BANK FOR INTERNATIONAL SETTLEMENTS

61st ANNUAL REPORT

1st APRIL 1990–31st MARCH 1991

BASLE, 10th JUNE 1991

Bank for International Settlements

61st Annual Report

1st April 1990–31st March 1991   Basle, 10th June 1991

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61st Annual Report

submitted to the Annual General Meeting
of the Bank for International Settlements
held in Basle on 10th June 1991

Ladies and Gentlemen,

I have the honour to submit herewith the sixty-first Annual Report of the Bank for International Settlements for the financial year which began on 1st April 1990 and ended on 31st March 1991.

The net profit for the year amounted to 114,892,783 gold francs, after transfer of 4,173,949 gold francs to the Provision for Exceptional Costs of Administration, 10,000,000 gold francs to the Provision for Building Purposes and 5,000,000 gold francs to the Provision for Modernisation of Premises and Renewal of Equipment. This compares with a net profit for the preceding year of 104,330,524 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 33,892,783 gold francs in payment of a dividend of 200 Swiss francs per share.

The Board further recommends that 24,300,000 gold francs be transferred to the General Reserve Fund and the remainder of 56,700,000 gold francs to the Free Reserve Fund.

If these proposals are approved, the Bank's dividend for the financial year 1990–91 will be payable to shareholders on 1st July 1991.

I. A not so peaceful world after all

The last twelve months could hardly have offered a sharper contrast to those preceding them. Then, the beginning of a process of political liberalisation and economic transformation in eastern Europe, extending even to the Soviet Union, had marked the end of almost half a century of cold war. The prospect of a more peaceful world had opened up, in which arms races would cease and scarce resources would be directed to other uses such as better protection of the environment and more fundamental assistance for the poorest countries. The invasion of Kuwait by Iraqi forces on 2nd August 1990 dampened such hopes and demonstrated that the potential for military conflict with worldwide economic repercussions continued to exist, and, it was feared, not only in the Middle East. The immediate result was the threat of an external shock of the kind that had severely disrupted the world economy twice in the 1970s, that is, a sharp rise in oil prices. While many experts were quick to argue that the economic effects of an oil price rise, even if long-lasting, would be less severe this time, the psychological impact was quite strong, reflecting the high degree of uncertainty and the deep disappointment after the earlier wave of optimism.

Oil prices, however, already peaked in early October and they declined fairly steadily thereafter. Following the end of hostilities with the liberation of Kuwait in the spring of 1991 the oil price uncertainty was greatly reduced. Not only has the pre-invasion price level been more or less restored, but the market structure also looks at least as stable as before the crisis. Nevertheless, the prospect of a peace dividend now seems less certain. Despite the ending of the war, potential uncertainty in the area has not been wiped out and, therefore, the world is not back to where it was twelve months ago.

The second half of 1990 and the early months of 1991 thus not only provided a sobering reminder of how quickly political upheavals, in particular those affecting energy supplies, can change the economic scene but also left policy-makers more aware that they face an uphill struggle on virtually all fronts. Quite apart from the war and its consequences it had become evident that the problems in eastern Europe and within Germany would be considerably more difficult than had been anticipated.

At the time of the invasion of Kuwait in August several major economies were already on, or over, the brink of a cyclical downturn; whether the Gulf conflict and its repercussions on financial markets actually tipped the balance or merely hastened the process is difficult to say. The liberation of Kuwait was widely expected to restore consumer confidence in the United States and thereby help the economy out of recession.

Whether this will be the case remains to be seen. The United Kingdom and Canada could take longer to reach the trough and come out of it; in other countries, such as France and Italy and some of the smaller economies, the slowdown is still in its early stages and may continue for some time.

For the industrial countries as a whole real GDP growth in 1990 fell back to levels last recorded in 1986, though it remained significantly above the 1979–84 average (see the table opposite). It is, however, already clear that 1990 will not be followed by a rapid rebound such as occurred in 1987; indeed, there will almost certainly be a further slowdown in GDP growth in 1991 in the industrial countries as a group. As the table shows, for the other country groups, with the exception of the major oil producers, 1990 compared even less favourably with the preceding years. Apart from eastern Europe, which is embarking on a completely new and difficult beginning which makes comparisons with earlier output figures virtually meaningless, the African and Middle Eastern regions as well as Latin America experienced stagnation or decline in per capita income in 1990. For the world as a whole economic growth in 1990 was thus at its lowest level since 1985 and also below the 1979–84 average.

Viewed in such general terms, there may seem to be a broad similarity of problems in many different parts of the world. Such a conclusion, however, would be far from the truth. Not only are there major differences within each regional grouping, but the context and hence the appropriate policy response also vary greatly across the different groups that are at present experiencing economic decline.

An obviously special case is that of the countries in eastern Europe. Nobody could have doubted that their transition from a centrally planned to a market economy would be slow and difficult even under the best of circumstances and in the absence of serious policy mistakes. It involves no less than replacing the entire control mechanism of the economy and its whole legal and institutional framework. Allowing prices to reflect actual scarcities and removing subsidies not only implies large changes in relative prices but also tends to push up the general price level, a tendency which can only be contained by highly restrictive macro-economic policies, with serious side-effects on production. While a new price structure is emerging an exchange rate has to be set which will allow the economy to find – and sustain – a new role in the international division of labour. The countries of eastern Europe were neither able to draw on established wisdom for guidance on how best to tackle the tasks they faced, nor were they allowed the benefit of ideal circumstances. On the contrary, the temporary oil price hike and the progressive breakdown of the Comecon trading arrangements added significantly to the problems that could be anticipated. Hungary, Poland and Czechoslovakia forged ahead resolutely, by rather different routes but all driven by the realisation that there was no alternative; the bankruptcy of the old system was too complete. In the other countries the political process was slower to produce a consensus on what course to follow. The Soviet Union and Yugoslavia both drifted into deeper crisis.

World output growth[1]								
Country groups and regions	1984–86 GDP	1979–84 average	1985	1986	1987	1988	1989	1990
	as % of total	percentage changes in real GDP						
Seven major countries	61.7	2.1	3.6	2.7	3.4	4.7	3.3	2.6
Other industrial countries[2]	10.0	1.8	2.9	2.6	3.1	3.4	3.5	2.6
Developing countries	18.5	3.5	4.4	3.6	4.3	4.8	3.4	2.8
Major oil producers[3]	6.4	1.8	2.0	−1.2	1.2	3.2	2.3	3.1
Other developing countries	12.1	4.4	5.6	6.1	5.9	5.7	4.0	2.7
Africa and Middle East	1.7	3.6	6.5	4.4	2.5	3.6	2.4	2.0
Asia	6.6	6.7	6.4	6.7	8.0	9.4	5.4	5.7
of which: NIEs[4]	1.6	7.4	3.7	10.8	12.1	9.4	6.1	6.8
Latin America	3.8	0.7	4.2	5.9	4.1	0.1	1.8	−2.0
Eastern Europe[5]	9.8	3.1	2.0	2.7	1.7	3.7	1.6	−5.8
World	100.0	2.4	3.5	2.9	3.4	4.5	3.2	1.8

[1] Average growth rates for the seven major and other industrial countries are calculated using 1988 GDP weights and exchange rates and other averages using 1984–86 GDP weights and exchange rates, including all countries with 1988 GDP of at least US$0.1 billion. [2] Including the countries listed in the table on page 25, Iceland, Luxembourg and Malta. [3] OPEC members, Mexico and Trinidad and Tobago. [4] The newly industrialised economies: Hong Kong, Singapore, South Korea and Taiwan. [5] National output figures converted at non-commercial exchange rates.

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

In Sub-Saharan Africa per capita income probably fell further in 1990, and as time goes by it becomes more and more difficult to envisage an upturn generated by internal forces. External shocks to the region have been frequent and most countries' resistance to such shocks is low because of a lack of diversification, inadequate infrastructure and an outdated and deficient capital stock. Drought, rapid population growth and political instability contributed to the bleak picture.

In Latin America an overall deterioration with falling output, accelerating inflation and rising interest arrears on external debt was dominated by Brazil's difficulties in restructuring its economy and by further output declines in Argentina and Peru. Mexico, by contrast, experienced an upturn in growth following the successful implementation of its stabilisation programme.

Asian countries on average saw a small acceleration in real output growth last year as stable macro-economic policies together with micro-economic policies to promote domestic restructuring and export growth once again proved successful. Oil-exporting Middle Eastern countries benefited from the rise in oil prices, whereas some other countries in the region experienced a steep fall in real incomes as a result of the invasion of Kuwait.

Among the industrial countries Germany was (and remains) very much a special case in having to manage the transition of the former German Democratic Republic from a centrally planned to a market economy within its own – new – borders. Monetary union, which paved the way for political union, exacted a heavy toll economically by exposing industry in eastern Germany to world market competition at a sharply higher real exchange rate completely out of line with actual productivity levels. Large nominal wage increases in the wake of monetary union made matters worse, as did losses of large parts not only of the eastern European markets but also of the home market. The need to create a functioning infrastructure and a new public administration almost overnight, together with legal uncertainties regarding the restitution of property to former owners, are other elements in this picture of disarray. On the positive side, the old Federal Republic is committed to assisting the restructuring as much as possible, and also to covering the wide discrepancy between income and productivity levels in the former GDR by huge transfer payments financed largely out of public sector borrowing. This has given an enormous boost to industrial production not only in western Germany, where industry was already operating close to capacity limits, but also among its western European neighbours. Apart from a number of European countries, only Japan managed to avoid slipping into recession, although it was also affected to some degree by the international slowdown in activity towards the end of 1990 and in early 1991.

The question thus arises as to whether a cyclical downturn is either inevitable or avoidable only at a high cost in terms of growing structural distortions and increasing inflationary pressures. Evidently the timing of cycles is highly uncertain, as has been amply demonstrated by the long duration of the most recent upswing which began in 1983. In large economies like that of the United States individual regions or sectors may go through cycles of their own which do not necessarily add up to a significant economy-wide recession. Also, if the underlying growth trend is sufficiently strong, cyclical influences may lead to a slowdown in economic growth without resulting in a recession in the technical sense of the term (an absolute decline in GDP over two successive quarters). Nevertheless, the question of how macro-economic policy, and monetary policy in particular, should respond to cyclical phenomena needs to be addressed even when these phenomena are not very pronounced or when the cycle itself is largely a result of policy, whether by accident or by design. There is no question that in most of the countries now in recession demand restraint was appropriate after excess demand pressures had been allowed to build up in 1988–89. The issue of whether there is a case for counter-cyclical policy was at the core of the monetarist/Keynesian controversy which at one point in the 1970s seemed to have been largely settled in favour of the former. It flared up again in the 1980s when intermediate targets lost much of their appeal and inflation rates had declined. How monetary policy has recently been conducted in these circumstances is discussed in detail in Chapter VII. The relative merits of counter-cyclical and medium-term strategies will be taken up again in the Conclusion of this Report.

Consumer price increases have been on a clear upward trend since 1986 in the Group of Ten countries as a whole, even if food and energy are excluded. There are, however, marked differences from country to country. Those with the worst performance have been the United Kingdom and Sweden, both of which are now in recession. It is well known that while economic overheating as a rule generates inflationary pressures, recession as such is no cure for inflation. The all-important question is whether domestic cost-push can be brought under control, which may be somewhat easier once the economy has cooled down. Present growth trends thus may indeed offer an opportunity to return to greater price stability, but whether this opportunity is exploited will depend on the success of macro-economic policies in maintaining a good balance between competing objectives. This leads back to the basic policy question referred to above.

The temporary impact of the invasion of Kuwait on oil prices was transmitted with some force to the financial markets (as is described in Chapter V), from where it spread back into the real economy, significantly exacerbating the climate of uncertainty. However, there appears also to have been another way in which financial market developments may have affected the real side of the economy. It was unrelated to the Gulf conflict and became a topic of serious debate in the United States and, to a lesser extent, in the United Kingdom. The catch-phrase for this is the possibility of a "credit crunch", a phenomenon that occurs if banks or other lenders, perhaps overreacting to having burned their fingers in what has been shown to be imprudent lending, refuse loans or financing at their current lending rates even to creditworthy customers with sound projects. If shared by a sufficiently large number of lenders, such behaviour cannot fail to have a significant impact on real economic activity. The question was raised as to whether regulators themselves might not inadvertently have encouraged such behaviour on the part of the banks.

In a similar context it has been pointed out that banks which encounter difficulties in meeting the capital ratios agreed upon by the Group of Ten supervisors for the end of 1992 will either have to raise additional capital or reduce the size of their balance sheets. However, this seems to be at most a minor factor since very few banks are in such a position, even after the events of 1990, with the stock market fall, declining property prices in some countries and weakening economic activity. There may indeed now be a greater awareness of the capital ratio implications of portfolio decisions, but that is precisely what was needed. It could lead to longer-term problems of credit availability only if circumstances were to deny a large number of banks access to additional capital, which is only conceivable if bank profits remain under severe pressure over a prolonged period. In more globalised, highly competitive financial markets this is hardly a credit crunch scenario since most bank customers have a wide choice of other sources of credit, but it does underline the urgent need to adapt banking legislation in those countries where banks have lost competitiveness vis-à-vis other, less stringently regulated institutions and markets.

One problem that had given particular cause for concern in recent years diminished substantially in 1990: the current-account imbalances between the industrial countries. Most striking was the decline of the Japanese surplus, which fell to less than half of what it had been in 1988. At US$ 36 billion it was even lower than the German surplus of $47 billion, which itself narrowed significantly compared with the previous two years and will narrow further in 1991. Both major deficit countries managed to reduce their current-account shortfalls, the United Kingdom from $33 to 22 billion and the United States from $110 to 99 billion. A reduction of the US deficit to below $100 billion had been considered by many to be the most ambitious target that could possibly be achieved. Divergent cyclical developments have clearly played a role in bringing about such impressive results, as, more recently, have the Japanese, Saudi Arabian and German financial contributions to the Gulf war effort. This, together with the recent strengthening of the US dollar, raises some doubt as to whether these trends – except for the further reduction of the German surplus – will continue in 1991 and beyond. Given the concern which had earlier surrounded the size of the imbalances one might have expected their reduction to have been greeted with considerable relief. This, however, does not seem to have happened, at least to judge from developments in the exchange markets. Daily volatility has been about as high and monthly and quarterly exchange rate fluctuations almost as pronounced as before. Exchange market developments are discussed in detail in Chapter VIII.

With the reduction of current-account imbalances international policy co-ordination, which under conditions of floating exchange rates is the only, though not always successful, precaution against serious exchange rate misalignments, lost a clear focus in 1990. The policy implications of the need to bring down current-account deficits or surpluses were relatively obvious. Against a background of large imbalances it was not too difficult to agree in principle on what was required of each country participating in policy co-ordination. Without that background the question is no longer so straightforward. New efforts are being launched in this field. Given that all policy issues have an important international dimension, this is also an area that will be revisited in the Conclusion.

Concern about persistent imbalances has given way to concern about a shortage of world savings in the face of increased demand for capital, in eastern Europe, in the Middle East and, of course, in developing countries. The high level of real long-term interest rates in virtually all countries is widely seen as a reflection of such a shortage. The fall in national saving, which is discussed in Chapter II, is primarily (but not only) a problem of the government sector, brought on by persistent budget deficits and the shift from expenditure on infrastructure investment to current consumption. Although the cyclical downturn may have eased the problem recently, the longer-term decline in national saving in many countries remains a constraint on capital investment and, ultimately, growth in the world economy.

The international debt crisis lingers on and casts a shadow over large parts of the developing world, if no longer over the international banking system. The basic strategy for dealing with the problems of indebted countries, and which has proved its usefulness, for example, in the Mexican case, has remained in place. New ground has, however, been broken in a related area. In order to facilitate its transition to a market economy, Poland has been the main beneficiary of a greater readiness to envisage official debt forgiveness. It became only too evident, however, that the case-by-case approach has its limitations: what is done in the case of one debtor may be watched with envy and resentment by the others and the basic objectives of creating conditions which will encourage private capital flows may be frustrated. Chapter VI gives a detailed account of developments in this area of international lending as well as in international financial markets in general.

The structure of the Report has been only slightly modified with the addition after Chapter II of a separate chapter devoted to developing countries and eastern Europe. The numbering of the chapters that follow has been changed accordingly but their sequence remains the same as in previous years.

II. Developments in industrial countries

A general overview of business cycle conditions in the industrial countries in 1990 and the early months of 1991 is presented in the first part of this chapter, followed by a discussion of the economic consequences of the Gulf crisis and developments in individual economies. Two special topics are also addressed in some detail. Firstly, the relationship between government debt, budget deficits and public investment is examined, with emphasis on recent developments and the longer-term problems encountered in the budget consolidation process. The determinants of national saving in the industrial countries are then considered in the context of rising world demand for capital, high real interest rates and the fall in government saving over the past two decades.

Business cycle conditions

Growth slowed last year

Average real GNP/GDP growth in the industrial economies slowed to 2½% last year, down from about 3½% in 1989, while consumer price inflation rose by almost 1 percentage point to 5¾%. Underlying the aggregate figures was a fairly mixed economic performance as the desynchronised pattern of cyclical activity discussed in last year's Annual Report became even more pronounced, especially in the second half of 1990. While a few economies, in particular Japan and Germany, continued to show robust growth, earlier weakness in several industrial countries, notably the United States, the United Kingdom, Canada and Sweden, developed into deeper and more widespread declines in economic activity. Moreover, the strong expansion in continental Europe recorded in 1989 and most of 1990 weakened markedly, with France and Italy experiencing a fall in industrial output by the end of the year.

Higher oil prices

Numerous factors are responsible for the slowdown in economic performance among the industrial countries. The supply shock of higher oil prices and the uncertainties associated with the Gulf crisis played a role in the second half of the year, working indirectly through a broad decline in consumer and business confidence and a related deceleration in consumer spending and directly through the terms-of-trade loss and the increase in production costs. In those countries with the weakest performances, however, the downturn was well under way before last August, and most of them are experiencing a "classic" aggregate demand type of cyclical downturn related to restrictive monetary policies. The slowdown in activity in the United States, in contrast, appears to be primarily attributable to a decline in consumer and business confidence, the cumulation of imbalances in the financial system and overbuilding in the non-residential construction sector. High real interest rates, combined with inventory destocking, were largely responsible for the more recent slowdown in France and Italy. The high real rates in those two countries are in part related to external factors, for example the exchange rate constraint in the EMS, rather than domestic overheating.

