by 9.1% and those with longer maturities more than doubled.

On the basis of maturity, sight deposits constitute 8.4% of the total, those with a maximum maturity of three months 88.2% and those at over three months 3.4%, compared with 10.9%, 87.5% and 1.6% respectively on 31st March 1993.

(a) Deposits in gold GF 4,061,111,651

This compares with 4,367 million gold francs on 31st March 1993. This item registered a further decrease, even more marked than in the preceding financial year.

The decline in these resources, of 306 million gold francs, was attributable to a reduction in sight deposits, partially offset by an increase in time deposits in gold.

(b) Deposits in currencies GF 57,164,913,520

The total of these resources had stood at 52,148 million gold francs on 31st March 1993. The rise thus amounted to 5,017 million; it chiefly reflected the increase in deposits with a maximum maturity of three months.

C. Other liabilities

The total of other liabilities amounted to GF 1,907,510,750
compared with 1,706 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 1994".

(a) The item "Staff pension scheme" stood at GF 200,202,916

compared with 172 million gold francs on 31st March 1993. 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.

(b) The item "Miscellaneous" stood at GF 1,666,213,037

It had amounted to 1,495 million gold francs on 31st March 1993.

(c) The item "Dividend payable on 1st July 1994" stood at GF 41,085,797

The dividend payable per share, which was raised from 200 to 240 Swiss francs at the end of the previous financial year, remains unchanged at 240 Swiss francs. The equivalent in gold francs is to be set aside out of the net profit for the financial year 1993/94. An amount of 38.9 million gold francs had been set aside out of the net profit for the previous financial year; the difference reflects exchange rate movements.

The net profit for the financial year under review, as shown in the Profit and Loss Account, amounted to 138.1 million gold francs, before deduction of the above-mentioned dividend.

It is proposed that the balance of 97 million gold francs be allocated in accordance with Article 51 of the Statutes. Details of this allocation are given in Section 5 below.

The net profit for the financial year compares with that of 139.9 million gold francs for the financial year 1992/93.

Assets (employment of resources)

The following table gives a breakdown of the balance-sheet asset items according to their nature.

An examination of the table shows a contraction in assets in gold and an increase in those in currencies. This development reflects the movements recorded in both gold and currency resources.

(a) Sight assets in gold GF 4,338,320,401

This compares with 4,727 million gold francs on 31st March 1993. The decline of 389 million in this item was due in large part to the decrease in liabilities in gold but also to the investments made on the market (see item (d)).

(b) Cash on hand and sight assets in currencies GF 12,021,055

On 31st March 1993 this item had stood at 8 million gold francs.

BIS: Development of investments and other assets, by nature						
Nature	Financial years ended 31st March				Movement	
	1993		1994			
	in millions of gold francs					
Sight assets						
Gold	4,727		4,338		– 389	
Currencies	8	4,735	12	4,350	+ 4	– 385
Treasury bills		2,175		3,511		+ 1,336
Time deposits and advances						
Gold	413		580		+ 167	
Currencies	41,184	41,597	41,370	41,950	+ 186	+ 353
Government and other securities at term		11,428		15,088		+ 3,660
Miscellaneous		31		77		+ 46
Total						
Gold	5,140		4,918		– 222	
Currencies	54,826	59,966	60,058	64,976	+ 5,232	+ 5,010

(c) Treasury bills GF 3,510,671,575

This compares with 2,175 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 41,950,211,324

On 31st March 1993 the total of this item, which comprises gold and currency transactions, had stood at 41,597 million gold francs, giving an increase of only 353 million.

– Investments in gold GF 579,775,726

This compares with 413 million gold francs on 31st March 1993.

– Investments in currencies GF 41,370,435,598

This compares with 41,184 million gold francs on 31st March 1993.

The increase in this item, like that in Treasury bills (see item (c) above) and in government and other securities at term (see item (e) below), was linked to the expansion in resources in currencies.

(e) Government and other securities at term GF 15,087,920,103

The value of this portfolio, which had stood at 11,428 million gold francs on 31st March 1993, varied appreciably during the financial year. It is made up of securities – Treasury securities and commercial paper in particular – purchased on various markets.

The main movement affecting the currency composition of the Bank's assets was a further increase in the item in US dollars, which constitute the largest element.