Overheating followed by recession

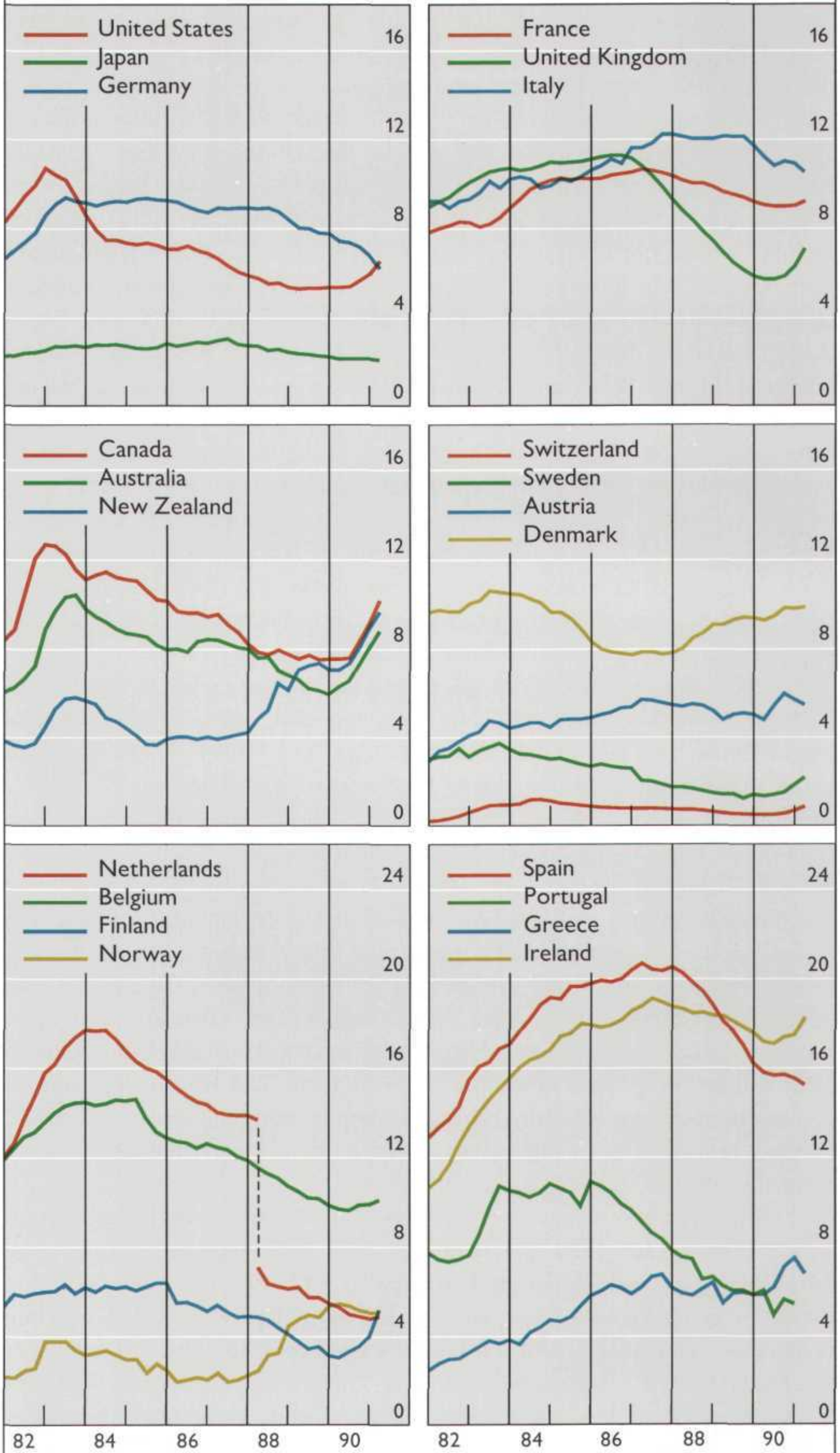
The industrial countries at present experiencing weakness in the aftermath of classic overheating include the United Kingdom, Canada, Sweden, Finland and Australia. Sustained economic expansion brought with it tightening goods and labour markets, characterised by higher rates of capacity utilisation and falling unemployment. Excess demand conditions developed and were reflected in rising wage and price inflation and, in most cases, deteriorating trade balances. In order to counter emerging imbalances, monetary policy was made more restrictive in almost all of these countries in mid-1988, and in most of them has since been tightened further. Money and credit growth declined and nominal and real interest rates reached very high levels. Against this background, economic activity eventually slowed; real GNP growth fell significantly, in some cases even becoming negative, and industrial production dropped markedly. Unemployment rates reached a low around the middle of last year in most cases and either stagnated or rose during the remainder of 1990 and the early months of this year. Profits were squeezed as weak market conditions did not allow businesses to raise prices in line with costs.

Recession despite monetary easing in the United States

Excess demand conditions developed somewhat earlier in the United States than in most other countries as its economic upswing had in general begun sooner and had initially been stronger. The federal funds rate rose steadily between March and August 1988 as the Federal Reserve reacted to increasing evidence of strong growth in the economy by tightening reserve positions. Unemployment reached a low of around 5% in early 1989. Partly because of higher interest rates and partly on account of the maturity of the business upturn, real growth slowed in the spring of 1989 and the Federal Reserve responded by easing its policy stance. By April 1991 the federal funds rate had declined by 400 basis points. The elimination of the short-term interest rate differential vis-à-vis Germany and Japan brought a substantial decline in the foreign exchange value of the dollar in 1990 and strong growth in non-farm net exports. The gain in international competitiveness was partially reversed, despite continuation of the trend towards relatively lower US interest rates, by the appreciation of the dollar early this year.

Despite easier monetary conditions the US slowdown has persisted, accelerating in late 1990 and continuing this year with particularly large increases in unemployment in February and March. This may to some extent be attributable to reluctance on the part of banks to lend to certain sectors or certain regions of the country, even to creditworthy borrowers ("credit crunch"). The recession in the United States is atypical in not having been initiated by a rise in real interest rates, strong wage pressures or excessive inventories. Real interest rates in the United States declined last year owing both to the fall in nominal interest rates and to higher

Unemployment rates*



* In percentages. National data and definitions; for the Netherlands, break in series.

Lower consumer and business confidence

consumer price inflation, while nominal wages in many sectors have not kept up with inflation since 1986. Several cyclical imbalances are evident, in particular the rapid growth in consumer and business debt ratios and high commercial property vacancy rates. However, the continuation of the economic downturn appears to be due in large measure to low consumer and business confidence, initially related to problems in dealing with persistent federal budget deficits and troubled financial institutions. Against the background of an already weak economy, the temporary oil price hike and initial uncertainty over the outcome of the crisis in the Persian Gulf pushed the US economy further into a slump. Although consumer confidence recovered somewhat in response to the allied military successes in the Gulf war, real GNP declined again in the first quarter of 1991.

Strong growth in Germany ...

Several other industrial countries continued to enjoy strong growth in 1990. Germany, the Netherlands and Austria experienced very robust growth together with only moderate increases in wage and price pressures last year, partly as a result of the pre-emptive and progressive tightening of

Consumer prices

Countries	1988	1989	1990				1991
			March	June	Sept.	Dec.	March
	percentage changes over twelve months to end of period[1]						
United States	4.4	4.6	5.2	4.7	6.2	6.1	4.9
Japan	1.0	2.6	3.5	2.2	3.0	3.8	4.0
Germany	1.8	3.0	2.7	2.3	3.0	2.8	2.5
France	3.1	3.6	3.4	3.0	3.8	3.4	3.2
United Kingdom	6.8	7.7	8.1	9.8	10.9	9.3	8.2
Italy	5.5	6.5	6.1	5.6	6.3	6.4	6.6
Canada	4.0	5.2	5.3	4.3	4.2	5.0	6.3
Australia	7.7	7.8	8.6	7.7	6.0	6.9	4.9
Austria	1.9	2.9	3.1	2.9	3.7	3.5	3.5
Belgium	1.9	3.6	3.4	3.0	3.7	3.5	3.3
Denmark	4.5	4.8	3.0	2.5	3.1	1.9	2.4
Finland	6.5	6.6	6.6	5.6	5.7	4.9	4.8
Greece	14.0	14.8	17.8	21.7	21.8	22.8	19.5
Ireland	2.6	4.7	4.2	3.5	2.9	2.7	2.6
Israel	16.4	20.7	16.1	16.3	18.6	17.6	18.0
Netherlands	1.2	1.3	2.3	2.3	2.7	2.6	2.6
New Zealand	4.7	7.2	7.0	7.6	5.0	4.9	4.5
Norway	5.6	4.2	4.5	3.6	3.9	4.4	3.5
Portugal	11.7	11.6	12.8	13.6	13.7	13.7	12.2
South Africa	12.5	15.3	14.9	13.6	14.3	14.6	14.1
Spain	5.9	6.9	7.0	6.6	6.4	6.5	5.9
Sweden	6.3	6.7	10.7	9.8	11.5	10.9	10.7
Switzerland	1.9	5.0	5.0	5.0	6.1	5.3	5.9
Turkey	61.6	64.3	62.8	62.6	59.3	60.4	62.3
Average[2]	4.0	4.9	5.3	4.8	5.7	5.7	5.2

[1] Quarterly figures for Australia, Ireland and New Zealand. [2] Calculated using 1988 GDP weights and exchange rates.

Sources: National data.

monetary policies begun in 1988. In Japan, rapid domestic demand growth led by high business investment continued to be the primary factor underlying the strength of activity. Signs of slowing growth became evident in the fourth quarter, however, and the rise in consumer price inflation to almost 4% in 1990, up from only 1% in 1988, was a serious concern for the Japanese monetary authorities.

... and in Japan

The extraordinary events surrounding the rapid economic, monetary and political unification of Germany have greatly changed the economic situation in Europe. In western Germany aggregate demand increased partly in reaction to the large fiscal stimulus and transfer of purchasing power to the former German Democratic Republic. Output growth accelerated but was outpaced by demand, facilitating the process of external adjustment. Positive trade spillover effects were especially evident in several European countries, particularly Belgium, Denmark and Austria. Under these circumstances, monetary conditions in Germany were tightened and short-term interest rates were increased to stem rising excess demand pressures. Higher interest rates were in part transmitted abroad, however, placing an unwelcome restraint on economic activity in several countries, in particular those participating in the EMS exchange rate mechanism (ERM). Tensions within the ERM gained some attention in late 1990 and early this year, exacerbated by the slowdown of activity in France and Italy and the deepening recession in the United Kingdom.

Unification of Germany

Economic consequences of the Gulf crisis

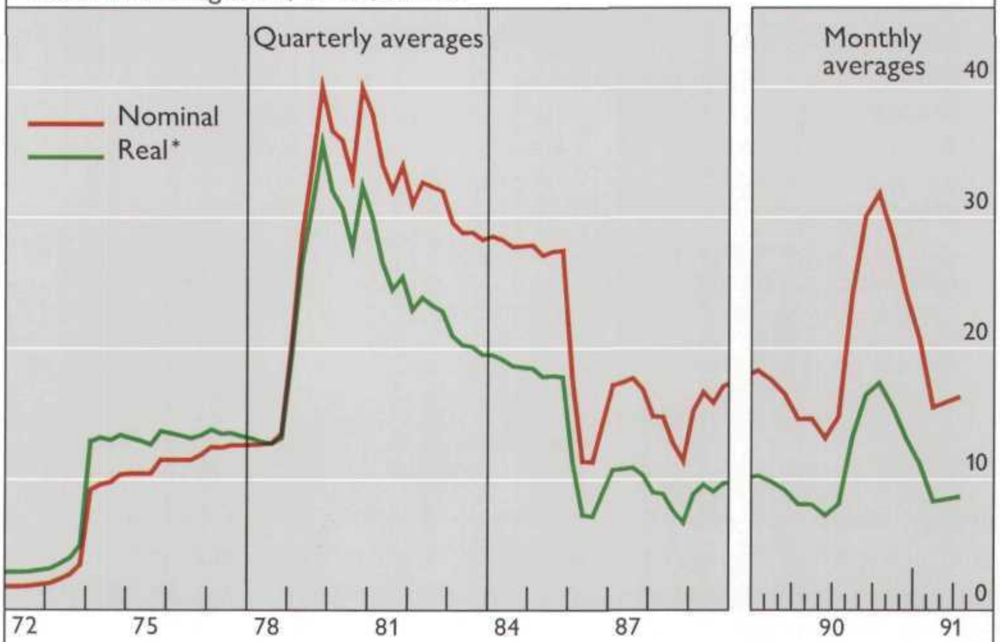
The crisis in the Gulf and the associated fluctuation in oil prices slowed growth or deepened the recession in most industrial countries in the second half of 1990. Inflation rates would also have been moderately lower in the absence of the temporary oil price surge. However, the industrial countries were better prepared to weather an oil shock last August than had been the case prior to the 1973 or 1978–80 oil price increases. Not only was it temporary in nature, the oil price rise last year also started from a relatively low base in real terms following the extended period of weakness in oil markets in the mid to late 1980s. Lower energy use in production, reduced energy import dependence and more favourable business cycle conditions, in particular lower inflation rates, limited the adverse effects of the upswing in oil prices. Nonetheless, the Gulf crisis did contribute to the unexpectedly sharp economic downturn in the fourth quarter in some countries by significantly eroding business and consumer confidence.

Temporary oil shock

In contrast to the two previous oil shocks, the upward swing in oil prices last year did not last very long. As can be seen from the graph opposite, spot market oil prices more than doubled between July and September 1990 in response to the invasion of Kuwait, rising from less than \$15 to over \$30 per barrel, but declined subsequently to approach their pre-invasion level early this year. In real terms, oil prices at their peak were still much lower than those prevailing a decade ago. Although oil supplies and stocks were plentiful at the time, the sharp jump in oil prices last August reflected fears of a longer-term disruption in exports from the

Spot crude oil prices

Saudi Arabian light-34, in US$/barrel



* Nominal oil price deflated by the US GNP deflator.

Minimal oil supply disruption

Middle East, where some two-thirds of the world's proven oil reserves are located. Oil prices fell back once the threat to Saudi Arabian oilfields was relieved by the allied military build-up in the region. Furthermore, several countries, notably Saudi Arabia, increased oil production, making up for the supplies lost in the embargo on oil exports from Iraq and Kuwait. In contrast, the 1973 price explosion, following the Yom Kippur war in the Middle East, had been associated with an explicit decision by Arab countries to cut back oil production and impose a partial embargo on exports to several industrial countries. In 1978–80, unlike the recent experience, there was quite a large build-up of oil stocks, contributing to price pressures.

Reduced energy dependence

Despite the long lag between price increases and the development and implementation of energy-saving technology, significant strides in reducing energy dependence have been made in response to the more than sixfold rise in real oil prices following the two shocks in the 1970s. The industrial countries sharply reduced their energy and oil consumption (in volume terms) as a percentage of real output, as is shown in the table overleaf, and were therefore in a better structural position to absorb an oil price increase than at the time of the two previous shocks. From the highs recorded in the early 1970s, primary energy requirements as a percentage of GNP had declined by 25% by 1989, oil consumption had been cut by 40% and net imports of energy had dropped by 46%. Moreover, following substitution measures, oil as a percentage of primary energy use had declined from around 51 to 43%.

Reduced dependence on oil in the production process lessens the adverse cost-push effect of an oil price rise, and reduced dependence on oil

Energy consumption and imports in industrial countries						
Items	1960	1970	1975	1980	1985	1989
	oil equivalent units/GDP (indices 1973 = 100)					
Primary energy requirements	96.9	100.9	95.8	89.5	78.9	75.1
Oil consumption	71.9	95.9	92.3	80.7	62.2	60.0
Net energy imports	48.4	89.0	91.7	78.4	49.5	54.3
Memorandum items:						
Real oil price [1]	*103.8*	*77.0*	*268.5*	*497.0*	*319.7*	*174.7*
Oil/primary energy use [2]	*39.7*	*50.9*	*51.6*	*48.3*	*42.2*	*42.8*
Net energy imports/ primary energy use [2]	*19.2*	*33.7*	*36.6*	*33.5*	*24.0*	*27.6*

[1] Crude oil price/US GNP deflator. [2] In percentages.
Source: OECD.

imports mitigates the adverse terms-of-trade effect. The developments in energy usage and import dependence, together with actual changes in energy import prices (including exchange rate changes), would indicate that the net real income loss associated with the oil price rise was less than ½% over 1989–90 for all the major industrial countries. In contrast, real income losses of 2–3% were experienced in many industrial countries following the previous oil shocks.

Small real income loss

Other factors also point to significantly less severe adverse effects arising directly from the oil shock. In particular, inflation rates, liquidity overhang and the degree of overheating in industrial economies were generally much lower than before the two shocks in the 1970s. The following graphs compare inflation, monetary growth and real GNP growth rates in the major industrial countries before and after the three oil shocks. Consumer price inflation in these countries averaged about 4½% at the time of the oil shock last August. At the time of the first and second oil shocks inflation averaged 10½ and 7¼% respectively. Clearly, overheating conditions were most evident prior to the first oil shock, particularly in Japan, where inflation was running at an annual rate of 16% in the fourth quarter of 1973 and had been accelerating in the course of the year. Prior to the second shock inflation in Japan was under 4% and declining, while at the time of the most recent increase in oil prices it was under 3%.

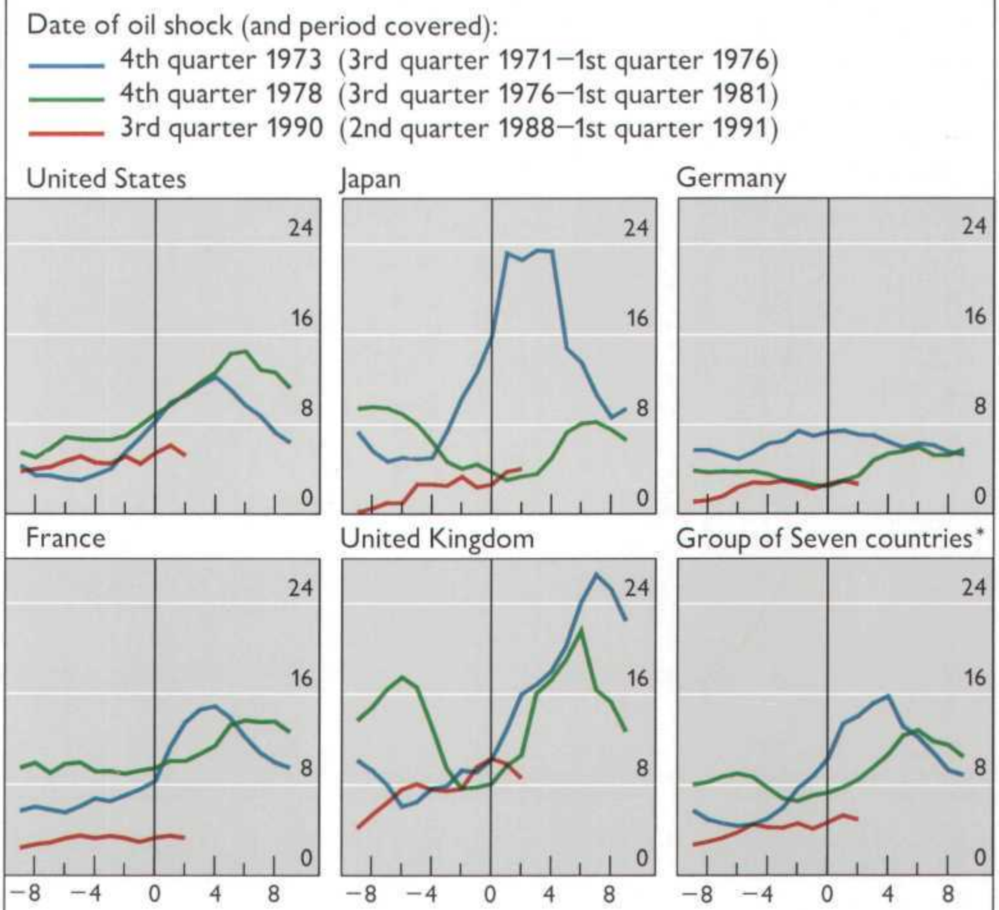
Less inflationary pressure

Similarly, real GNP growth and monetary growth were substantially less on average in the major industrial economies at the time of last year's oil price increase than previously. Year-on-year real GNP growth up to that point averaged about 2¾% and had been gradually decelerating for more than a year in line with weakening economic performance in the United States and the United Kingdom. However, in contrast to the sharp and widespread international downturn already evident before the first oil shock in 1973, many industrial economies – notably Japan, Germany and most of continental Europe – were still experiencing strong growth. Monetary policy stances last year reflected different economic situations, with a relaxation of policies in the United States and a fairly restrictive stance in Japan, Germany and, through the transmission of high interest rates, also in

Desynchronised pattern of cyclical activity

Consumer price inflation

Changes over four quarters, in percentages



* Calculated using 1988 GDP weights and exchange rates.

the other ERM countries. Slower and more stable average growth in the broad monetary aggregates last year compared with the situation at the time of the previous oil shocks, as well as much higher real interest rates, indicate that there was less monetary overhang and underlying inflationary pressure in most industrial economies.

Despite the seemingly good prospects for weathering an oil price hike, particularly one of much smaller magnitude and shorter duration than its predecessors, economic activity weakened significantly in many industrial countries in the fourth quarter. However, while this development was partly attributable to the temporary oil price increase, a more important influence was the uncertainty associated with the Gulf conflict, which led to plummeting confidence and retrenchment in spending by consumers and businesses. The combination of these factors contributed to the plunge in stock markets in August and September. The airline and tourism industries were particularly hard hit by rising fuel costs combined with the widespread cancellation of tourist and business travel.

Uncertainty over Gulf conflict

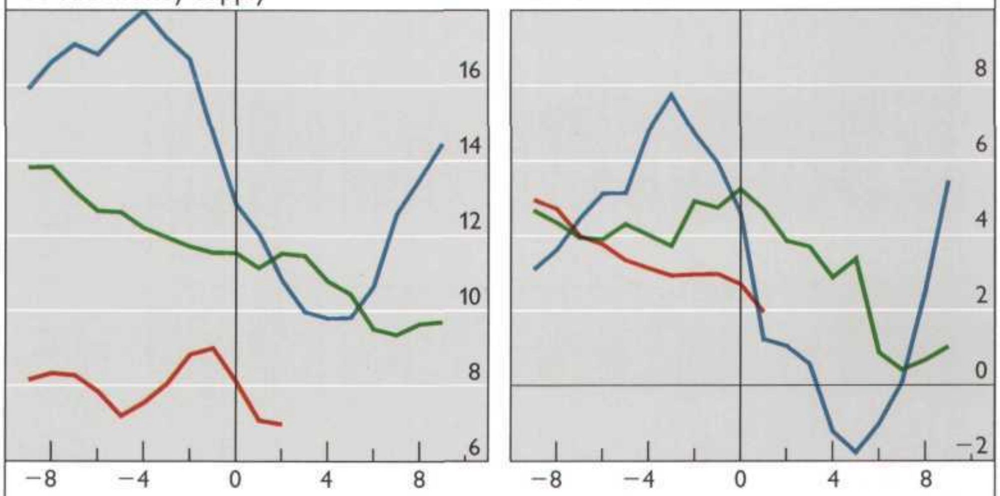
The allied military victory in the Gulf war earlier this year considerably reduced the tensions and the degree of uncertainty in the world economy. Moreover, in the political and economic climate that followed, reflected in

Money supply and real GNP/GDP in the Group of Seven countries[1]

Changes over four quarters, in percentages

Date of oil shock (and period covered):
- 4th quarter 1973 (3rd quarter 1971–1st quarter 1976)
- 4th quarter 1978 (3rd quarter 1976–1st quarter 1981)
- 3rd quarter 1990 (2nd quarter 1988–1st quarter 1991)

Broad money supply[2] Real GNP/GDP



[1] Calculated using 1988 GDP weights and exchange rates. [2] For the United States, Italy and Canada, M_2; for Japan, M_2+CDs; for Germany and France, M_3; for the United Kingdom, M_4.

the moderate tone of the OPEC meeting in mid-March, greater stability, plentiful supplies and relatively low prices in the oil market seemed likely. Foreshadowing these favourable developments, stock markets in the United States and the United Kingdom rebounded in the fourth quarter. More recently, there has also been some recovery in consumer and business confidence.

Nonetheless, hopes of a quick turn-round may be premature. The weakness of several economies at the end of last year, in particular France and Italy, was surprising and signs of a slackening have also emerged in Japan. With the United States, the United Kingdom, Canada, Sweden and other countries already in recession, the transmission of the slowdown through trade and other international linkages may be difficult to avoid.

Developments in individual industrial economies

The three largest economies

Recession in the United States

The *United States* economy was in recession by the end of last year; in the fourth quarter real GNP declined at an annual rate of 1½%, followed by a fall of 2¾% in the first quarter of 1991. This marked the end of an eight-year business cycle upturn, the second-longest on record and more than double the average duration of expansion in the post-war period. Signs of a gradually slowing economy had been evident for almost two years, culminating in a deceleration of real GNP growth to 1% in 1990 for the year as a whole. Unemployment climbed to 6¾% in March this year, 1¾ percentage points above its level at the beginning of 1989. Between June 1990 and February 1991 payroll employment declined by 1¼ million, with job losses spreading to most sectors of the economy.

Weak domestic demand

Weakness was evident in most components of domestic demand last year – personal consumption, fixed investment and inventory investment. In the fourth quarter private consumption dropped by 3½% and fixed investment by 5½%. Declines in non-residential and residential construction reflected general weakness in the real estate market and high commercial property vacancy rates. Office vacancy rates in New York, Los Angeles and Chicago, the three largest US metropolitan areas, averaged 14, 17 and 17% respectively in 1990. Many metropolitan areas, particularly in the south-west, had vacancy rates well above 20%. Manufacturing, making up only 17% of total employment, was also an area of weakness, accounting for more than half of the fall in employment since June. Employment in manufacturing has declined progressively since early 1989, largely as a result of lay-offs necessitated by cutbacks in production in the automobile industry.

High vacancy rates

Improved net exports

The slowdown in the US economy was mitigated somewhat by an improved net export position, supported by a significant depreciation in the average dollar exchange rate in the course of the year. Moreover, given relatively tight inventory positions, a significant inventory run-down effect is not anticipated, in contrast to most previous recessions. Inventory/final sales ratios were very stable in 1989–90 and should allow any pick-up in demand to be quickly translated into production and employment gains. The growth in public consumption also helped offset the fall in private demand last year.

Larger budget deficit

The federal government budget deficit in fiscal 1990 rose by $27 billion (NIPA basis), more than one-half of which was attributable to automatic stabilisers in a slowing economy. On a consolidated budget basis, including social security, purchases of savings and loan association assets and deposit insurance funding, the deficit rose by $67 billion to $220 billion in fiscal 1990, and is projected to reach $318 billion in fiscal 1991. Concern about continued large deficits led to the enactment of further legislation last November offering some hope of substantial reductions in the future. Recessionary conditions have also adversely affected the fiscal positions of state and local governments, further exacerbating the general government budgetary position.

Continued expansion in Japan

Real GNP growth in *Japan* accelerated to about 5½% last year, led by rapid expansion in domestic demand and, in particular, very strong business investment. Personal consumption was buoyant, growing at over 4%, despite the 40% decline in equity prices from their peak in 1989 to the end of last year. Growth in Japan was above the economy's longer-term potential, and a further tightening of labour market conditions, pulling down the unemployment rate to around 2%, has increased inflationary pressures. Persistent labour shortages and high levels of capacity utilisation, rising further last year, are an important driving force behind the rapid business investment growth. Real non-residential fixed investment grew at

Developments in real GNP/GDP and demand components: major industrial countries

Countries and periods	GNP/GDP[1]	Total domestic demand	Demand components: Personal consumption	Public consumption	Total fixed investment	Stock changes[2]	Net exports[2]	Memo: Private non-residential fixed investment
	percentage changes							
United States								
1982–89 average	3.8	4.1	3.8	3.2	5.6	0.1	−0.4	4.7
1988	4.5	3.3	3.6	0.2	5.6	0.0	1.2	8.3
1989	2.5	1.9	1.9	2.3	1.6	0.0	0.6	3.9
1990	1.0	0.5	0.9	2.8	−0.1	−0.7	0.5	1.8
1990 Q IV[3]	0.5	−0.5	0.1	3.8	−1.1	−1.1	1.0	2.2
Japan								
1982–89 average	4.3	4.5	3.8	2.4	6.2	0.1	−0.2	9.4
1988	6.3	7.6	5.3	2.2	12.2	0.6	−1.2	14.8
1989	4.7	5.7	4.3	2.1	8.8	0.2	−0.9	15.5
1990	5.6	5.8	4.1	1.4	10.7	−0.1	−0.2	13.8
1990 Q IV[3]	4.7	4.2	1.8	1.5	9.9	−0.3	0.5	12.5
Germany[4]								
1982–89 average	2.6	2.6	2.2	1.5	3.1	0.3	0.2	5.0
1988	3.7	3.8	2.7	2.3	5.1	0.6	0.1	6.8
1989	3.9	2.7	1.7	−0.9	7.1	0.4	1.2	8.5
1990	4.5	4.7	4.2	2.6	8.2	0.0	−0.2	9.6
1990 Q IV[3]	4.8	4.5	4.0	4.7	7.6	−0.6	0.3	12.3[5]
France								
1982–89 average	2.4	2.5	2.5	1.9	3.1	0.0	−0.2	3.9
1988	4.2	4.4	3.4	2.9	8.6	0.1	−0.3	10.2
1989	3.9	3.5	3.2	0.2	7.5	0.0	0.3	8.6
1990	2.8	3.2	3.2	3.4	3.5	−0.1	−0.4	4.6
1990 Q IV[3]	2.1	2.1	2.8	3.2	1.2	−0.3	−0.1	2.2

For footnotes and sources see the table opposite.

an annual average rate of almost 15% in 1988–90 as firms attempted to substitute capital for scarce labour and to increase output capacity. Reflecting strong domestic demand growth and the slowdown in several major trading partners, notably the United States, Japan's net export surplus fell, furthering the external adjustment process.

Rise in price pressures

The strength of economic activity and the oil shock contributed to some rise in price pressures in Japan last year. Wholesale price increases accelerated in the second half of the year to over 2% (December to December) and consumer price inflation quickened to almost 4% by the end of the year. Part of the rise was related to earlier weakness of the yen exchange rate. Wage growth, although high in real terms by international standards, was roughly in line with productivity increases, so that cost-push

Developments in real GNP/GDP and demand components: major industrial countries (continued)								
Countries and periods	GNP/ GDP[1]	Total domestic demand	Demand components					Memo: Private non-residential fixed investment
			Personal consumption	Public consumption	Total fixed investment	Stock changes[2]	Net exports[2]	
	percentage changes							
United Kingdom								
1982–89 average	3.4	4.4	4.6	1.0	6.8	0.2	−1.1	9.5
1988	3.9	7.5	6.9	0.6	14.1	0.7	−3.7	20.3
1989	1.9	2.9	3.9	0.6	3.9	−0.4	−1.0	4.7
1990	0.7	−0.1	1.0	1.7	−1.7	−0.7	0.9	−1.5
1990 Q IV[3]	−1.4	−1.4	−1.5	0.6	−6.4	0.7	0.1	−7.4
Italy[6]								
1982–89 average	2.8	3.3	3.0	2.7	3.2	0.0	−0.3	n.a.
1988	4.1	4.4	4.2	2.8	6.9	0.0	−0.5	9.0
1989	3.0	3.0	3.6	0.9	4.6	−0.3	−0.1	5.3
1990	2.0	1.9	2.7	1.0	3.0	−0.5	0.0	3.4
Canada								
1982–89 average	4.1	4.7	4.3	2.1	5.9	0.5	−0.8	5.2
1988	4.4	5.0	4.3	2.8	10.2	−0.3	−1.1	15.2
1989	3.0	4.1	3.8	2.6	4.5	0.4	−1.3	5.0
1990	0.9	0.0	1.3	3.9	−2.4	−0.9	0.9	−2.3
1990 Q IV[3]	−1.0	−2.2	−0.4	5.4	−7.2	−1.4	1.3	−5.1
Average[7]								
1982–89 average	3.6	3.9	3.6	2.5	5.3	0.1	−0.3	6.7
1988	4.7	4.9	4.2	1.3	8.8	0.2	−0.1	11.6
1989	3.3	3.2	2.8	1.5	5.5	0.1	0.0	8.8
1990	2.6	2.4	2.2	2.5	4.6	−0.3	0.2	6.6
1990 Q IV[3, 8]	2.0	1.4	1.1	3.2	3.3	−0.6	0.5	5.7

[1] GNP for the United States, Japan and Germany. [2] Percentage point contribution to GNP/GDP growth. [3] Change over four quarters. [4] Based on 1980 prices. [5] Machinery and equipment. [6] Quarterly data not available for 1990. [7] Weights proportional to GDP and demand components in 1988. [8] Partly estimated.

Sources: OECD and national data.

inflation pressures, so much in evidence in many other industrial countries, did not arise from this source. Policy also attempted to stem price pressures; monetary tightening began cautiously in 1988 and was reinforced in 1989 and again last year with two increases in the official discount rate and a climb in short-term market interest rates. The general government fiscal surplus also rose further to over 3% of GNP. Nonetheless, the upswing in consumer price inflation at the end of 1990 and the beginning of this year remains a policy concern.

Monetary tightening

Real GNP growth accelerated to 4½% last year in western *Germany*. This rate of growth is the fastest recorded since the country's recovery from the recession in the mid-1970s and exceptional in coming at an advanced stage of the eight-year business cycle upswing. The growth in

Rapid growth in western Germany

domestic demand was broadly based, led by a rise of more than 12% in machinery and equipment investment and buoyant consumer demand. The upturn in demand, largely attributable to the rapid unification of the western and eastern parts of Germany and the related transfer of purchasing power to the former GDR, benefited external adjustment by reducing the net export surplus.

Although the economy was operating at close to full capacity in 1990, consumer prices rose by less than 3%, about the same rate as in 1989. Wholesale prices increased by less than 1%. Inflation was moderated last year by rapid labour productivity gains, the strength of the Deutsche Mark exchange rate and the firm monetary policy followed throughout the year, evidenced by the high real interest rates in Germany. Nonetheless, inflation remains a focus of policy concern. Nominal wage growth had accelerated to almost 5½% by the end of 1990, and the broader GNP deflator measure of inflation had climbed to about 3½%.

Collapse of industry in eastern Germany

The economic and monetary unification of the Federal Republic of Germany with the former GDR in July, followed by political union in October, was implemented very rapidly and in many respects gave the eastern part of the country little time to adjust. It has led to the collapse of eastern German industry, mainly because its goods are not competitive with those produced in the West in terms of quality, product choice and cost structure. As a consequence, internal demand has to a large extent shifted to western products. Last year numerous production facilities closed, output dropped and unemployment climbed in the eastern Länder; by February 1991 nearly one-third of the labour force was either unemployed or working greatly reduced hours. Demand was underpinned by massive public transfers, however, designed to support income levels and facilitate economic adjustment during the transition to a private economy.

Sharp rise in budget deficit

Funding the transfers to the eastern Länder pushed the net general government financial balance from a small surplus position in 1989 to a deficit equivalent to 3% of GDP last year. Deficits are projected to remain high, despite the increases in taxes and social security contributions taking effect in the spring and summer of this year, which are expected to raise an additional DM 35 billion (about 1¼% of GNP) in 1991 alone. The costs and problems associated with unification are now seen to be much greater and the process of transition expected to be longer than initially anticipated. For example, uncertainty over whether to return property to the original owners prior to collectivisation or to provide cash compensation has discouraged private investment and hindered transfers of property titles. In addition, privatisation of formerly state-run firms has proved difficult. Real output is forecast by the five leading German research institutes to fall further by between 10 and 20% in the new Länder this year. In response to mounting unemployment and the dislocation of production, an additional public spending package amounting to DM 24 billion for 1991–92 was approved in March for investment in schools, hospitals and a range of job-creating measures.

Problems of unification

Other large industrial economies

Recessionary conditions were clearly evident and had been widely expected in the *United Kingdom* and *Canada* last year, following periods of monetary tightening. The surprises were *France* and *Italy*, where weakness in activity was partly related to high real interest rates and inventory destocking.

Recession and accelerating inflation in the United Kingdom

The *United Kingdom* was in full recession in the second half of 1990, with absolute declines in output in the third and fourth quarters keeping year-on-year growth to only about ¾%. Economic activity had been decelerating for more than two years, after several years of very rapid growth in which excess demand pressures had built up, leading to accelerating price rises. Inflation as measured by the retail price index peaked at about 11% last October, falling subsequently to around 8% by March 1991. The community charge (poll tax) and rising mortgage interest costs contributed some 3 percentage points to the jump in the price level in 1990. Even excluding these items, however, inflation accelerated in parallel with the high underlying growth in wages and a cyclical downturn in productivity. Unemployment reached a low point of around 5½% in April 1990 and climbed rapidly to over 7% in the early months of this year. At the same time, industrial production reached a peak in June and declined progressively throughout the remainder of 1990 and into 1991. The "boom and bust" cycle in the United Kingdom was also reflected in real estate markets; earlier sharp increases in house and commercial property prices gave way to declines last year. A reduction and eventual abolition of the unpopular poll tax was announced in March, to be replaced by a property tax in 1993–94, with sweeping reforms of local government finance. A rise in the VAT rate will partly substitute for the poll tax.

Tax reform

Signs of recession were also evident in *Canada* last year, with the level of real GDP declining in the last three quarters and industrial production weakening progressively. The unemployment rate climbed by 3 percentage points between March 1990 and March this year, largely reflecting a sharp drop in manufacturing employment. Most indicators point to a somewhat milder recession than that in the early 1980s, primarily because overheating pressures are less and inventories are in better balance. Consumer price increases were still running at about 5% last year, owing to strong nominal wage growth and a cyclical downturn in productivity. Explicit inflation targets converging towards price stability, jointly announced by the central bank and the Department of Finance in February 1991, are aimed at lowering inflationary expectations in the medium term. However, a once-for-all price level effect of the introduction of the goods and services tax in January is likely to add to inflationary pressures. The budget position deteriorated somewhat last year as a result of the cyclical downturn, although revenues received an unexpected boost from the fiscal reform measures undertaken in 1989.

Downturn in Canada

Slower growth in France ...

Economic growth decelerated to 2¾% in *France* last year, with output declining in the fourth quarter largely owing to a sharp drop in business investment. Weakening foreign demand, the rise in oil prices and the real appreciation of the French franc vis-à-vis non-ERM currencies contributed to a fall in net exports for the year as a whole. High real interest rates, shared by most of the ERM member countries, also contributed to slower domestic demand growth. The slowdown in activity appeared to be widespread, with industrial production 5 % below its August peak by the end of 1990, and other sectors also weakening in the second half of the year. After decreasing in the early months of 1990, unemployment stabilised at 9% for the remainder of the year and began to rise in early 1991. The year-on-year increase in consumer prices was roughly stable at 3½%.

... and Italy

Real GDP growth in *Italy* slowed to about 2% last year, from 3% in 1989, reflecting a widespread weakening of domestic demand. Signs of slowing were already evident in the first half of 1990, with a fall in industrial production, capacity utilisation and new orders, and were followed in the second half by a contraction in residential and non-residential construction activity and investment in plant and machinery. Inventory destocking in the course of the year also contributed to the fall in domestic demand growth. Continued growth in private consumption, at 2¾% for the year as a whole, kept the economy from an even steeper decline. High real interest rates also played a part in the slowdown. Since 1988 the inflation differential vis-à-vis other ERM member countries has not narrowed significantly. Rapid nominal wage growth has been an important factor, although the price effects of higher indirect taxes and the temporary rise in oil prices have played a role. Net government borrowing remained roughly unchanged last year, as progress in budget consolidation proved difficult against a background of rising interest payments on existing high levels of government debt, together with continuing problems in controlling other expenditure categories.

The smaller industrial economies

Economic activity also generally slowed in the smaller industrial economies last year, as can be seen from the table opposite, although individual macroeconomic performance was mixed. Average real GDP growth was 2½%, about 1 percentage point lower than in 1989, chiefly owing to a marked deceleration in fixed investment spending to only 1½% (following average annual growth of over 7½% in 1988–89). Inflation performance was also mixed last year, with a roughly equal number of countries experiencing accelerating and decelerating price increases respectively. Many countries adopted a restrictive monetary policy stance or, in some cases, tightened policy further.