Assets and liabilities in gold decreased by 222 million and 306 million gold francs respectively. The difference of 84 million corresponds to the rise 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
	1993	1994	
	in millions of gold francs		
Not exceeding 3 months	43,649	43,704	+ 55
Over 3 months	9,376	13,334	+ 3,958
Total	53,025	57,038	+ 4,013

Investments with maturities not exceeding three months remained stable, increasing by only 55 million gold francs; on the other hand, those at longer term rose by 3,958 million, or 42%.

With regard to relative shares, deposits with a maximum maturity of three months account for 76.6% of total investments, compared with 82.3% on 31st March 1993, and those at over three months 23.4%, compared with 17.7% previously.

(f) Miscellaneous GF 76,568,985

This item had stood at 31.5 million gold francs on 31st March 1993.

Forward gold operations

These operations are mentioned in Note 2 to the Balance Sheet and show a negative balance of GF 195,074,876

There was a marked increase in these transactions. At the end of the previous financial year they had shown a negative balance of 111 million gold francs.

5. Net profits and their distribution

The accounts for the sixty-fourth financial year ended 31st March 1994 show a net operating surplus of 145,227,801 gold francs, compared with 162,427,719 gold francs for the preceding financial year. The reduction in the net operating surplus mainly reflects the lower level of interest rates for the major currencies compared with those prevailing in the preceding financial year; this resulted in decreased interest income on the Bank's own funds held in currencies and also led to tighter trading margins on its borrowed funds operations.

This year's result is shown after deduction of 50,450,402 gold francs in respect of costs of administration, representing a 2.4% increase over the

previous year's figure of 49,255,621 gold francs. A larger increase would have been recorded but for the effect of valuation changes, in particular the lower value of the Swiss franc during much of the year against the gold franc. In terms of Swiss francs, in which currency most of the Bank's expenditure is incurred, the increase in costs amounted to about 6%.

The Board of Directors has decided to transfer 3,274,041 gold francs to the Provision for Exceptional Costs of Administration and to supplement – by means of a further transfer of 3,867,963 gold francs – 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 the continuing series of technical projects involving investment expenditure. As a result of these transfers the net profit amounts to 138,085,797 gold francs, against 139,895,417 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 138,085,797 gold francs be applied by the General Meeting in the following manner:

(i) an amount of 41,085,797 gold francs in payment of a dividend of 240 Swiss francs per share;
(ii) an amount of 29,100,000 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 64,900,000 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 1994 to the shareholders whose names are contained in the Bank's share register on 20th June 1994.

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 1994 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. Shareholding central banks

Following the dissolution of the Czech and Slovak Federal Republic and the establishment of an independent Czech Republic and an independent Slovak Republic with effect from 1st January 1993, the two successor central banks to the former State Bank of Czechoslovakia approached the BIS with a view to achieving an agreed division of the Czechoslovak issue of the Bank's

capital. As a consequence, at the Extraordinary General Meeting of the Bank held on 14th June 1993, which took place immediately prior to the 1993 Annual General Meeting of the Bank, the Czechoslovak issue was cancelled and an equivalent number of new shares, comprising the Czech issue and the Slovak issue, respectively, of the Bank's capital, was simultaneously issued to the Czech National Bank and to the National Bank of Slovakia.

7. Changes in the Board of Directors and in the Management

Mr. Bengt Dennis relinquished the offices of Chairman of the Board of Directors and President of the Bank on 31st December 1993, on completion of the three-year period for which he had been elected. The Board elected Dr. W.F. Duisenberg, President of the Netherlands Bank, as successor to Mr. Dennis in these two positions for a period of three years commencing on 1st January 1994.

Lord Richardson of Duntisbourne relinquished his directorship and therefore his position as Vice-Chairman of the Board at the end of June 1993. On 1st July 1993 Mr. Edward A.J. George succeeded Mr. Robert Leigh-Pemberton as Governor of the Bank of England and became an ex officio member of the Board in his place. Mr. George appointed Mr. Leigh-Pemberton (now Lord Kingsdown) as a member of the Board to succeed Lord Richardson of Duntisbourne as from 1st July 1993.

At its meeting on 14th September 1993 the Board elected Dr. Lamberto Dini as Vice-Chairman of the Board of Directors for a period of three years as from that date.