Favourable performance in several European countries

Output and inflation performance continued to be favourable in several European countries, especially the Netherlands, Belgium and Austria, which benefited from exchange rate and trade linkages with a buoyant German economy. Although Denmark's close trade ties with Germany were reflected in a current-account surplus in 1990 for the first time in more than twenty-five years, real GDP growth, at 1½%, was slowed by a slump in gross fixed investment. Denmark's business cycle has

Slow recovery in Denmark

Changes in real GDP and fixed investment in other industrial countries

Countries	1988 GDP in billions of US dollars	Real GDP[1]				Real gross fixed investment			
		1980–87	1988	1989	1990[2]	1980–87	1988	1989	1990[2]
		percentage changes							
Australia	247	3.3	3.5	4.6	1.5	2.4	8.2	10.0	– 6.4
Austria	127	1.4	3.9	4.0	4.6	0.4	6.0	5.5	6.9
Belgium	151	1.1	4.6	4.0	3.7	–1.6	13.4	13.5	7.0
Denmark	108	2.4	0.5	1.2	1.6	2.8	–6.6	0.2	– 1.0
Finland	106	2.9	5.4	5.2	0.0	2.4	10.5	13.1	– 1.8
Greece	53	1.1	4.0	2.9	1.0	–3.8	8.8	8.6	4.0
Ireland	33	2.3	3.9	5.9	5.3	–2.7	4.6	11.3	8.3
Israel	42	3.5	2.1	1.6	5.1	1.8	–0.5	–5.5	4.4
Netherlands	227	1.1	2.9	4.1	3.5	1.0	9.2	3.9	3.1
New Zealand	42	2.3	1.7	0.8	1.2	5.4	0.5	7.2	4.9
Norway	89	3.3	–0.5	0.4	1.8	3.7	1.6	–4.8	–28.5
Portugal	42	1.9	4.0	5.4	3.9	0.3	15.0	7.5	9.0
South Africa	89	1.1	4.1	2.1	–0.9	–4.2	8.9	5.4	– 1.4
Spain	344	2.2	5.2	4.8	3.6	2.3	14.2	13.2	7.9
Sweden	182	2.0	2.3	2.1	0.3	2.4	6.0	10.9	– 1.8
Switzerland	183	1.7	2.9	3.5	2.6	4.1	6.9	6.0	2.6
Turkey	71	5.5	3.6	1.7	10.2	6.0	–1.4	–0.7	8.7
Average[3]	–	2.2	3.4	3.5	2.6	1.7	7.8	7.6	1.5

[1] For Turkey, real GNP. [2] Preliminary. [3] Calculated using 1988 GDP weights and exchange rates.
Sources: OECD and national data.

been out of step with that of most of Europe and, amidst a series of structural reforms, a recovery is now beginning in a low-inflation environment. In sharp contrast to most of the 1980s, real fixed investment growth exceeded 8% in Ireland last year, output grew by 5¼% and consumer price inflation was down to 2¾%. Fixed investment growth also contributed positively to output growth in Austria and Belgium in 1990, although more recent economic indicators suggest that economic activity may be slowing in Belgium. Output growth in Spain decelerated to 3½% last year, partly on account of slower, albeit still robust, investment spending; inflation improved somewhat in response to the monetary tightening in mid-1989, but at 6½% in 1990 was still much higher than in many other ERM member countries.

Downturns in Sweden, Australia and Finland

A build-up of excess demand followed several years of strong growth in a number of countries, leading to high and rising inflation pressures, monetary restraint and, more recently, a downturn in economic activity. Sweden, Australia and Finland, for example, experienced downturns last year associated with tighter monetary conditions. High real interest rates contributed to a decline in gross fixed investment of over 6% in Australia. The strong upswing in Switzerland since 1985 had led to very tight goods and labour markets, contributing to a 5% inflation rate in 1989–90. The slowdown in activity last year followed the progressive tightening of mone-

Inflation in Switzerland

tary policy. Sweden experienced an upturn in inflation to about 11% in 1990, despite recessionary conditions, though this was in part related to the major tax reform, in particular the broadening of the value added tax base. The slowdown in Sweden is also to some extent attributable to a cumulative deterioration in international competitiveness.

Swedish tax reform

Other special factors influenced developments in several smaller industrial countries. In addition to cyclical factors, the downturn in Finland in 1990 and the projected fall in output this year – the first in the post-war period – have been exacerbated by the decline in trade with the Soviet Union, reflecting that country's economic crisis and the switch from barter-type clearing to hard-currency trade. New Zealand's economy continues to grapple with far-reaching structural reforms implemented from the mid-1980s, including deregulation of wages, prices, interest rates and the exchange rate, a reduction in tax rates, the elimination of subsidies, privatisation and, last year, the granting of greater independence to the central bank. Although inflation was brought down to under 5% in 1990, output growth has virtually stagnated since 1985, more than doubling the rate of unemployment. In an attempt to raise the economy's medium-term growth potential, in December the Government announced reforms to the labour market and welfare system and measures to reduce the budget deficit. Robust real fixed investment in Portugal, including a 45% rise in direct foreign investment in 1990, has supported rapid growth since the country joined the European Community in 1986. However, inflation accelerated to almost 14% last year and the budget deficit, at 7½% of GDP in 1990, remains a serious problem. The large imbalances in the Greek economy worsened last year, with inflation climbing to over 20%; the current-account deficit widened sharply to more than 5% of GDP and output growth fell. Moreover, the general government financial deficit in Greece exceeded 19% of GDP in 1990, providing the impetus for the austerity budget package approved by Parliament in December.

Deregulation in New Zealand

Imbalances in Greece

Government debt, budget deficits and public investment

Budget positions generally deteriorated in the industrial countries last year, raising average net borrowing from 1 to 1½% of GDP. Cyclical downturns were the major factor in the worsening of financial balances in the United States, the United Kingdom, Sweden, Finland and elsewhere, as weak macro-economic performance reduced revenues and increased outlays. However, "structural" factors entirely accounted for the substantial deterioration in the German government financial balance and also contributed to the decline in the US budget position. The German government financial balance swung from a small surplus in 1989 to a deficit of over 3% of GDP last year, mainly because of the costs of unification but partly also as a result of the implementation of the last stage of the tax reform programme. In the United States expenditure to cover deposit insurance costs, including the outlays associated with failed financial institutions and the provision of working capital for the Resolution Trust Corporation, was estimated at over $55 billion for fiscal 1990, contributing

Budget positions deteriorated last year

significantly to the consolidated budget shortfall. In Canada unexpected revenues from the major fiscal reform programme, begun in 1988 with the reduction of tax rates and a broadening of the personal and corporate tax bases, helped to support the government financial balance against the background of a weakening economy.

Fiscal consolidation and public debt

Longer-term budget consolidation efforts

Last year's deterioration in government financial positions for the industrial countries as a group was the first setback to budget consolidation since the mid-1980s. Helped by the strength and long duration of the economic upswing, the government financial shortfall in the industrial countries had been reduced to about 1% of GDP on average by 1989 – the lowest level since the early 1970s. Eight countries had achieved balanced or surplus positions (Australia, Finland, Germany, Japan, Norway, Sweden, Switzerland and the United Kingdom). Particularly dramatic turn-rounds in budget positions since the early 1980s had been recorded in Sweden, Ireland and Denmark, as can be seen from the graph overleaf. Although smaller in relative terms, the decline in the US general government borrowing requirement from about 3½% of GNP in 1986 to 1¾% in 1989 was large in absolute terms. By contrast, little progress had been made in reducing sizable budget deficits in the Netherlands and Italy, while Greece set a new record in government borrowing in 1989–90.

Moves to consolidate public finances had succeeded in stabilising or reducing public debt/GNP ratios in most industrial countries. Average gross public debt outstanding in the industrial countries grew rapidly from the mid-1970s to a peak of about 60% of GDP in 1987, but it had declined by about 2 percentage points by 1990. Most of the industrial countries had stabilised or reduced their public debt ratios by 1989. Debt ratios peaked at about 135% in Belgium and Ireland before declining in recent years. Especially large reductions were made in the United Kingdom, Sweden, Denmark, Ireland and, to a lesser extent, Japan.

Rising interest payments

The earlier rise in public debt ratios had led to a cumulative increase in interest payments and even a "snowball" effect, with new debt issued to cover interest payments on existing debt, further increasing the debt burden. Rising interest payments in turn contributed to the upward pressure on total government outlays, effectively "crowding out" some discretionary expenditure as governments attempted to limit tax increases for reasons of efficiency and competitiveness. Moreover, the rise in revenue due to the "inflation tax" was greatly reduced in the low-inflation environment prevailing during much of the 1980s. Finally, high real interest rates in the 1980s made debt service more costly.

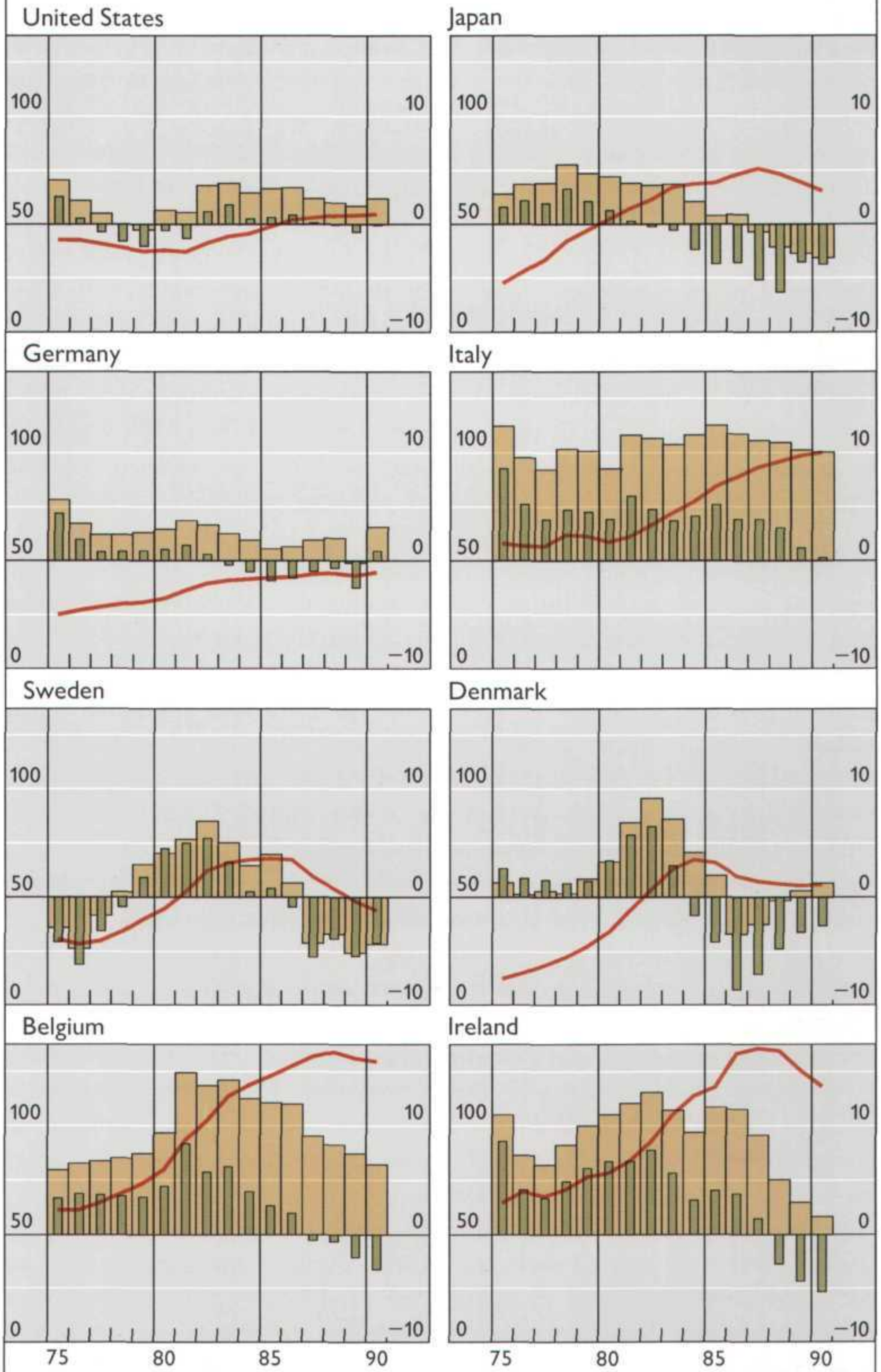
Pressure on government expenditure

Less room for flexibility in the structure, composition and timing of spending was the result of these trends. The share of interest payments on net government debt as a percentage of total expenditure amounted to 6½% in the industrial countries last year, only slightly less than the 1985–86 peak. In Italy, Belgium and Greece interest payments accounted for 18–21% of total expenditure. Net interest payments amounted to

Gross public debt and general government deficit

As a percentage of GNP/GDP

Gross public debt (left-hand scale)
General government deficit (right-hand scale; − = surplus)
Primary deficit (right-hand scale; − = surplus)



Sources: OECD and national data.

about 7% of general government expenditure in the United States, but to almost 15% of federal government spending.

Build-up in public debt

The budget consolidation process eventually halted the rapid growth in interest outlays in most industrial countries. However, the process was made much more difficult because of the earlier build-up in public debt. The reduction in the non-interest component of the deficit (primary budget balance) was very large in most industrial countries, as is shown in the graph opposite, reflecting the need for deep cuts to make even limited inroads into total government borrowing. Most industrial countries had primary budget surpluses last year: Japan of over 3% of GDP, Australia, Belgium and Sweden 4% or more and Ireland over 5%.

Fiscal policy constraints

The desirability of consolidating government finances in the medium term and lowering public debt levels is well illustrated by current developments. Thanks to a protracted budget consolidation process in the 1980s, the Federal Republic of Germany was well placed from the public finance point of view to absorb the enormous costs associated with unification last year. With a roughly balanced budget position at the beginning of the year, the large increase in expenditure did not give rise to any major financing difficulties and longer-term interest rates basically remained stable after the initial large rise in February 1990. A projected German government borrowing requirement of around 3–4% of GDP is similar in magnitude to those of the early 1980s and less than the 5½% deficit recorded in 1975. Similarly, budget consolidation in the United Kingdom over the past decade helped achieve a surplus in the general government finances in 1988–90. This favourable starting position allowed the UK Government in March 1991 to present a budget with a substantial rise in the public sector borrowing requirement to 1% of GDP in fiscal 1991–92 and 2% in 1992–93, helping to support domestic demand during the recession.

Constraints on counter-cyclical fiscal policy

The use of discretionary fiscal policy for counter-cyclical purposes, i.e. explicit changes in taxes and expenditure in an attempt to dampen business cycle fluctuations, generally fell out of favour in the 1980s. This was partly due to growing doubts about the ability of governments to influence aggregate demand in the timely and precise manner necessary to counteract cyclical swings in activity. However, it was also attributable to the constraints imposed by the build-up of debt and large structural budget deficits. For example, automatic stabilisers should help to dampen the cyclical downturns in the United States and Canada somewhat, but they are in fact likely to be partially offset by discretionary elements of fiscal policy. In other words, recent measures raising user fees and taxes and restraining expenditure growth would have a contractionary effect on activity this year were it not for the automatic stabilisers.

Burden on monetary policy

More generally, in many countries the build-up of public debt over more than a decade has limited the scope for counter-cyclical fiscal policy action and placed the burden of discretionary policy on the monetary authorities. This problem is compounded in many countries, including

Belgium, Italy and the Netherlands, by the fact that the progress made to date in budget consolidation is primarily owed to favourable business conditions ("growth dividends") and could quickly be eroded in a cyclical downturn. In addition, countries with high debt levels are particularly vulnerable to increases in interest rates, which drive up debt service costs and exacerbate the government's financial position.

The composition of expenditure and public investment

Sharp rise in government transfers and interest outlays

The composition of government expenditure in the large industrial countries has been influenced chiefly by the growth of (non-interest) transfer payments, as is shown in the table opposite. Average total government outlays (as a percentage of GDP) in these countries climbed by more than 9 percentage points between the 1960s and the 1980s – comprising increases of 6 points in non-interest transfers, 2½ points in gross interest payments and ½ point in consumption. Government investment expenditure, in contrast, declined. The average rise in government consumption was small, partly because of the higher GDP weight of Japan in the later period – Japan has the lowest level of government consumption as a percentage of GDP among the major industrial countries – and partly because of the small rise in the United States of only ¼ percentage point between the two periods.

Fall in government investment

Government net investment (in roads, bridges, airports, etc.) declined to only 2½% of GDP in the 1980s, with the United States investing least (¼%) and Japan most (5¾%) among the large industrial countries. The contraction in government net investment in the United States, Germany, France, the United Kingdom and Canada amounted to over 1% of GDP between the 1960s and 1980s. The much larger GDP weight of Japan in the later period, and the increase in public investment in that country, partially offset the impact of the declines in other industrial countries in the average figure.

In governments' attempts to consolidate public finances discretionary public investment projects proved easier to cut than transfers and, to a lesser extent, public consumption (a large part of which represents wages and salaries of government employees). The decline in public investment also reflects the completion of major infrastructure systems in many industrial countries, in some cases the end of post-war reconstruction, and a more critical evaluation of rates of return on public investment. Japan, in contrast, continues to invest in public infrastructure at a high rate, partly because of the relatively undeveloped state of its infrastructure in certain areas compared with most other industrial countries, and partly because of increasing strains on existing facilities. Nonetheless, a deterioration in infrastructure over the past decade is clearly evident in the United States, where the problem is concentrated in major cities and is complicated by the overlapping of responsibilities between different levels of government. Similar concerns about the low rate of public investment have also been expressed in several other countries, including the United Kingdom and Belgium.

Deteriorating public infrastructure

Structure of general government outlays in major industrial countries

Countries and periods	Total	of which						Memorandum items	
		Con-sump-tion	Investment		Trans-fers	Interest[1]		Net lending	Net saving[2]
			gross	net		gross	net		
	as a percentage of GNP								
United States									
1960–69	29.0	17.6	2.9	1.6	6.6	1.9	1.5	− 0.4	0.7
1970–79	32.2	17.7	2.0	0.6	10.1	2.4	1.7	− 1.2	−1.0
1980–89	35.8	17.9	1.6	0.3	11.8	4.5	3.1	− 3.4	−3.3
Change[3]	6.8	0.3	−1.3	−1.3	5.2	2.6	1.6	− 3.0	−4.0
Japan									
1960–69	18.4	7.9	4.8	4.3	5.3	0.5	−0.2	1.0	5.8
1970–79	25.2	9.0	6.2	5.7	8.7	1.3	0.1	− 1.7	4.4
1980–89	33.0	9.7	6.3	5.7	12.9	4.1	1.4	− 1.4	4.4
Change[3]	14.6	1.8	1.5	1.4	7.6	3.6	1.6	− 2.4	−1.4
Germany									
1960–69	36.7	15.0	5.8	5.4	15.2	0.7	−0.6	0.7	5.8
1970–79	45.0	18.6	6.0	5.5	19.1	1.2	0.3	− 1.7	3.3
1980–89	47.7	19.8	4.4	3.7	20.8	2.7	1.2	− 2.0	1.3
Change[3]	11.0	4.8	−1.4	−1.7	5.6	2.0	1.8	− 2.7	−4.5
France									
1960–69[4]	38.0	13.1	4.8	4.1	18.9	1.2	0.4	0.4	4.1
1970–79	42.1	16.0	4.9	3.7	20.1	1.1	0.0	− 0.4	2.4
1980–89	51.4	19.0	4.5	2.7	25.5	2.5	1.3	− 2.1	−0.4
Change[3]	13.4	5.9	−0.3	−1.4	6.6	1.3	0.9	− 2.5	−4.5
United Kingdom									
1960–69	35.4	16.8	4.5	3.5	10.1	3.9	2.5	− 1.0	2.5
1970–79	42.5	19.4	5.6	4.4	13.5	4.0	2.1	− 2.6	1.3
1980–89	45.1	20.9	3.2	2.0	16.5	4.5	2.5	− 2.4	−0.7
Change[3]	9.7	4.1	−1.3	−1.5	6.4	0.6	0.0	− 1.4	−3.2
Italy									
1960–69[4]	32.5	13.9	3.9	3.6	13.2	1.4	0.9	− 2.0	1.3
1970–79[4]	40.8	15.3	4.3	4.0	17.4	3.7	2.8	− 7.8	−4.1
1980–89	49.5	16.4	5.1	4.8	20.4	7.6	6.9	−11.1	−6.7
Change[3]	17.0	2.5	1.2	1.2	7.2	6.2	6.0	− 9.1	−8.0
Canada									
1960–69	30.8	15.5	4.3	3.0	8.0	3.1	1.1	− 0.4	2.3
1970–79	38.6	19.3	3.7	2.3	11.4	4.2	0.0	− 0.9	1.3
1980–89	46.5	20.4	3.3	1.8	14.8	8.0	1.9	− 4.8	−3.0
Change[3]	15.7	4.9	−1.0	−1.2	6.8	4.9	0.8	− 4.4	−5.3
Average[5]									
1960–69	30.5	16.0	3.7	2.7	9.0	1.8	1.2	− 0.3	2.0
1970–79	35.2	16.4	3.9	2.8	12.7	2.2	1.1	− 1.7	0.7
1980–89	39.6	16.4	3.6	2.6	15.1	4.4	2.5	− 3.2	−0.8
Change[3]	9.1	0.4	−0.1	−0.1	6.1	2.6	1.3	− 2.9	−2.8

Note: Figures for 1989 are partly estimated.

[1] Property and entrepreneurial income. [2] Excluding net capital transfers. [3] Change from 1960s to 1980s. [4] Based on the old system of national accounts. [5] Calculated using GDP weights and exchange rates in 1963 for the 1960–69 period, in 1975 for the 1970–79 period and in 1988 for the 1980–89 period.

Source: OECD.

Decisions on government spending priorities must take account of the growth-enhancing aspects of appropriate public investment. Empirical evidence shows a link between investment in core public infrastructure (roads, public transport, airports, water supply and sanitation systems, electricity and gas facilities and so on) and economic growth, both regionally and internationally, partly owing to its effects on private sector productivity. A major part of the productivity slump in the United States has been attributed to low public investment. Regions investing more in infrastructure tend to have higher output, productivity and employment growth. Public investment often stimulates output growth by providing a base on which private investment can build.

Saving in the industrial countries and the world demand for capital

Net national saving as a percentage of national income, shown in the graph opposite, declined by almost 4 percentage points between the 1960s and the 1980s in the major industrial countries. This has raised concerns about the possibility of a world saving "shortfall" in the face of the potential demand for new capital investment from eastern European countries, for rebuilding infrastructure damaged by the war in the Persian Gulf and to meet the continuing needs of developing countries. Accommodating additional investment demands on this scale would require a rise in worldwide saving in the medium term and net resource transfers from the industrial countries to other regions, reversing the pattern observed during the past decade. Net capital outflows from the large industrial countries (net national saving less net capital formation) averaged 0.6% and 0.2% of national income annually in the 1960s and 1970s respectively, and gave way to average net capital inflows of 0.3% in the 1980s.

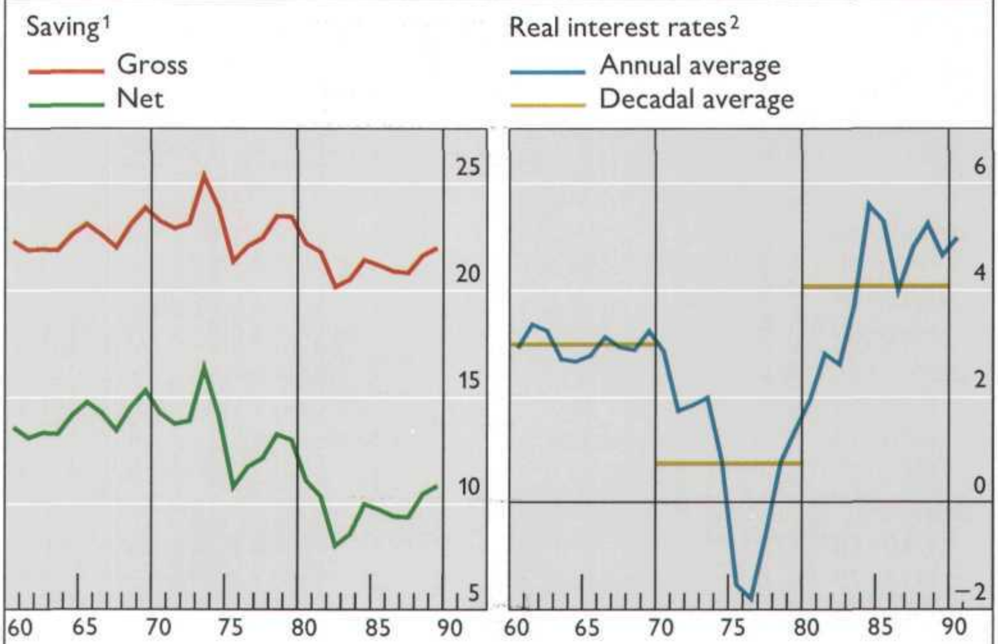
World saving shortfall

Net national saving has recovered somewhat in the past few years, but the persistently high level of real long-term interest rates compared with earlier periods highlights the continuing pressure of demand for investible funds. Real interest rates in the major industrial countries, also shown in the graph, averaged about 5% last year and over 4% in the 1980s. The average long-term real rate was about 3% in the 1960s and below 1% in the 1970s. The impact of national saving on developments in real long-term interest rates is difficult to quantify precisely, partly because "long rates" are typically measured in bond markets rather than by a broader spectrum of financial and real assets. Nonetheless, the persistence of virtually unprecedented levels of real interest rates by most measures suggests that fundamental longer-term factors such as saving/investment imbalances are largely responsible.

Persistently high real interest rates

In the short term, significant demands on worldwide saving from eastern Europe (except the eastern part of Germany) and the developing countries is unlikely. The required transformation of formerly centrally planned economies will take time, and substantial private foreign investment and large-scale access to capital markets will depend on the implementation of credible reform programmes. A resumption of private lending from the industrial to the developing countries on a large scale is

Saving and real interest rates in the Group of Seven countries



[1] Gross saving as a percentage of GNP, net saving as a percentage of national income. [2] Long-term government bond yields less percentage changes in consumer prices over three years (at an annual rate).

Sources: For saving, OECD National Accounts; for real interest rates, national data.

also unlikely in the near term, at least as long as debt overhang remains a major problem. Moreover, the pressure of demand on saving will be mitigated this year by the slowing of economic activity in the industrial countries – a falling-off in investment and a rise in precautionary saving are typical at this stage of the business cycle.

Investment demand

Greater demands on worldwide saving are likely to emerge over the medium term, however. Investment opportunities will probably expand rapidly if the process of reform in formerly centrally planned economies makes visible progress. The outlook for investment in a large number of developing countries could also improve if they follow policies modelled more closely on the most successful experiences elsewhere. Moreover, when growth picks up in industrial countries and resource utilisation rates rise, the pressure on credit markets will increase. Under these circumstances, measures to promote saving in the industrial world must be considered a desirable objective.

The decline in government saving

Decline in national saving

Averages of national saving rates over three decades as a percentage of national income, broken down into public and private components, are shown in the table overleaf for the major industrial countries. The decline in net national saving between 1960–69 and 1980–89 is evident in all of these countries, with the sharpest drop in Germany (8¼ percentage points) and the smallest in Canada (1½ percentage points). The average decline for the group as a whole was 3½ percentage points, and would have been much larger had it not been for the higher GDP weight of Japan in the later

National saving in major industrial countries

Countries and periods	Gross national saving[1]	Net national saving	of which: Public[2]	Private: Total	Private: House-holds	Private: Business enter-prises[3]	Memo: General govern-ment net lending[1]
		as a percentage of national income					
United States							
1960–69	19.7	10.8	0.8	10.0	6.2	3.8	− 0.4
1970–79	19.4	9.1	−1.2	10.3	7.6	2.6	− 1.2
1980–89	16.3	4.0	−3.8	7.8	6.0	1.9	− 3.4
Japan							
1960–69	34.5	25.2	6.6	18.6	11.9	6.6	1.0
1970–79	35.3	25.6	5.0	20.6	16.5	4.1	− 1.7
1980–89	31.6	20.9	5.1	15.7	13.1	2.6	− 1.4
Germany							
1960–69	27.3	19.9	6.3	13.5	7.6	6.0	0.7
1970–79	24.3	15.2	3.7	11.5	9.7	1.7	− 1.7
1980–89	22.5	11.6	1.5	10.1	8.9	1.2	− 2.0
France							
1960–69[4]	24.7	16.6	4.6	12.1	9.4	2.7	0.4
1970–79	25.8	17.0	2.7	14.4	11.9	2.5	− 0.4
1980–89	20.4	8.9	−0.4	9.3	7.9	1.4	− 2.1
United Kingdom							
1960–69	18.4	10.9	2.7	8.2	4.3	3.9	− 1.0
1970–79	17.9	8.3	1.4	6.8	4.3	2.5	− 2.6
1980–89	16.6	5.5	−0.8	6.3	3.7	2.6	− 2.4
Italy							
1960–69[4]	24.2	17.6	1.4	16.2	14.1	2.0	− 2.0
1970–79[4]	22.3	14.4	−4.6	19.0	18.9	0.1	− 7.8
1980–89	21.9	11.0	−7.7	18.7	15.9	2.8	−11.1
Canada							
1960–69	21.9	11.3	2.6	8.7	4.0	4.8	− 0.4
1970–79	22.9	13.1	1.4	11.7	6.0	5.6	− 0.9
1980–89	20.7	9.9	−3.4	13.3	9.2	4.2	− 4.8
Average[5]							
1960–69	22.0	13.5	2.3	11.2	7.2	4.0	− 0.3
1970–79	23.2	13.5	0.8	12.7	10.0	2.7	− 1.7
1980–89	21.5	10.0	−0.9	10.9	8.8	2.1	− 3.2

[1] As a percentage of GNP. [2] General government. [3] Includes public enterprises. [4] Based on the old system of national accounts. [5] Calculated using GDP weights and exchange rates in 1963 for the 1960–69 period, in 1975 for the 1970–79 period and in 1988 for the 1980–89 period.

Source: OECD.

period. Japan had by far the highest saving rate in the 1980s, at 21% of national income, while the United States had the lowest at 4%.

Government dissaving

The contraction in government net saving, at 3¼ percentage points, accounted for most of the decrease in national saving, while the fall in private saving accounted for about ¼ percentage point. The decline in public sector saving (current revenue less current expenditure) was due partly to the deterioration in overall financial balances (total revenue less total expenditure) and partly to a drop in the share of total expenditure devoted to investment, i.e. a shift from capital to current expenditure. There was public dissaving in the United States, France, the United Kingdom, Italy and Canada during the last decade. In the 1960s, by contrast, most industrial countries recorded substantial public net saving, used the funds to finance public investment and still had negligible government borrowing requirements.

In principle, a decline in public saving need not lead to a fall in national saving if the private sector responds by increasing its saving. Indeed, a sharp rise in saving by the household sector in the 1970s more than offset a decline in government saving in the major industrial countries. In the 1980s, in contrast, average private saving declined to 11% of national income, which, on top of the drop in public saving, resulted in a sharp fall in national saving.

The decline in private saving

Fall in private saving

Average net private saving rates in the past decade were somewhat lower than in the 1960s and significantly less than in the 1970s. Demographic factors and changes in the distribution of income probably played a role in the fall in private saving between the 1970s and the 1980s. In particular, the increase in the proportion of elderly people in the population, accompanied by an improvement in their economic situation, reduced aggregate saving. On the one hand, the elderly tend to save relatively little, typically drawing on existing wealth in retirement. The rise in the number of elderly people as a percentage of the population in many industrial countries, for example the United States, Japan, the United Kingdom, Canada, Australia, Finland, the Netherlands, Norway and Sweden, between the 1970s and the 1980s probably lowered the average propensity to save.

Demographic factors

In addition, the relative income position of the elderly has improved, in large measure as a result of expanded and more generous social security systems. Average public pension expenditure rose substantially in most industrial countries in the 1980s, representing an average of 9% of GDP in the largest countries compared with 7% in the 1970s. Public pension expenditure in Sweden was equivalent to about 5% of GDP at the beginning of the 1970s and almost 11% in 1985. Social security benefits for the elderly in the United States accounted on average for 40% of their per capita disposable income in 1985 (compared with only 2% in 1950). Not surprisingly, the average real income of households headed by an elderly person in the United States also rose much faster than the average gain for all households.

Stock and real estate capital gains

Another possible reason for the decline in private saving in the 1980s, in particular in the United Kingdom, Japan and the United States, is the rapid escalation in prices of real assets. Unexpected capital gains from stocks, real estate, etc. may have induced households to increase consumption and reduce saving from current income. The boom in stock markets in all the major industrial countries during the 1980s, despite the drops in October 1987 and October 1989, created large capital gains. Indices of real equity prices more than tripled in Japan (with an increase of 370%), more than doubled in Italy, the United Kingdom and France, and also rose substantially in the United States (80%). By contrast, real equity prices in the 1970s declined by some 40% or more in the United States, Germany, the United Kingdom and Italy and rose by only 12½% in Japan. Although the calculation of net gains is complicated by stock repurchases and other factors, the real equity gains in the 1980s stand in sharp contrast to the 1970s and may have encouraged consumption from current income.

The boom in real property values (land, commercial property and houses) in many countries or regions also contributed significantly to increasing household wealth, not least because of its large weight in total asset holdings (for example, over 60% of housing units are owner-occupied in the United States, Japan, the United Kingdom, Italy, Spain and several other industrial countries). In the 1980s house prices rose in real terms by about 60% in the United Kingdom, 50% in Japan (tax-assessed land prices) and 25% in the United States. Owing in large part to the revaluation of equities and housing, the ratio of households' net total assets to GNP in Japan increased by more than 60% in the 1980s, contributing to the decline in saving from current income during this period (see Chapter VII).

Financial liberalisation

Financial liberalisation and innovation in the 1980s also seem to have led to a reduction in private saving by providing easier access to consumer credit, pushing up real asset prices and facilitating the growth of corporate debt-for-equity restructuring. With fewer constraints on consumer borrowing, for example, there is less need for "target saving", allowing young households in particular to borrow much more than their predecessors for major durable goods purchases. In addition, in the United States, the United Kingdom, Sweden and a number of other countries consumer purchases can now be financed with credit from tax-favoured mortgages (mortgage equity loans). Such loans may also have indirectly reduced saving by making real property more attractive to hold, pushing up house prices and creating unexpected capital gains.

Corporate restructuring

Financial innovation facilitated the restructuring of the corporate sector in particular in the United States in the 1980s, substantially increasing leverage positions. Corporate restructurings have in large part been associated with highly leveraged transactions and the development of the non-investment-grade bond market. Capital gains to existing stockholders associated with takeovers and divestitures, according to one estimate, explain a substantial part of the decline in the household saving ratio in the United States in the 1980s.

The desirability of increasing national saving

Although "optimal" saving rates cannot be precisely identified, there are various indications that present rates may be too low. Empirical evidence suggests that longer-term growth would be spurred by higher saving in the industrial countries. In addition, demographic trends and insufficient investment rates in many regions point to the desirability of increasing national saving.

Tax impediments to private saving

Private saving has been discouraged in some countries by a number of features of existing tax codes, often magnified by some of the developments in the financial sector during the 1980s discussed above. In several countries saving is discouraged by the double taxation of income from capital, once at the corporate and once at the personal income tax level. High marginal rates of taxation on nominal interest income may also discourage saving. Interest payments on house mortgages, and often on consumer loans, are also tax-deductible in most industrial countries, creating an incentive to borrow and also distorting the composition of investment. This incentive is particularly strong where marginal tax rates are high, for example in the Scandinavian countries. In countries with less generous deductions on household credit private saving is on average much higher than in other countries.

Moreover, the decline in national saving may be an important factor in the slower improvement in living standards in a number of industrial countries. The top graph overleaf plots average net national saving rates against real wage growth in manufacturing for the major industrial countries in 1960–79 and 1980–89. The lower graph plots national saving against per capita real GNP/GDP growth. In periods of relatively high saving individual countries have tended to experience more rapid growth of real wages and per capita income. For example, net national saving in France dropped by half, averaging 18% (FR1) in 1960–79 and 9% (FR2) in 1980–89, while per capita income growth declined from 3¾ to about 1½%. Also conforming to this pattern, Japan had the highest (JP2), and the United States the lowest (US2), saving and real wage growth rates among the major industrial countries in the 1980s.

Lower saving, slower growth

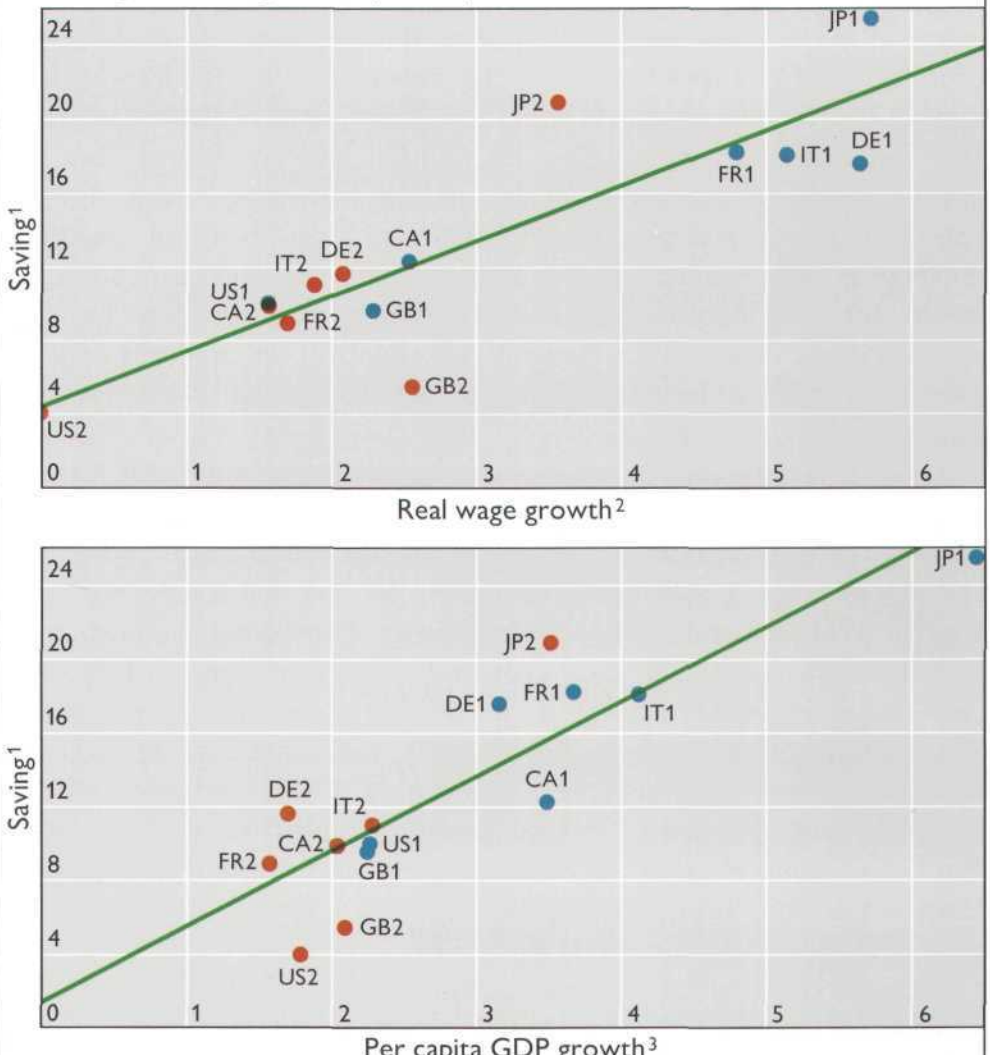
Causal relationships between saving, real income and real wages are difficult to identify precisely, and many factors influence such linkages. Some economists also argue that low saving simply follows, and does not contribute to, slower economic growth. Moreover, a close link between saving and growth would appear to be inconsistent with the current high degree of international capital mobility, which should effectively decouple national saving and growth working through the investment channel.