M. Jacques de Larosière ceased to be a member of the Board on 15th September 1993, when he relinquished the office of Governor of the Bank of France. His successor in that post, M. Jean-Claude Trichet, became an ex officio Director as from 16th September 1993. Prof. Helmut Schlesinger relinquished the office of President of the Deutsche Bundesbank at the end of September 1993. His successor in that post, Dr. Hans Tietmeyer, became an ex officio Director as from 1st October 1993. Prof. Leonhard Gleske retired from the Board on 30th September 1993. To succeed him Dr. Tietmeyer appointed Prof. Schlesinger as from 1st October 1993. Mr. Urban Bäckström was elected as a member of the Board to succeed Mr. Dennis as from 1st January 1994. Dr. Dini and M. Philippe Wilmès were reappointed to the Board in September 1993 and February 1994 respectively and Dr. Duisenberg was re-elected to the Board in March 1994.

In October 1993 Dr. Tietmeyer, President of the Deutsche Bundesbank, appointed Herr Helmut Schieber as his Alternate and in November 1993 Dr. Antonio Fazio, Governor of the Bank of Italy, appointed Dr. Stefano Lo Faso as his Alternate in the absence of Dr. Carlo Santini. Finally, in March 1994 Mr. George, Governor of the Bank of England, appointed Mr. W.A. Allen as his Alternate in the absence of Mr. T.A. Clark.

As regards the Management of the Bank, M. Alexandre Lamfalussy relinquished his position as General Manager at the end of December 1993. He was succeeded by Mr. Andrew D. Crockett on 1st January 1994. Dr. Gunter

D. Baer and M. Guy Noppen were appointed Managers in the General Secretariat as from March 1994 and Dr. W.R. White was appointed Manager in the Monetary and Economic Department as from June 1994. Dr. Kurt Spinnler, Deputy Manager, and Herr Robert von Werra, Assistant Manager, retired at the end of December 1993.

Conclusion

As recovery from the protracted recession spreads through the industrial world, economic policies face both a short-term and a longer-term challenge. In the short term, the task is to accommodate a revival of demand, while maintaining the credibility of the basic counter-inflationary thrust of policy. In a longer-term context, the challenge is to improve the structural functioning of the industrial economies, so that the scourge of unemployment can be more effectively tackled, and the cycle of overheating followed by recession can be moderated. In the developing world, a growing number of countries have demonstrated that the right policies can produce good results despite an inhospitable international environment. It will be important to learn the lessons of their experience, so that improvements in investment, employment and growth can be more widely shared.

The brightest aspect of the recent economic performance in the industrial countries has been low inflation. While favourable terms of trade and the weakness of economic activity have been important factors, the determination displayed in the implementation of monetary policy has been crucial. This has helped to weed out the cost-push elements which tend to keep inflation high even after immediate excess demand pressures have abated. Yet questions are still raised about the fruits of this achievement. What will the good price performance – provided it can be preserved – do to improve the prospects for growth and employment in a longer-term perspective?

The drive towards greater price stability was based on experience of the heavy costs of inflation. Inflation can lead to the expropriation of savers and tends to undermine both the willingness to save and the ability to invest. It distorts the relative prices that govern the allocation of resources, with too many resources flowing into inflation hedges which do not necessarily enhance overall productivity. The inherent tendency of price increases to accelerate contributes to uncertainty and results in distortions in long-term interest rates and exchange rates. These adverse consequences of inflation sooner or later force the authorities to resort to restrictive policies which in the short run have a dampening effect on real activity and employment. Evidence from the 1970s – and more evidence has since become available in the developing world – seems to confirm that countries with a better price performance are generally more successful at achieving sustainable growth.

That is not to say that public support for policies aimed at preserving price stability can be taken for granted. As experience of the costs of inflation recedes, the notion that output and employment can be increased by accepting

a little more inflation inevitably gains currency again. The undoubted existence of a short-term trade-off between inflation and output growth can come to obscure the fact that no such trade-off exists in the longer term. This places a particular onus on central banks to explain, on a continuing basis, the rationale for the policy of price stability and the consequences of departing from it. Reducing inflation is always a long-drawn-out, painful process; this puts a high premium on maintaining stability, once it has been achieved. As a safeguard against pressures arising from changes in public sentiment, central banks in many countries have been given greater responsibility for the maintenance of price stability, in an attempt to insulate them from the short-term exigencies of the political process.

The maintenance of a monetary policy with clearly defined priorities – within the bounds of what monetary policy is capable of achieving – has become all the more important with the deepening and internationalisation of financial markets. Markets for the longer-term instruments that are of particular relevance for investment decisions respond to monetary policy actions in ways that are not always easy to predict. Market participants try to read longer-term implications into individual monetary policy decisions. Depending on the markets' view of the sustainability of a particular change in short-term interest rates, longer yields may move sympathetically, or in the opposite direction. This underlines the importance of a clear medium-term orientation for monetary policy. But it does not make it any easier for central banks to select the appropriate setting for monetary policy instruments in circumstances where the reliance that can be placed on traditional indicators has diminished.

The darkest aspect of the recent economic performance of the industrial countries is the high and, in some cases, still rising level of unemployment. The question is increasingly put: what is wrong with economic policies which are unable to prevent unemployment of this order of magnitude from developing in the first instance and from being remedied once it has arisen? It is perhaps not surprising that cyclical weakness of demand is blamed by many for the current rate of joblessness. Those who hold this view see the remedy as lying mainly in stimulating aggregate demand, even if this results in some increase in underlying inflation.

Unemployment no doubt has an important cyclical element. Yet evidence from the range of studies considered in this Report suggests that the longer-term trend of unemployment is not primarily the result of the macroeconomic policies that keep inflation down but of structural rigidities that prevent the labour market from functioning efficiently. To put it in positive terms: labour markets should be such that all are able to secure employment who are able and willing to work at the current price for their skills. In practice, however, legal or other arrangements, originally designed to protect workers in employment, have turned against those without jobs. Moreover, what was supposed to soften the effects of temporary unemployment too often tends to prolong it. The international correlation between the degree of labour market rigidities of various kinds and the level of unemployment is becoming increasingly clear.

This constitutes a major challenge for regulatory and structural policies. Unfortunately for the prospects of achieving reform, existing arrangements are often backed by a strong social consensus. They represent a large part of what are still seen as important social achievements. They are rarely viewed by the general public as an impediment to the effective operation of labour markets that bears much responsibility for a major fiscal burden and unnecessary social hardship.

The difficulties in bringing about a change in attitudes towards labour market regulation are evident. There seems to be little alternative to a patient explanation of economic cause and effect as a means of preparing public attitudes for the changes in present arrangements that are essential if lasting progress is to be made in tackling the evil of unemployment.

The issue of jobs is closely bound up in the public mind – though not necessarily correctly – with that of international competitiveness. The debate about the causes and consequences of changing international competitiveness has been stimulated greatly by the spectacular export-led growth achieved by so many countries in East and South-East Asia. It is quite obvious that recent shifts in the centres of growth and of industrial activity are related not to endowments of natural resources but to the economic policies being pursued: regulatory and structural as well as macroeconomic.

The success of East Asian economies, and the fact that in many product lines they have greatly increased their share of markets in mature industrial countries, has contributed to a rise in protectionist sentiment. On occasion, this sentiment has been influenced by the claim that, since wages in developing countries are lower than those in Europe and North America, the competition is somehow "unfair". Such views present a further challenge to political leadership. Only on a most superficial view does the spread of industrialisation create unemployment in the "old" industrial countries, because the newly industrialising countries overall import as much as they export. The expansion of world industrial capacity is, therefore, of potential benefit to all, the more so the more scope is given to international competition. The Uruguay Round accord is of great importance in this regard, although determined efforts are still required to clarify certain aspects of it and to avoid backsliding once the agreement has been finalised. Of course, translating the opportunities offered into actual benefits depends on flexibility – the more adaptable the economy the greater the advantage to be gained.

Foreign investors' willingness to commit funds to particular countries depends foremost on the existence of a congenial economic environment. Major policy reforms have transformed the attractiveness of large parts of the developing world as a location for investment. Indeed the flood of foreign capital into both Asia and Latin America has been one of the striking features of the early 1990s. There have, however, been important differences in the two areas' experience with capital inflows. In Asia, they have been associated with a high rate of investment. In Latin America, the rate of investment has picked up only recently and still remains relatively low. Because the danger of a reversal of capital flows puts pressure on the authorities to maintain macroeconomic stability and to persist with microeconomic

reforms, the incentives for governments to maintain reform-minded policies have increased with the heavier reliance on foreign capital.