Nonetheless, most statistical evidence suggests that over longer periods of time national saving and investment rates are highly correlated, although some weakening of this relationship was observed in the past decade. Moreover, the view that the decline in national saving has played an important role in worsening economic performance is consistent with other evidence. For example, one study estimated that a 10% net national saving rate (as a percentage of national income) would be required for the United States to attain its highest possible consumption growth path (given population growth and underlying technological change), well above the 4% average recorded in the 1980s.

Worsening economic performance

In addition to the projected medium-term investment demand from eastern Europe, and the desirability of increasing net resource transfers to developing countries, pressure on worldwide saving could also arise from an expected longer-term increase in the proportion of the elderly in

Saving, real wages and per capita GDP



Note: US = United States; JP = Japan; DE = Germany; FR = France; GB = United Kingdom; IT = Italy; CA = Canada. "1" following country names refers to the period 1960–79 (1963–79 for real wages), and "2" to the period 1980–89. The regression lines have been calculated using all data points.

[1] Average of net national saving as a percentage of national income. [2] Average annual growth of wages in manufacturing less annual changes in consumer prices, in percentages. [3] Average annual growth of per capita real GDP, in percentages.

Sources: For saving and per capita GDP, OECD National Accounts; for real wages, national data.

industrial country populations. As this change in demographic structure is likely to occur faster in high-saving Japan, an even larger decline in its current-account surplus may be anticipated, further eroding this source of funds for world capital markets. In this context, international pressure on Japan to lower its national saving rate seems particularly misplaced.

Private saving incentives desirable

Given these considerations, several recent structural reforms aimed at increasing incentives to private saving are to be welcomed; these include measures to reduce the tax deductibility of interest on consumer borrowing by households (United States) and the enhancement of incentives for the private provision of retirement pensions (Australia, Japan, the United Kingdom and the United States). Nonetheless, specific incentives designed to raise private saving have met with only limited success in the past, and are often costly in terms of lost government revenue.

Increase in public saving essential

In these circumstances, national saving is most likely to be raised significantly by increasing government saving. Indeed, the decline in saving since the 1960s is primarily attributable to the drop in public saving. Reversing this pattern in the 1990s would appear to be the most direct and dependable way to achieve substantive results. To this end, medium-term budget consolidation efforts by governments in the industrial countries should be reinforced, particularly once an upturn in economic activity allows greater flexibility in the design of fiscal policy.

III. Developments in other countries

Highlights

Overall, average output growth in the newly industrialised economies (NIEs) and the developing countries declined between 1989 and 1990. Moreover, under the influence of internal adjustment policies and external shocks – including large terms-of-trade changes and weaker growth in the industrial countries – differences in growth performance between individual countries and country groups widened considerably. Real output growth increased in the group of oil-exporting developing countries due to the real income gains accruing from the rise in oil prices and it also rose in the NIEs, though mainly as a result of developments in South Korea.

By contrast, in the group of non-oil-exporting developing countries real output growth weakened in response to unfavourable terms-of-trade changes and tighter policies in a number of countries. The situation continued bleak in Sub-Saharan Africa and real per capita income declined still further in Latin America as a result of major internal imbalances and a marked tightening of fiscal policies. On the other hand, output growth in the Asian region accelerated to almost 6%, though a slowdown was observed towards the end of the year and in some major countries financial imbalances widened.

The average rate of inflation in the NIEs and all developing countries combined rose to 240%, almost entirely because of developments in Latin America. In four Latin American countries inflation reached four-digit rates, but the acceleration was widespread. Notwithstanding a less favourable price performance in the NIEs, Asian countries as a group managed to reduce inflation, helped by price subsidies and conservative macro-economic policies.

Changes in trade accounts also differed widely between countries and country groups. The surplus of the NIEs fell substantially, reflecting unfavourable terms-of-trade changes and strong growth in domestic demand, whereas the oil-exporting countries recorded a sharp rise in export receipts. They accounted for most of the increase in the overall surplus of the developing countries even though non-oil developing countries managed to offset part of the effects of higher oil prices by expanding real export growth. In the group of heavily indebted middle-income countries, which includes oil as well as non-oil-exporters, the trade surplus remained largely unchanged. A marked deterioration in countries such as Brazil, Peru and the Philippines was offset by large gains in oil-exporting countries, especially Nigeria and Venezuela.

In eastern Europe several years of progressively decelerating growth rates were succeeded by actual declines in output last year. In the four countries that are furthest advanced in the reform process this development can be interpreted as the costs of correcting past dislocations and imbalances, whereas in other countries they mainly reflected the effects of shortages in conditions of a progressive disintegration of the economic system.

Last year also saw a marked acceleration in the rate of inflation, notably in those countries that have adopted comprehensive reform measures. However, it was attenuated by restrictive macro-economic policies complemented by incomes policies and the large changes in relative prices did not spark off a wage/price spiral. Inflation also rose in those countries where most prices are still subject to control and the degree of suppressed inflation may have increased even more. Indeed, a principal feature of recent developments has been a marked rise in financial imbalances, mainly because of mounting budget deficits and increased saving by households facing shortages of consumer goods.

Against this background reform of the financial sector will play a crucial role in the transition from a centrally planned to a market economy, both as a complement to other measures and as a key condition for maintaining macro-economic stability. Most countries have introduced a two-tier banking system and money and capital markets have started to develop. However, given the recent date of these changes many problems remain. In particular, most banks are undercapitalised and carry a large stock of non-performing loans. Market segmentation is also high and real interest rates are still negative in most countries. Above all, the ability to control the growth of monetary aggregates is limited. Budget deficits are monetised and commercial banks have as yet little discretion to refuse credit to enterprises.

The newly industrialised economies and developing countries

The external environment in 1990

An unfavourable external environment ...

The external environment facing most developing countries, specifically the non-oil-exporting countries, was for several reasons unfavourable in 1990. Average real output grew less fast than in 1989 (see the table overleaf) and there were wide differences between oil exporters, which experienced an acceleration in real output growth, and non-oil-exporters, where real output growth fell to 2¾%. Indeed, even though the oil price shock was considerably smaller than those occurring in 1973 and 1978–80, the impact was just as severe.

... with high dependence on oil imports in the NIEs ...

In the NIEs rapid industrialisation and a marked rise in the use of automobiles increased per capita energy consumption by more than 50% during 1980–88 (see the table on page 43). In addition, though the oil intensity of output and the share of oil in overall energy consumption have declined over the same period, the share of energy consumption met by imports and the dependence on oil are much higher than in the industrialised countries. The oil price rise also occurred in a period of deteriorating

GDP growth in developing countries and the NIEs

Countries and country groups	1984–86 GDP in billions of US$	1980–85 average	1986	1987	1988	1989	1990	Per capita 1980–90 average
		percentage changes						
Africa	250	1.6	3.3	1.5	3.1	2.4	2.7	−0.5
Nigeria	62	−2.3	3.2	1.8	4.1	4.0	5.2	−2.7
Sub-Saharan countries	109	2.3	3.3	1.9	2.0	1.6	1.6	−0.5
Middle East	488	0.7	−2.3	1.2	3.2	2.7	1.8	−2.4
Egypt	55	8.1	9.1	6.4	6.2	5.3	2.5	4.7
Asia	950	6.6	6.6	7.7	9.1	5.5	5.8	5.0
China	237	10.0	7.7	10.2	11.1	4.0	5.0	7.3
India	216	5.2	4.2	4.1	10.4	5.0	4.5	3.2
Indonesia	82	4.7	5.9	4.8	5.7	7.4	7.5	3.1
Malaysia	31	5.1	1.2	5.3	8.7	8.8	10.0	3.4
Philippines	32	−1.0	1.9	5.8	6.8	5.7	3.1	−0.7
Thailand	40	5.6	4.9	9.5	13.2	12.2	9.8	5.7
NIEs	208	6.9	10.8	12.1	9.4	6.1	6.8	6.6
Latin America	732	0.7	3.7	2.8	1.0	1.2	−0.3	−0.9
Brazil	236	1.1	7.5	3.6	0.0	3.6	−4.6	−0.6
Mexico	163	1.9	−3.7	1.6	1.4	2.9	3.9	−0.6
Argentina	74	−2.2	5.6	2.5	−2.7	− 4.6	−2.0	−2.6
Chile	17	−0.4	5.7	5.7	7.4	10.0	1.6	1.0
Peru	22	−0.5	9.5	6.9	−8.8	−12.2	−5.0	−3.9
Venezuela	58	−1.3	6.5	3.6	5.8	− 8.3	4.4	−2.3
All countries*	2,420	3.0	3.6	4.3	4.9	3.3	2.8	1.2

* Calculated using 1984–86 GDP weights and exchange rates.

Sources: IMF World Economic Outlook, UN Commission for Latin America and the Caribbean and national data.

export performance, reflecting the lagged effects of large real exchange rate appreciations.

Most other non-oil-exporting countries were in an even weaker position to weather the repercussions of the oil price rise. In Latin America and the Sub-Saharan countries real per capita income last year was well below the 1980 level and because of the embargo several countries, particularly in the Middle East and Asia, suffered falls in exports and in workers' remittances, while returning migrant workers aggravated an already serious unemployment problem. Finally, the possibility of smoothing the adjustment to the shock through foreign borrowing was limited. In fact, in the course of last year some of the countries worst hit by the crisis saw their foreign exchange reserves fall to perilously low levels.

... and low resistance to external shocks in other countries

The oil crisis was, however, not the only unfavourable factor. Firstly, with a number of industrial economies clearly showing signs of recession, potential export market growth for developing countries slowed noticeably. Secondly, non-oil commodity prices weakened significantly while import prices recorded a substantial rise, in the event forcing countries dependent on non-oil commodity exports to restrain import growth.

Other unfavourable influences were ...

Developments in energy and oil consumption: selected countries and country groups

Countries and country groups	Energy consumption[1] per capita	Energy consumption[1] per unit of output	Oil consumption per unit of output	Oil consumption	Net imports	Energy consumption per capita, 1988[2]	Energy consumption per unit of output[3]
	percentage changes, 1980–88, annual rate			as a percentage of energy consumption, 1988			
Africa	−2.0	1.4	0.0	59.8	−195.6	149	0.3
Côte d'Ivoire	−3.3	1.5	1.6	81.0	56.3	129	0.2
Ghana	−0.3	1.4	1.8	43.4	46.2	130	0.2
Kenya	−6.2	−5.3	−7.3	73.3	86.9	105	0.3
Zimbabwe	0.6	0.1	0.5	16.5	28.0	495	0.7
Latin America	0.0	0.8	−0.5	57.6	− 28.5	958	0.5
Brazil	0.2	0.5	−1.6	50.7	31.3	845	0.5
Chile	0.6	0.2	−0.8	53.8	45.3	820	0.5
Costa Rica	−1.4	0.0	−1.2	71.7	77.6	350	0.2
Cuba	0.4	−3.7	−3.5	98.8	97.9	1,088	0.7
Uruguay	−4.3	−3.4	−2.9	67.7	71.2	768	0.3
Asia	2.7	−1.1	−3.6	28.6	4.2	369	1.0
India	6.0	2.5	1.2	32.0	12.9	201	0.6
Pakistan	3.5	0.7	1.8	38.8	32.2	220	0.6
Philippines	−3.9	−2.4	−4.8	70.3	83.0	233	0.4
Thailand	5.4	0.4	−3.9	66.3	53.6	400	0.4
NIEs	4.9	−1.8	−4.5	52.8	86.6	1,896	0.5
OECD Europe	*0.3*	*−1.3*	*−3.6*	*43.5*	*40.2*	*3,234*	*0.4*

[1] Measured as primary energy requirements in tonnes of oil equivalent. [2] In kilograms. [3] Total energy requirements in 1985 relative to 1984–86 average GDP in US dollars.

Sources: UN Energy Statistics Yearbook and OECD/IEA Energy Balances of OECD Countries, World Energy Statistics and Balances and Annual Oil Report.

Finally, despite a small drop in international interest rates, debt servicing obligations stayed at elevated levels.

... limited export growth ...

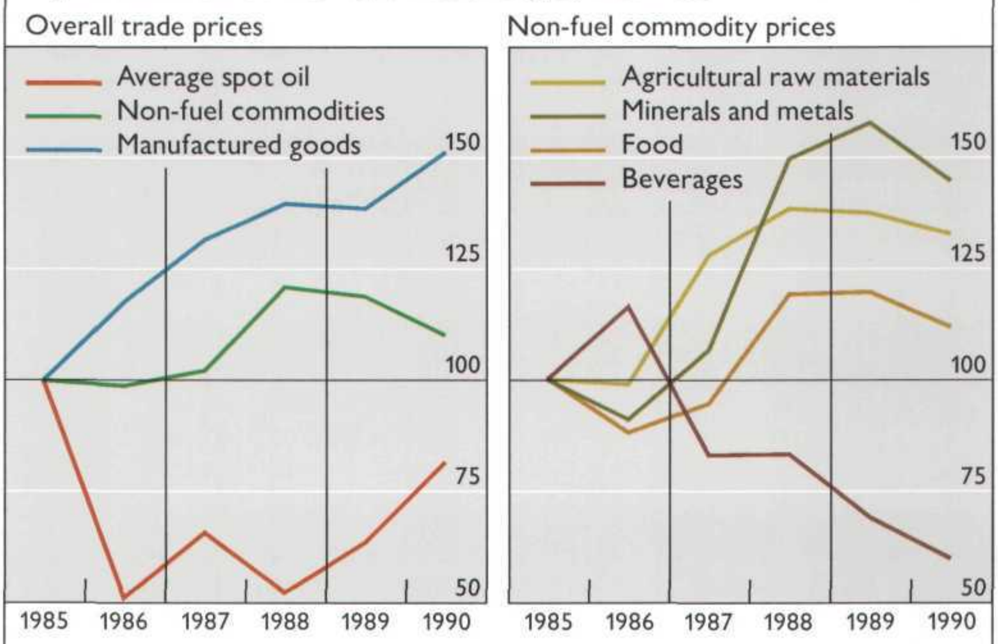
The slowdown in GDP growth in industrial countries produced a fall in their import growth from 7½% in 1989 to 6% in 1990 and contributed to the already weakening trend of economic activity in the developing world. Countries in Latin America in particular experienced a drastic slowdown in export market growth as the two areas accounting for half of their export markets – the United States and their own region – slowed to a near standstill. By contrast, Asian developing countries continued to benefit from buoyant export markets. Although the US market expanded only little, two equally important markets, Japan and the Asian region itself, continued to grow vigorously.

... and lower commodity prices

Not only did the sluggishness of world economic activity limit the export growth potential of developing countries in volume terms, it also contributed to a softening of non-oil commodity prices, already negatively affected by excess supply conditions in several markets. Following a drop of nearly 2% in 1989, non-oil commodity prices in dollar terms fell by 7½% in 1990 (see the graph overleaf). In contrast to 1989, when prices for

Trade prices in developing countries

Expressed in US dollar terms; annual averages, 1985 = 100



Source: IMF World Economic Outlook.

beverages bore the brunt of the overall price decline, the fall in 1990 was broadly based. It was again sharpest for beverages (about 13%), as stocks accumulated in earlier years continued to be offloaded in sluggish world markets. Rising stocks, as well as the expansion of productive capacity which had accompanied the metals boom of 1987–89, resulted in an average price decline of 8½% for metals and minerals. The expansion of food production, spurred in part by more buoyant price developments in 1989 as well as a recovery in yields from levels affected by droughts, led to a downward correction of 6½% in the world price of food commodities. A somewhat better balance between supply and demand prevailed for agricultural raw materials, with prices declining by 3½% in 1990. By contrast, spot oil prices rose on average by close to 30%, following a rise of 21% in 1989, while the upward trend in the prices of manufactured goods that was briefly interrupted in 1989 resumed last year, with prices rising by 9%.

The newly industrialised economies

Weakening trade balances and ...

Following an already significant decline in 1989, the trade surplus of the Asian NIEs shrank by almost $10 billion to only $9 billion in 1990 (see the table on page 49). The deterioration was, as in 1989, particularly pronounced in *South Korea,* where the trade account shifted from a sizable surplus to a deficit of $2 billion. In *Taiwan* the trade account also weakened considerably though it continued to show a large surplus. By contrast, the trade balance of *Singapore* deteriorated moderately, while that of *Hong Kong* moved into deficit reflecting inflationary pressures and slow import growth in China.

The weakening trend in the trade accounts of Taiwan and South Korea

... lower export growth in the NIEs ...

reflected the impact of four factors. Firstly, their high dependence on oil imports made them particularly vulnerable to the oil price hike in the second half of 1990 and in both countries the rise of import prices accelerated by over 8%. Secondly, the faltering growth of activity and demand in the United States sharply curtailed the buoyancy of their main export market. Thirdly, a real currency appreciation, particularly vis-à-vis their main competitor, Japan, continued to affect their export performance and export volume growth fell below 3%. Since the strengthening of the yen from mid-1990, however, there has been some recovery in external competitiveness and this should support faster net export growth in 1991. Finally, due to the buoyancy of domestic demand, import volume growth remained in double figures in South Korea, while it recovered sharply in Taiwan, notwithstanding more restrictive policies.

... but stronger real output growth

Despite the negative contribution of net real exports, GDP in *South Korea* rose by 9% in 1990. Stimulated by expansionary policies, domestic demand growth more than offset the weaker export performance. However, this trend may not be sustainable, even though it is not out of line with growth rates achieved earlier in the decade. In addition to the marked deterioration in the trade account, the boom in domestic demand and output was accompanied by accelerating consumer prices and speculative investment in real and financial assets. By contrast, earlier periods of rapid and sustainable real income gains had been characterised by export-led growth and policies aimed at strengthening the external position. In *Taiwan,* on the other hand, a tightening of monetary policy helped to reverse the effects (possibly accounting for as much as one-third of total growth in 1989) of an unprecedented real property and equity price boom and was instrumental in reducing real output growth to 5%. At the same time, plans for improving the country's infrastructure were finalised in late 1990 and will provide a major boost to output growth in the coming years.

Developing countries

A bleak picture in Sub-Saharan countries and ...

Domestic output and price developments. The contrast between oil and non-oil-exporters was particularly pronounced in *Africa* and the *Middle East.* While aggregate GDP in these two areas rose by 2%, output growth in the *Sub-Saharan* countries was only 1½% and real per capita income declined for the fourth consecutive year. The main cause was a 6% deterioration in the terms of trade, which forced a number of countries to cut domestic demand and imports. In the non-oil-exporting Middle Eastern countries the principal influence was losses of exports and workers' remittances as a result of the Gulf crisis. At the same time, benefiting from a high level of excess capacity in the oil sector, *Nigeria* was able to expand oil production and real GDP by over 10% and 5% respectively. Reflecting tight credit policies, including a strengthening and restructuring of the financial sector, and a sharp cutback in monetary financing of the budget deficit, the rate of inflation was reduced to less than 15%. The current account also improved, despite an 8½% rise in imports. Even so the level of real imports amounted to less than one-third of its 1981 peak. One serious consequence of the policy of import compression was a fall in the investment/GDP ratio to less than 10%.