Yet much remains to be done in a number of developing and transition economies. China, for all its impressive economic performance in recent years, has still to come to grips with the essential elements of macroeconomic control, although the unification of its exchange rate has been an important step in this regard. Brazil's authorities have proposed an ambitious stabilisation programme – but it will require determined and persistent implementation to achieve success. India has made a decisive break with past policies and embraced an outward-looking policy strategy. Here too, however, efforts need to be maintained over a run of years if the new strategy is to become self-sustaining.

In eastern Europe, certain countries appear to have turned the corner, and income has begun to rise again. In no case, however, has output regained former levels, although its quality may have improved. Other countries in the region are still struggling to restore macroeconomic stability, while in most of the CIS states the lack of stabilisation policies continues to hold back reform efforts, and output and employment levels remain on a downward path. Many developing countries in Africa continue to register declining per capita incomes. Some recent changes, however, augur well for a better performance in the years ahead. The more realistic exchange rate for the CFA franc should help to improve the export prospects of the countries concerned. A number of North African countries have taken similar steps towards adopting more appropriate exchange rates. South Africa's first election based on universal suffrage led to the formation of a new government that has declared its commitment to free markets as well as to political reform. If policy can be held to this direction, then foreign capital is likely to flow into the country again after many years of economic sanctions.

The last subject to be addressed in this Conclusion concerns the stability of financial markets in the face of ever greater freedom of capital movements, both across borders and involving a wider range of instruments and institutions. The question refers not only to private institutions and markets, but also to exchange rate arrangements both in Europe and elsewhere. In a wider sense it is also related to the problems of monetary management referred to above.

The advantages of free capital movements are not in question: financial resources can be allocated to where they are most productive and the discipline that is thereby imposed on governments is by and large healthy. But in a global perspective the question has to be asked what conditions are required for unrestricted freedom of capital movements to be beneficial, and whether these conditions are indeed fulfilled. What has become abundantly clear from recent experience is the need for stable and consistent underlying policies if capital flows are not to lead to exchange rate instability and/or threaten domestic liquidity management. Developments in the European exchange rate mechanism (ERM) over the past two years or so suggest that credible policies with a well understood focus can be more effective in generating the desired degree of exchange rate stability than

tightly defined intervention obligations if the latter do not command the confidence of market participants. In the developing world, the importance of stable policies is just as apparent, given the evident vulnerability of capital flows to changes in sentiment on the part of foreign investors.

Capital market developments have had implications beyond those for cross-border financial flows and exchange rates. There have been a number of episodes in which financial market disruptions threatened to cause difficulties in the domestic economies of industrial countries. Financial markets are often subject to swings of sentiment that are hard to account for in terms of changes in underlying economic conditions. The stock market crash of 1987 was the first big event to draw greater attention to a new quality of financial markets deriving from international linkages, new technology and the development of new financial instruments. The pace has quickened with the European exchange market turbulence in September 1992, which did not die down until fluctuation bands were substantially widened in the summer of 1993. The recent dramatic decline in bond prices illustrates that the whole range of financial contracts is subject to sudden changes in sentiment.

These developments give rise to a number of questions that are increasingly debated, and not only in financial circles. Have financial innovation and liberalisation contributed to greater instability of asset prices? Is there a threat to the soundness of the financial system? Does innovation change the response of the economy to macroeconomic policy instruments? And what, if anything, should be done to regulate the use of new instruments?

These are not easy questions to answer. It will presumably be several years, at least, before a settled consensus emerges. Certain observations can nevertheless be made. First, there are doubtless some conditions in which the new instruments made possible by financial innovation and liberalisation can contribute to asset price volatility. Yet there is no inherent reason why the greater freedom to transact in capital markets should, in general, make prices more volatile. If anything, more depth and liquidity in markets, and a greater ability to disaggregate exposures and hedge unwelcome risks, should reinforce the stabilising properties of markets. Still, innovations mean that changes in the markets' perceptions of underlying policies can be more quickly translated into price movements than before. This reinforces the need for monetary policy to be seen to be holding to a stable course.

A second observation relates to the implications of financial market innovation for the soundness of the banking system. In principle, the greater attention to the management and pricing of risk that new instruments engender, together with the improved ability to hedge risks, should be factors that increase the resilience of financial institutions. Experience has nevertheless shown that the new instruments can be misused. The growing size of derivatives markets, together with the complexity of risk management strategies employed, underlines the importance of ensuring that all participants in the market manage their portfolios prudently, and that the market itself is robust to sudden disturbances.

A third observation concerns the effects of financial market innovation on economic responses to the standard macroeconomic instruments

employed by central banks. On the one hand, there has been no diminution in central banks' ability to control short-term money market interest rates, and no reason to doubt that the response of the economy to interest rate changes still goes in the traditional direction. On the other hand, the availability of new or cheaper ways of hedging against financial market risks presumably changes the behaviour of economic agents, at least at the margin. Otherwise it would be difficult to explain the growth of derivatives markets. The extent to which such changes in behavioural response call for adaptations in how central banks implement policy is unclear, but it is a question that deserves, and is the subject of, further investigation as these markets continue to grow.

Lastly, how should central banks respond to accelerating financial innovation? This is perhaps the most difficult issue to address. Precipitate reactions have obvious drawbacks. Liberalisation and innovation in capital markets offer enormous benefits to the users of markets through the more efficient allocation of financial resources and enhanced opportunities to manage risk. It is very important to preserve these gains. Any official action should therefore be directed at improving the ability of market participants to exploit the advantages of new instruments without jeopardising their own financial soundness or the stability of the financial system more widely. Doubtless there is work still to be done to strengthen the control procedures of institutions using the market, as well as to adapt capital adequacy standards for market-makers. More is also required to improve market transparency (through disclosure) and to make market infrastructure more resilient (for example, by strengthening settlement systems). On the macroeconomic side, it would be a mistake to assume that policy-making would be made easier if financial instruments could be limited or capital movements controlled. Global markets are now so highly integrated that suppressing the symptoms of investor preferences in one market would simply lead to their manifestation elsewhere.

What capital market innovations demonstrate is the need for stable monetary policies, implemented in a medium-term framework. If market participants have confidence in the medium-term environment for investment decisions, then these decisions are more likely to contribute to stability and less likely to have disruptive consequences. And with credible policies, the scope for a measure of short-run flexibility in the face of cyclical fluctuations is enhanced.

Basle, 26th May 1994

ANDREW CROCKETT
General Manager

Balance Sheet and Profit and Loss Account

at 31st March 1994

Balance Sheet at 31st March 1994

(in gold francs – see Note 1)

Assets		
Gold		4 338 320 401
Cash on hand and on sight account with banks		12 021 055
Treasury bills		3 510 671 575
Time deposits and advances		
Gold		
Not exceeding 3 months	135 148 834	
Over 3 months	444 626 892	
Currencies		
Not exceeding 3 months	34 767 434 706	
Over 3 months	6 603 000 892	
		41 950 211 324
Government and other securities at term		
Not exceeding 3 months	8 801 168 720	
Over 3 months	6 286 751 383	
		15 087 920 103
Miscellaneous		76 568 984
Land, buildings and equipment		1
		64 975 713 443

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 1994, gold payable against currencies on forward contracts amounted to 195 074 876 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	703 116 157		*732 216 157*
Special Dividend Reserve Fund	47 530 055		*50 530 055*
Free Reserve Fund	668 766 872		*733 666 872*
		1 449 483 397	*1 546 483 397*
Deposits (gold)			
Central banks			
Sight	3 927 133 252		
Not exceeding 3 months	44 169 042		
Over 3 months	89 808 958		
Other depositors			
Sight	399		
		4 061 111 651	*4 061 111 651*
Deposits (currencies)			
Central banks			
Sight	1 184 731 837		
Not exceeding 3 months	51 984 873 492		
Over 3 months	1 980 595 968		
Other depositors			
Sight	48 571 239		
Not exceeding 3 months	1 966 140 984		
		57 164 913 520	*57 164 913 520*
Staff Pension Scheme		200 202 916	*200 202 916*
Miscellaneous		1 666 213 037	*1 666 213 037*
Profit and Loss Account		138 085 797	—
Dividend payable on 1st July 1994		—	*41 085 797*
		64 975 713 443	*64 975 713 443*

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 1994 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, 29th April 1994 PRICE WATERHOUSE

Profit and Loss Account

for the financial year ended 31st March 1994

(in gold francs)