... a deepening crisis in Latin America ...

Although the *Latin American* region recorded a net revenue gain as a result of the rise in oil prices, average GDP declined, while inflation accelerated from the already high rate recorded in 1989. As a further sign of the deepening crisis open unemployment rose, the combined trade balance deteriorated, interest arrears increased and – despite restrictive fiscal measures – public sector debt rose to levels which in several countries made it difficult to maintain positive real interest rates.

... with falling output ...

The overall fall in output can mainly be ascribed to developments in the three countries (Brazil, Argentina and Peru) suffering from severe macro-economic instability. Reflecting the close inter-regional trade links, the output losses recorded by these three countries reinforced the effects of restrictive policies implemented in a large number of other countries and more than offset the gains accruing to the major oil exporters (Mexico and Venezuela). The poor output performance can also be seen as the outcome of policies aimed at curbing nominal income growth in an environment in which enterprises do not adjust their prices in response to general demand conditions but mainly on the basis of cost developments and ingrained inflationary expectations. These trends were particularly evident in *Brazil,* where attempts to consolidate the budget deficit combined with a severe liquidity squeeze resulted in a steep fall in real GDP and industrial employment. Despite efforts to liberalise imports and the more restrictive policy stance, the rate of inflation rose to more than 3,000% (see the table opposite), though part of this increase was due to Brazil's vulnerability to higher energy prices. The situation was even worse in *Peru,* where a further fall in GDP brought the cumulative output loss in the last three years to almost 30%. Over the same period the rate of inflation accelerated from 86 to 7,650%. The poor state of the economy may also be seen in the secondary market price of Peruvian foreign banking debt, which has declined to only 3½% of its face value.

... and accelerating inflation in major countries

Also some more encouraging signs ...

There were, however, also some encouraging developments in the region. The performance of *Colombia* continued to display a high degree of economic stability. Even though the fall in output growth in *Chile* was exceptionally steep, it should be seen against the background of policies aimed at preventing the economy from crossing the threshold of excess demand and accelerating inflation. Moreover, the stabilisation and reform measures undertaken by *Venezuela* in early 1989 were instrumental in generating positive output growth in 1990 and in reducing the rate of inflation to just over 30% by the end of the year. Finally, *Mexico* recorded its highest growth rate since 1981 and cut back the budget deficit to 4½% of GDP, compared with 12¼% in 1988. However, these developments were accompanied by a rise in inflation, partly as a result of an expansionary monetary policy. Despite the windfall gain from higher oil prices, the current-account deficit remained largely unchanged. A further problem is that in the longer run the private investment/GDP ratio of 12–13% may

Inflation in developing countries and the NIEs							
Countries and country groups	1980–84 average	1985	1986	1987	1988	1989	1990
	percentage changes in consumer prices						
Africa and Middle East	12.5	7.0	11.5	16.5	18.5	16.5	14.0
Egypt	14.6	12.1	23.9	19.7	17.6	21.3	16.8
Nigeria	22.4	5.5	5.4	10.2	38.3	40.9	13.5[1]
Asia	7.5	6.0	8.7	9.5	14.3	11.7	8.0
China	2.3	11.9	7.0	8.8	20.7	16.3	2.0
India	10.2	5.6	8.7	8.8	9.4	6.2	9.0[1]
Philippines	19.8	23.1	0.8	3.8	8.8	10.5	12.5
South Korea	8.3	2.5	2.8	3.0	7.1	5.8	8.6
Latin America	90.0	145.0	88.0	131.0	286.5	533.0	768.0
Argentina	263.5	672.0	90.5	131.7	343.0	3,079	2,314
Brazil	132.5	227.0	150.0	219.0	582.0	1,325	3,118
Mexico	61.5	57.7	86.2	131.8	114.2	20.0	26.7
Peru	87.0	163.2	77.9	85.8	667.0	3,399	7,650
All countries[2]	35.0	49.0	34.0	48.5	98.0	171.5	238.0

[1] Estimated. [2] Calculated using 1984–86 GDP weights and exchange rates.
Sources: IMF International Financial Statistics, World Economic Outlook and national data.

not be sufficient to provide employment for the rapidly growing labour force.

... though higher inflation was widespread

As regards the acceleration of inflation in the area, the average rate of 768% conceals very wide variations both in the course of the year and between countries. Although prices reacted rather sluggishly to the stabilisation policies implemented in the countries suffering from hyper-inflation, there was some slowdown towards the end of the year. However, it remains to be seen whether this slowdown is sustainable, as recourse was had to price and wage freezes and in some cases – most notably in Argentina – domestic price developments were dampened by appreciating nominal exchange rates. In most other Latin American countries inflation was also higher than in 1989 and the worsening price performance prompted a number of governments to introduce restrictive policies, which contributed to the slowdown in output growth.

Stronger growth in Asia ...

Even excluding the NIEs, real growth in *Asia*, at 5½%, was well above that in other developing countries and slightly higher than in 1989. However, several factors caused a weakening towards the end of the year. Because of a relatively high energy intensity of output, the real income losses resulting from the rise in oil prices were greater than in most OECD countries. Some of the larger Asian countries also suffered a substantial loss of workers' remittances. Moreover, a tightening of credit conditions was observed as Japanese banks withdrew from the syndicated loan market and equity prices declined, forcing firms to find alternative sources of finance. In addition, a number of central banks tightened monetary policy and raised interest rates in an attempt to dampen inflation and reduce asset prices and real property speculation. Finally, some countries, including the two largest of the region, saw rising financial and structural imbalances, which cast some doubt on the sustainability of current real output growth.

These general trends were clearly evident in *Thailand,* which again achieved one of the highest growth rates in the region (9.8%) but experienced worsening problems in the form of shortages of skilled workers, an overburdened infrastructure, accelerating inflation and a widening gap between the poor rural areas and the booming industrial region around the capital. In *Malaysia* the 10% growth in real output was the result of strong domestic demand, boosted by an almost 10% rise in real wage incomes and a continuing boom in foreign investment. However, the contribution of net real exports was negative and the current-account deficit widened. The budget deficit also rose due to increases in consumer price subsidies and may widen further this year as the Government plans to offset lower export growth by reducing direct and indirect taxes and further expanding investment incentives. By contrast, in *Indonesia,* which like Malaysia is a net oil exporter, the Government has opted for a cautious budget policy using most of the additional oil revenues for debt repayments and investment in infrastructure. Apart from the terms-of-trade gain, the 7½% real output growth recorded last year reflected a strong rise in private consumption and the lagged effects of structural policies aimed at improving the international competitiveness of the economy.

... reaching 10% in some countries

The unfavourable developments seen in the *Philippines* last year were partly the result of external and exogenous factors such as higher oil prices, the loss of workers' remittances, natural disasters and shortages and disruptions related to social and political unrest. However, a poor export performance – in part due to a 20% nominal rise in the minimum wage – also played a role. Moreover, there were several signs of growing financial and structural imbalances. The budget deficit and the external imbalance both rose to around 5½% of GDP, and the rate of unemployment to 9% despite an estimated one-third of the labour force being underemployed. Worsening imbalances were also evident in *India* last year, as the budget deficit increased to 8½% of GDP (with interest payments on the public debt now absorbing some 30% of total expenditure), raising the public debt to a level which places constraints on monetary policy. A further deterioration in the current account raised the foreign debt to 27% of GDP. Even after selling most of its long-term foreign assets to finance imports, by November India had run down its foreign reserves to a level corresponding to only two weeks of imports. Industrial output growth fell for the second consecutive year and the rate of consumer price inflation rose to 12½% by end-1990.

Widening imbalances in the Philippines ...

... India ...

In *China,* too, there were flaws in a picture that at first glance looks impressive: output growth accelerated in 1990, inflation was reduced to only 2% and the current account moved into surplus. Higher output growth was, however, partly a result of a cumulation of unsold inventories in state enterprises and a series of stimulative monetary measures. Moreover, because of mounting losses in state enterprises, the budget deficit rose substantially compared with 1989, while the improvement in the

... and China

current account should be seen in the light of a large rise in export subsidies. Finally, inflation performance was helped by the postponement until this year of reforms aimed at introducing market-determined prices.

Trade-account developments in 1990. Against the background of divergent external and internal developments, changes in trade-account positions differed widely between various groups of developing countries. The overall trade surplus increased by $29 billion, but the increase was almost entirely accounted for by the fuel exporters, which saw their trade surplus rise by close to $27½ billion.

Moderate trade-balance improvement for non-oil-exporters ...

The improvement in the trade balance of the *non-fuel-exporting countries* taken together should be seen against the background of the oil price hike, which alone added almost $3 billion to their import bill. In addition, the Gulf crisis aggravated the trade performance of some countries in the second half of 1990, in particular Egypt and Jordan. Moreover, the fall in non-oil commodity prices combined with the oil price increase produced an overall terms-of-trade deterioration larger than any since the outbreak of the debt crisis in 1982, with import prices rising by 7½% in dollar terms, against a 2% increase in export unit values. As can be seen from the table overleaf, the terms-of-trade losses were widespread, with those of primary commodity producers amounting to as much as 8%. The concentration of these producers in Sub-Saharan Africa and Latin America also explains the high incidence of large terms-of-trade losses in these two regions.

... helped by stronger export growth

Generally, the adverse effects were more or less offset by substantial increases in real export growth and, in most instances, by a further slowing of import demand. Export volume growth for all non-oil-exporting countries combined rose to 8½% in 1990. The increases registered in countries

Trade-account balances of developing countries and the NIEs

Country groups	Trade-account balance					of which: Oil trade balance				
	1986	1987	1988	1989	1990	1986	1987	1988	1989	1990
	in billions of US dollars									
NIEs	19.9	25.4	21.8	18.9	9.2	−6.2	−7.9	−7.9	−10.1	−13.8
Developing countries[1]	−10.9	18.5	4.0	21.7	50.9	81.5	98.3	91.2	113.8	149.8
Fuel-exporting countries[2]	21.1	44.9	27.3	51.0	78.4	89.2	107.6	99.9	124.6	163.6
Non-fuel-exporting countries	−32.0	−26.4	−23.3	−29.3	−27.5	−7.7	−9.3	−8.7	−10.8	−13.8
Exporters of manufactured goods[2]	−11.3	− 2.6	− 1.2	− 5.8	− 3.4	−3.6	−4.6	−4.8	− 6.2	− 9.1
Exporters of primary products[2]	1.7	− 2.7	− 0.1	2.4	2.0	−2.5	−1.9	−2.1	− 2.1	− 2.3
Others	−22.4	−21.1	−22.0	−25.9	−26.1	−1.6	−2.8	−1.8	− 2.5	− 2.4
Memo item: Heavily indebted countries	*21.4*	*25.9*	*28.8*	*35.2*	*34.3*	*18.8*	*21.6*	*19.2*	*24.9*	*34.6*

[1] Other than the NIEs. [2] Countries whose exports of fuel, manufactured goods and primary products respectively accounted in 1985–87 for over 50% of their exports of goods and services.

Sources: IMF World Economic Outlook and national data.

Indicators of foreign trade: selected groups of countries				
Country groups	Periods	Export volumes	Import volumes	Terms of trade
		percentage changes, annual averages		
All developing countries*	1982–90	3.9	−1.6	− 4.0
	1988	11.3	7.3	− 6.1
	1989	7.7	4.9	3.0
	1990	6.6	2.1	1.7
Fuel exporters	1982–90	1.6	−5.1	− 7.4
	1988	13.5	8.2	−18.3
	1989	8.1	5.1	10.7
	1990	3.8	2.8	11.4
Non-fuel-exporters	1982–90	5.5	1.0	− 1.5
	1988	9.6	6.6	2.7
	1989	7.5	4.8	− 2.5
	1990	8.6	1.6	− 5.3
of which: Exporters of manufactured goods	1982–90	6.6	4.9	− 0.8
	1988	12.4	11.0	2.0
	1989	8.7	7.1	− 2.6
	1990	6.3	1.2	− 3.6
Exporters of primary products	1982–90	3.6	−2.2	− 2.6
	1988	3.1	2.0	4.7
	1989	7.0	0.6	− 1.6
	1990	8.8	1.1	− 7.9
Memorandum items:				
Heavily indebted countries	*1982–90*	*4.1*	*−3.6*	*− 4.0*
	1988	*11.7*	*8.8*	*− 3.1*
	1989	*5.5*	*3.2*	*1.0*
	1990	*4.6*	*8.2*	*− 1.4*
NIEs	*1982–90*	*11.6*	*10.7*	*1.0*
	1988	*14.1*	*21.0*	*1.0*
	1989	*8.6*	*14.9*	*2.1*
	1990	*3.3*	*5.5*	*− 1.1*

* Other than the NIEs. Group averages based on 1987–88 export weights.
Sources: IMF World Economic Outlook and national data.

exporting mainly manufactured goods were sustained close to the very high levels reached in preceding years, while gains of up to 9% were recorded for primary commodity producers. At the same time, the rise in import volumes was cut back to just 1½%. Import growth among the exporters of manufactured goods declined sharply from the high levels recorded in the two preceding years, while imports among primary commodity producers stagnated.

Marked differences among oil exporters ...

Quite contrasting developments in volume terms could be observed among the *oil-exporting countries*. Overall, export volume growth in this group of countries slipped from 8% in 1989 to about 4% last year, but differences in export performance were large. Thus the embargo on oil shipments from Kuwait and Iraq in the second half of 1990 was offset by a significant expansion of oil exports from a number of other oil producers, in particular Saudi Arabia, Nigeria and Venezuela. With buoyant export earnings, import growth in the Latin American and African oil-exporting countries rose to 9½% in volume terms, while the politically unstable climate in the Middle East disrupted import demand among the oil producers in that region.

... and a mixed outcome for the group of heavily indebted countries

Owing to differences in export orientation and sensitivity to external price trends, trade-account developments also diverged within the group of *heavily indebted middle-income countries.* The external shock represented by the sharp movements in individual countries' terms of trade appears to have hit hardest those countries with large structural imbalances in their domestic economies. This can be seen most clearly in the large deterioration in the external trade accounts of Brazil and the Philippines of about $5 and 1.5 billion respectively. The two countries' high dependence on oil imports explains a large proportion of the sharp increase in their imports of 10% or more, and Brazil also liberalised imports as part of its stabilisation programme. Nonetheless, the concomitant deterioration in their trade accounts cannot be blamed on these factors alone. The lack of competitiveness and acute social and economic imbalances have also contributed to the continuing surge in their non-oil imports and lacklustre export performance. In addition, export growth tended to be reduced by mounting interest arrears and problems in obtaining credits for financing imports needed in the manufacturing sector.

By contrast, economic activity and foreign trade recovered sharply in Venezuela in 1990, as oil export revenues increased by 45%, reflecting not only price increases but also rising volumes. In addition, growth in non-oil exports resumed, so that the trade surplus rose even though the dollar value of imports increased by well over 10%. Similarly, in Nigeria there was a significant improvement in the trade balance due to the expansion in oil revenues, which account for 95% of total export receipts. In Colombia higher revenues from oil exports were also evident but strong growth in non-oil exports was equally responsible for the improved trade performance.

The key roles of external competitiveness ...

In most developing countries external competitiveness is the key factor behind developments in domestic output growth and in the external accounts. The high growth rate experienced by the four NIEs in the past can to a large extent be ascribed to this factor, just as the less buoyant rates seen recently are related to a worsening of their relative cost position. Similarly, the fact that countries such as Malaysia, Chile and Indonesia have been able to ward off major current-account crises while others, such as Brazil, the Philippines and Peru, are still facing large and widening external imbalances also owes much to their ability to keep their real exchange rates more or less stable and, ultimately, to their success in preventing internal imbalances and inflationary pressures. Gaining com-

... and diversification

petitiveness in other than traditional export markets can also lay the basis for promoting a more diversified economy, thereby reducing vulnerability to terms-of-trade shocks. Indeed, the more diversified economies in the developing world experienced virtually no cumulative losses in their terms of trade between 1982 and 1990. Over the same period the cumulative terms-of-trade loss for primary commodity producers and oil-exporting countries amounted to over 20 and 50% respectively. Moreover, a competitive and well-diversified economy reduces sensitivity to trends in specific regional markets by creating the potential for taking advantage of more buoyant developments elsewhere.

Developments in eastern Europe

Recent developments in eastern Europe have been dramatic and unprecedented. The problems these countries are facing in moving from a centrally planned to a market economy are ones to which neither economic theory nor historical experience offers any ready solution. Last year's fall in output, amounting to almost 6% for the area on average, was, however, not only an inevitable price which had to be paid for the transition but just as much a consequence of the demise of an economic system that had progressively ceased to function and was beyond repair.

Output developments in ...

This combination of immediate and underlying causes was most evident in those countries (Hungary, Poland, the former German Democratic Republic (GDR) and Yugoslavia) which last year implemented comprehensive reform programmes, as the removal of price controls and the confrontation with market-determined prices led to steep declines in measured real output. Yet for three reasons statistical measures overstate the fall in consumer welfare. Firstly, with the introduction of market-determined prices the production of goods for which there was no consumer demand came to an end and distortions in previous output and income evaluations were removed. Secondly, by substantially reducing shortages, excessive inventories and the time spent standing in queues, the reforms eliminated costs of the earlier system and generated large, albeit unquantifiable, gains in consumer welfare. Thirdly, output in the newly developing private sectors is only partially covered by the official statistics, and in some cases not at all. This bias is serious in Hungary, since small enterprises, which are mostly private and more than doubled in number during the first ten months of last year, are not included in industrial output statistics. A similar bias is found in Poland, where the share of private industry in total output is estimated to have increased to 13½%, compared with only 7½% in 1989.

... countries implementing comprehensive reforms ...

... and in countries in the early stages of transition

The effects of a system in need of fundamental reform were manifest in those countries that are still in the early stages of the transition process and adopted only partial measures last year. A growth strategy essentially based on expanding output by increasing inputs of labour and, in particular, capital while paying little attention to technical progress and the allocation of resources had led to a secular fall in average growth as capital productivity declined. In the 1980s the fall in real growth was accompanied by widening imbalances as stronger nominal income gains in conditions of continuing price controls led to an increase in shortages and in the degree of suppressed inflation. In 1990 the deceleration in output was succeeded by an outright fall and as the year progressed it became increasingly evident that this fall was not to be interpreted as a reversible cyclical change. Rather it was as the culmination of a process of economic disintegration which could not be prevented by postponing or reversing reform measures.

Broad output trends and immediate causes

Following the political upheavals of 1989, falling output levels could already be observed in eastern Europe in the fourth quarter of that year, and this trend gathered momentum in the course of 1990. Average output fell by almost 6% (see the table below), and in some countries industrial output declined by more than 20%. Some of the immediate causes behind these developments were specific to particular countries or groups of countries, while others were of a more general nature, though varying in strength from one country to another.

Country-specific causes include shortages ...