Net interest and other operating income		195 678 203
Less: Costs of administration		
Board of Directors	843 122	
Management and Staff	34 123 436	
Office and other expenses	15 483 844	50 450 402
Net operating surplus		145 227 801
Less: Amounts transferred to		
Provision for Exceptional Costs of Administration	3 274 041	
Provision for Modernisation of Premises and Renewal of Equipment	3 867 963	7 142 004
Net Profit for the financial year ended 31st March 1994		138 085 797

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: 240 Swiss francs per share on 473 125 shares	41 085 797
	97 000 000
Transfer to General Reserve Fund	29 100 000
	67 900 000
Transfer to Special Dividend Reserve Fund	3 000 000
	64 900 000
Transfer to Free Reserve Fund	64 900 000
	—

Movements in the Bank's reserves

during the financial year ended 31st March 1994

(in gold francs)

I. Development of the Reserve Funds resulting from allocations for the financial year 1993/94

	Legal Reserve Fund	General Reserve Fund	Special Dividend Reserve Fund	Free Reserve Fund
Balances at 1st April 1993, after allocation of Net Profit for the financial year 1992/93	30 070 313	703 116 157	47 530 055	668 766 872
Add: Allocations for the financial year 1993/94	—	29 100 000	3 000 000	64 900 000
Balances at 31st March 1994 as per Balance Sheet	30 070 313	732 216 157	50 530 055	733 666 872

II. Paid-up Capital and Reserve Funds at 31st March 1994 (after allocation) were represented by:

	Paid-up Capital	Reserves	Total
Net assets in			
Gold	295 703 125	366 206 475	661 909 600
Currencies	—	1 180 276 922	1 180 276 922
	295 703 125	1 546 483 397	1 842 186 522

Board of Directors

Dr. W. F. Duisenberg, Amsterdam
Chairman of the Board of Directors,
President of the Bank

Dr. Lamberto Dini, Rome
Vice-Chairman

Urban Bäckström, Stockholm
Bernard Clappier, Paris
Dr. Antonio Fazio, Rome
Edward A. J. George, London
The Rt. Hon. Lord Kingsdown, London
Dr. Markus Lusser, Zurich
Prof. Dr. Helmut Schlesinger, Frankfurt a/M.
Dr. Hans Tietmeyer, Frankfurt a/M.
Jean-Claude Trichet, Paris
Alfons Verplaetse, Brussels
Philippe Wilmès, Brussels

Alternates

T. A. Clark, London, or
W. A. Allen, London
Hervé Hannoun, Paris, or
André Robert, Paris
Jean-Jacques Rey, Brussels
Dr. Carlo Santini, Rome, or
Dr. Stefano Lo Faso, Rome
Helmut Schieber, Frankfurt a/M., or
Dr. Wolfgang Rieke, Frankfurt a/M.

Management

Andrew Crockett	General Manager
Rémi Gros	Assistant General Manager, Head of the Banking Department
Dr. Giampietro Morelli	Secretary General, Head of Department
Dr. Horst Bockelmann	Economic Adviser, Head of the Monetary and Economic Department
G. M. Gill	Deputy Head of the Banking Department, Manager
Marten de Boer	Manager, Operational Security, Accounting and Budgeting
Dr. Renato Filosa	Manager, Monetary and Economic Department
Prof. Dr. Mario Giovanoli	Legal Adviser, Manager
Dr. Gunter D. Baer	Manager, General Secretariat
Guy Noppen	Manager, General Secretariat
Dr. W. R. White	Manager, Monetary and Economic Department (as from 1st June 1994)
Jean Vallet	Deputy Secretary General
André Bascoul	Deputy Manager, General Secretariat
Dr. Joseph R. Bisignano	Deputy Manager, Monetary and Economic Department
Jean-Claude Dagassan	Assistant Manager, ECU Clearing Agent
P. C. Bridge	Assistant Manager, Banking Department
Jean-Marc Andreoli	Assistant Manager, General Secretariat
Yukio Iura	Assistant Manager, Banking Department
Alexander Radzyner	Assistant Manager, General Secretariat
Claude Sivy	Assistant Manager, Control Operational Security
Günter Pleines	Assistant Manager, Banking Department
F. C. Musch	Secretary General of the Basle Committee on Banking Supervision, Monetary and Economic Department
J. A. Bispham	Assistant Manager, Monetary and Economic Department
Daniel Lefort	Assistant Manager, Legal Service