Among the country-specific causes, the stage and nature of the reform process, or the lack of reform, were probably the single most important one. In *Bulgaria* and *Romania* various reforms have been debated but few implemented until this year. The severe output falls can mainly be ascribed to shortages of raw materials and intermediate goods. These, in turn, were related to shortages of foreign exchange, which in the case of Bulgaria worsened following the moratorium on servicing foreign debt. The fall in output was aggravated by an outdated and neglected capital stock and by the absence of market forces to replace central planning. In Romania a further influence, affecting especially industrial output, was a cut in the

Eastern Europe: developments in real output[1]

Countries	1960–70	1970–80	1980–85	1986	1987	1988	1989	1990[2]
	percentage changes, annual averages							
Bulgaria	7.7	7.1	3.7	5.3	5.1	2.4	−0.5	−13.5 (−14.0)
Czechoslovakia	4.2	4.7	1.8	2.6	2.1	2.3	1.3	− 3.1 (− 3.7)
GDR[3]	4.1	4.8	4.5	4.3	3.3	2.8	2.0	−19.5 (−28.0)
Hungary	5.5	5.0	1.8	1.5	4.1	−0.1	−0.2	− 4.5 (− 4.5)
Poland	6.1	5.4	−0.8	4.9	2.0	4.7	−0.2	−12.0 (−23.0)
Romania[4]	8.6	9.4	3.0	3.0	0.7	−2.0	−7.9	−10.0 (−20.0)
Soviet Union	7.2	5.1	3.2	2.3	1.6	4.4	2.5	− 4.0 (− 1.5)
Yugoslavia	6.7	5.8	0.7	3.6	−1.1	−2.0	0.6	− 7.5 (−10.5)
Average[5]	6.8	5.2	2.9	2.7	1.7	3.7	1.5	− 5.8 (− 5.6)
Industrial countries	*4.8*	*3.1*	*2.5*	*2.7*	*3.4*	*4.5*	*3.3*	*2.5 (1.9)*

[1] Net material product (excluding depreciation and non-material services), except for Hungary (GDP) and Yugoslavia (gross social product, excluding non-material services). [2] Preliminary or estimated; figures in brackets refer to industrial production. [3] German Democratic Republic, unified with the Federal Republic of Germany on 3rd October 1990. [4] Figures for 1980–87 are currently being revised and may be substantially changed. [5] Weighted average, based on 1984–86 output and non-commercial exchange rates.

Sources: UN Economic Commission for Europe, Vienna Institute for Comparative Economic Studies and IMF International Financial Statistics.

working week from six to five days. In both countries the downturn was led by a sharp contraction in fixed investment spending – in Romania by 35% – as higher priority was given to satisfying the basic needs of the population.

... steep declines in investment spending ...

Shortages, combined with distribution bottlenecks and a 19% cutback in public investment in an attempt to reduce the public sector deficit, were also behind the fall in output in the *Soviet Union.* Lower energy production had a further negative effect, especially on real exports, and in several areas a supply structure based on a few large enterprises proved highly vulnerable as the effects of work disruptions in one sector or region cascaded through the whole economy. Despite the maintenance of price controls the rate of inflation rose sharply towards the end of the year in response to worsening shortages. Given the extent of this rise, the year-on-year price increase may have been 2–3 percentage points higher than is currently estimated and the fall in real output correspondingly steeper. Indeed, according to semi-official estimates a continuation of present trends would imply a real output decline of at least 11% this year. Nonetheless, and despite growing evidence of progressively deteriorating economic conditions, political obstacles to economic reforms increased in the course of last year. A comprehensive reform plan (the "500 days plan") was presented in the summer but the programme adopted in October was only a watered-down version of the original proposals.

... and a vulnerable production system

In *Poland,* the former *GDR* and *Yugoslavia* the measured fall in output can be directly related to the reform process, though the precise way in which domestic output and demand were affected by policies differed. In *Poland* very restrictive fiscal and monetary measures combined with incomes policies aimed at reducing real wages led to a marked decline in domestic demand, while a devaluation of the currency was instrumental in stimulating real export growth and in preserving the competitiveness of Polish enterprises in the domestic market. In the former *GDR,* by contrast, large income transfers from western Germany together with a slow adjustment of employment initially helped to maintain real incomes and domestic demand. However, the adoption of a 1:1 conversion rate against the Deutsche Mark for current transactions together with a rise of more than one-third in nominal wages meant that an increasing proportion of demand was satisfied through imports. As a consequence domestic sales and output declined dramatically, leading to an unprecedented rise in unemployment and short-time work towards the end of the year.

The experience of reforming countries as seen in Poland ...

... the former GDR ...

Like Poland, *Yugoslavia* adopted a comprehensive set of stabilisation and reform measures in late 1989, including tight fiscal and monetary policies, a six-month nominal wage stop and a partial price freeze. The measures also included a small devaluation of the currency, but, given the very high rate of inflation – 120% in the first quarter of 1990 – the policy of maintaining a fixed nominal rate against the Deutsche Mark quickly eroded the competitiveness of Yugoslavian firms. Combined with an almost complete liberalisation of imports, changes in the real external account thus compounded the effects of fiscal and monetary policies.

... Yugoslavia ...

... Hungary ...

... and Czechoslovakia

The relatively small output decline in *Hungary* can mainly be explained by transitional problems associated with a gradual economic reform process. Last year the policy of switching foreign trade to western countries succeeded in generating a surplus on the current account in convertible currencies. Moreover, changes in the real foreign balance had a positive effect on GDP. Lower real wages together with a depreciation of the effective exchange rate helped to boost real exports while the growth of imports fell, partly in response to the reintroduction of certain import restrictions. At the same time, the need to maintain restrictive fiscal and monetary policies, combined with large cuts in public sector investment and certain problems encountered in transferring resources from public to private enterprises, had an adverse influence on domestic demand. In *Czechoslovakia* a comprehensive reform package was implemented early this year, but uncertainties following its announcement had already led to precautionary behaviour last year. This could be seen in a marked and probably involuntary rise in inventories but also in advance purchases and a fall in the household saving rate to only 2%. Moreover, the absence of new markets to offset losses suffered within the Comecon trading system and in exports to the former GDR, together with attempts to move away from heavy and highly energy-intensive industries, brought the decline in total output to 3½%.

Common factors behind 1990 developments and ...

... widening gaps between demand and supply

A number of common factors reinforced the country-specific tendencies in 1990, some of which will continue to affect the area this year. Firstly, whatever its cause, a fall in output occurring simultaneously in countries which are closely linked by foreign trade will be accompanied by spillover and multiplier effects which aggravate the initial decline. Secondly, the rapid disintegration of the Comecon trading system (see Chapter IV) generally reduced real output growth. The fall was especially severe in countries such as Bulgaria, where exports to Comecon partners accounted for almost 85% of total exports. Thirdly, the rise in oil prices combined with a 30% cutback in energy exports from the Soviet Union was accompanied by large and unfavourable terms-of-trade changes in oil-importing countries. Given the relatively high energy intensity of output and, in some countries, a large share of imports in total energy consumption (see the table overleaf) the associated real income losses were much higher than in industrial countries. In addition, those countries which had been counting on oil imports from Iraq in repayment of previous credits were forced to seek alternative energy sources at much higher prices. Fourthly, a severe drought reduced agricultural output and electric power generation in the southern part of the area, thus further increasing the demand for food and energy imports. Finally, a deterioration in labour discipline resulted in frequent strikes and lower productivity, and political unrest – often associated with separatist movements – created further obstacles, in particular by increasing market segmentation and complicating policy co-ordination. As a result of these developments, especially in countries where the reform process was still at an early stage, there were clear signs of growing internal and external imbalances and widening gaps between nominal demand and real output. Money supply and credit growth accelerated, budget deficits widened and losses in public enterprises mounted against a background of accelerating unit labour cost growth and prices that were still subject to control.

Developments in energy and oil consumption in eastern Europe

Countries and country groups	Energy consumption[1] per capita	Energy consumption[1] per unit of output	Oil consumption per unit of output	Oil consumption	Net imports	Energy consumption per capita, 1988[2]	Energy consumption per unit of output[3]
	percentage changes, 1980–88, annual rate			as a percentage of energy consumption, 1988			
Bulgaria	1.4	−2.3	−2.8	35.0	58.2	4,120	1.2
Czechoslovakia	0.1	−1.6	−5.4	19.5	31.0	4,884	1.2
GDR	0.9	−3.2	−6.0	17.8	25.9	5,687	1.4
Hungary	0.8	−1.1	−3.0	31.3	45.6	2,800	1.5
Poland	−0.6	−0.9	−2.9	13.1	2.8	3,414	1.8
Romania	1.2	−2.7	−3.7	26.2	22.9	3,408	1.5
Soviet Union	3.3	0.3	−2.5	31.2	−19.3	4,955	1.4
Yugoslavia	1.9	2.1	−0.8	33.8	39.5	1,997	1.2
OECD Europe	*0.3*	*−1.3*	*−3.6*	*43.5*	*40.2*	*3,234*	*0.4*

[1] Measured as primary energy requirements in tonnes of oil equivalent. [2] In kilograms. [3] Total energy requirements in 1985 relative to 1984–86 average GDP in US dollars.

Sources: UN Energy Statistics Yearbook and OECD/IEA Energy Balances of OECD Countries, World Energy Statistics and Balances and Annual Oil Report.

Price and wage developments

All eastern European countries have experienced a worsening of price and wage performance over the last two years, but they differ widely with respect to earlier inflation and the causes of the most recent deterioration.

Inflationary pressures in countries adopting partial reforms

In *Bulgaria, Czechoslovakia, Romania,* the former *GDR* and the *Soviet Union* reported prices were more or less stable during the 1970s and 1980s as a result of extensive price controls and a policy of subsidising the prices of basic consumer goods (see the table opposite). In the course of 1989, and particularly following the political upheavals late in the year, some of these countries introduced partial price reforms, abolished certain subsidies and raised administered prices. However, except in the former GDR following the currency reform on 1st July, prices remained subject to control in 1990. Early this year, though, Bulgaria, Czechoslovakia and Romania introduced comprehensive price reforms and in April retail prices were partially decontrolled in the Soviet Union, following an earlier rise in wholesale prices.

Hungary, Poland and *Yugoslavia,* on the other hand, experienced comparatively high inflation rates during the 1970s and 1980s, though the underlying forces differed. *Hungary* had already taken the first steps towards a more market-oriented economy in 1968 but, overall, the economy remained highly centralised until the late 1980s. Inflation rose progressively during the 1980s and reached 30% last year, mainly as a result

Developments in consumer prices (CPI) and nominal wages (W)						
Countries		1970–80	1980–85	1985–88	1989	1990[1]
		percentage changes, annual rates				
Bulgaria	CPI	2.0	1.0	2.6	6.2	19.3
	W	3.9	3.3	5.6	6.0	23.0
Czechoslovakia	CPI	1.2	2.0	0.2	1.5	10.0
	W	3.1	1.8	1.9	2.4	8.2
GDR	CPI	−0.0	0.0	0.8	2.3	−4.0[2]
	W	3.1	2.0	3.9	2.5	19.0
Hungary	CPI	4.6	6.7	9.8	19.0	29.0
	W	6.6	7.9	14.5	13.6	25.0
Poland	CPI	4.6	32.5	33.0	260.0	585.0
	W	10.5	27.1	38.5	289.5	398.0
Romania	CPI	1.0	5.0	0.8	0.9	5.7
	W	5.7	4.8	1.4	4.0	18.0
Soviet Union	CPI	0.3	1.0	2.0	1.9	5.3
	W	3.3	2.4	5.0	9.1	12.3
Yugoslavia	CPI	17.5	47.5	131.0	1240	585.0
	W	18.9	42.5	125.1	1605	406.0

[1] Preliminary. [2] May–December relative to 1989 average.

Sources: IMF International Financial Statistics, UN Economic Commission for Europe, Vienna Institute for Comparative Economic Studies and national data.

of four factors: a gradual reduction of subsidies to less than 20% of government expenditure; a phased liberalisation of prices, with the proportion of market-determined prices reaching 90% early this year; reforms of the tax system, including the introduction of value added and personal income taxes; and devaluation of the currency combined with increasing exposure of the economy to world market prices as foreign trade was gradually switched towards countries with convertible currencies. The influence on prices of administrative measures as opposed to excess demand and/or wage cost pressures was striking last year, when an effective depreciation of the exchange rate together with incomes policies curbing nominal wage growth strengthened the monopoly position of large enterprises and enabled them to compensate for the reduction of subsidies almost entirely through higher prices, primarily in the domestic market.

Inflation in conditions of gradual price liberalisation

Price reforms and stabilisation policies in Poland ...

Consumer price inflation in *Poland* rose to an average rate of more than 30% during 1980–88 as a result of initial steps towards price liberalisation in 1981–82 and strong wage pressures, due in part to a high degree of wage indexation. Most prices remained subject to control until mid-1989, when food prices were liberalised. As a result of higher energy prices later in the year, compounded by the effects of a worsening fiscal imbalance, a series of devaluations and continued strong wage pressures, the rate of inflation rose to almost 650% during the twelve months to December. Consequently, a key supporting element in the liberalisation of virtually all prices which took effect in early 1990 was the introduction of a "nominal anchor". This was complemented by very restrictive monetary and fiscal policies, including positive real interest rates, a sharp fall in the growth of monetary and credit aggregates and an improvement in the general government budget balance by an estimated 11% of GDP. In fact, to break the wage/price/devaluation spiral the Polish authorities have relied on two nominal anchors: a partially convertible currency with a fixed rate against the US dollar (originally for six months but subsequently extended) and a nominal wage norm. The latter was enforced by reducing the degree of compensation for price inflation and subjecting excessive wage increases to steeply progressive tax penalties. Together with the monetary and budgetary measures, this two-pronged approach facilitated the move towards market-determined prices, and by mid-1990 the monthly rate of inflation had fallen to 4–5%.

In *Yugoslavia* the stabilisation programme was also based on a fixed nominal exchange rate (against the Deutsche Mark) and a wage norm supported by restrictive monetary and fiscal policies. Moreover, the measures included price liberalisation and a move to a convertible currency. However, because the problems inherited from the past were much more serious than in Poland, the programme had to give greater weight to anti-inflation policies than to reform. Firstly, the rate of consumer price inflation had reached 2,700% by the end of 1989 and, as a result of a poor output performance, the unemployment rate stood at almost 12%. Secondly, a financial system in which banks are owned by enterprises and in which the National Bank, until recently, had very little independence, had generated an unusually high degree of monetary accommodation. As can be seen from the table opposite, the main sources of monetary and credit expansion in Yugoslavia have been the refinancing of credits to the enterprise sector together with the absorption by the National Bank of devaluation losses on enterprises' foreign debt and the revaluation gains on residents' foreign currency deposits. Against this background an important component of the stabilisation measures was the transfer of credit subsidies and the Bank's losses on residents' hedging operations to the government budget. Steps were also taken to keep the government budget in surplus and to strengthen the autonomy of the National Bank. As a result of these various measures the monthly rate of inflation fell to 0–1% in the course of only six months but tended to rise again towards the end of last year.

... and Yugoslavia

First lessons from the reform and transition process

The key role of stabilisation policies, but ...

One principal conclusion concerning the sequencing of the reform process that emerges from developments in 1990 is the importance of complementing price liberalisation with restrictive macro-economic policies. In both Poland and Yugoslavia price shocks or a high inherited rate of inflation were absorbed without sparking off a wage/price spiral and in Hungary a wide range of measures have been introduced without major setbacks. Further, but more tentative, lessons may be drawn from the problems that these three countries have encountered during the second half of last year and from the experience with partial reform in other countries.

Firstly, in the countries which implemented comprehensive reform programmes real output and demand have failed to recover following large relative price changes, and the supply side has responded more slowly than

Monetary developments in Yugoslavia Contributions to changes in total deposits, based on end-of-period data						
Items	1980–85[1]	1986	1987	1988	1989	1990[2]
	percentage changes and percentage points					
Currency and demand deposits (M_1)	10.1	29.3	30.3	59.2	482	31.1
Time and savings deposits	31.1	55.5	99.1	184.2	1,842	3.8
of which: In foreign currency	*26.3*	*30.1*	*82.0*	*146.8*	*1,443*	*1.5*
Total deposits	41.2	84.8	129.5	243.4	2,324	34.9
Domestic credits	41.4	90.2	114.2	230.2	2,373	37.6
Enterprises	33.4	62.3	109.2	203.2	1,904	n.a.
of which: In foreign currency	*15.2*	*19.4*	*58.2*	*114.5*	*1,008*	*−2.7*
Other sectors[3]	8.0	27.9	5.0	27.0	470	n.a.
Net foreign assets	−28.8	−31.2	−78.3	−115.9	−555	−2.7
Other assets, net[4]	28.6	25.8	93.6	129.1	506	
Memorandum items:	in ratios					
Total deposits/GSP	*0.80[5]*	*0.58*	*0.60*	*0.68*	*1.24*	*n.a.*
Enterprise credits/GSP	*0.76[5]*	*0.46*	*0.49*	*0.56*	*0.95*	*n.a.*

[1] Average annual rate. [2] Preliminary. [3] Including banks' securities investment. [4] Mainly valuation effects. [5] 1980.

Sources: National Bank of Yugoslavia and IMF International Financial Statistics.

... problems in controlling price developments and ...

anticipated. Moreover, even though nominal wages have stayed below the wage norm and real wages have fallen, enterprises have passed on much of the reduction in subsidies in the form of higher prices. As a result, in all three countries the monthly rate of inflation seems to have become entrenched in the 3–5% range, despite weak demand and restrictive policies. Taken together these developments could indicate that when privatisation and institutional changes do not proceed at the same pace as price liberalisation enterprises will not be exposed to competitive pressures in the domestic market. Consequently, they respond to general demand restraint by cutting output and attempt to raise prices as soon as policies are relaxed even temporarily.

... in choosing an appropriate exchange rate

Secondly, when the authorities opt for a fixed exchange rate the choice of the appropriate level poses a dilemma. On the one hand, as has been seen in Poland and to some extent also in Hungary, if the exchange rate is fixed at a low level to support the external current account the monopoly position of state enterprises will be strengthened and, in the absence of offsetting measures, current-account surpluses will boost monetary growth. On the other hand, if the initial level is set too high it will become increasingly difficult for the authorities to maintain a nominal exchange rate anchor without jeopardising the external position, while adjusting the level will undermine the credibility of the reform plan.

Thirdly, in retrospect developments in 1990 clearly show that the introduction of nominal anchors or partial reforms in economies in which fundamental problems have not been resolved will provide only temporary relief. Yugoslavia, for instance, initially achieved an impressive reduction in the rate of inflation and also managed to lower the rate of growth of the monetary and credit aggregates. However, the reform package did not contain adequate measures to deal with the problem of unprofitable and highly indebted enterprises or with that of underlying wage pressures. Hence, when policies were relaxed wages accelerated sharply and, in order to cover mounting enterprise losses and additional subsidies, the credit ceiling was circumvented by regional governments and branches of the National Bank. Moreover, in response to a marked deterioration in the current account, the dinar was twice devalued by almost 30% against the Deutsche Mark early this year and access to foreign exchange deposits was blocked for households as well as enterprises.

Only temporary relief, when fundamental problems remain ...

Finally, in those countries which are less advanced in the reform process the partial measures adopted appear to have aggravated inflationary pressures and financial imbalances rather than stimulating real output. More specifically, with workers gaining more influence over enterprise decisions, nominal wages have increased relative to labour productivity and growing shortages of consumer goods have pushed up household saving relative to income (see the table below). Partial liberalisation has given enterprises greater incentives to retain profits for their own use, and following steps to decentralise investment decisions banks were also granted more freedom in lending to enterprises. Most importantly, however, the partial reform process has been accompanied by rising public sector deficits, largely financed by the central banks. This is especially evident in the Soviet Union (see the table opposite), where budget financing has been the single most important cause of the sharply increasing M_2/GDP ratio. In fact, credit to enterprises, which was an important source of monetary growth prior to 1985, appears to have been "crowded out" in recent years.

... or only partial reforms are undertaken

The role of the financial system in the reform process

The past year has witnessed an intensive debate concerning the need for economic stabilisation and the speed and sequencing of the reform process.

Developments in household savings deposits

Countries	1970	1975	1980	1985	1988	1989	1990[1]
	end-year deposits, as a percentage of NMP (GDP) in current prices						
Bulgaria	37.9	53.2	50.2	61.3	62.4	63.3	n.a.
Czechoslovakia	20.4	28.7	32.3	39.9	43.8	45.0	n.a.
GDR	42.9	47.6	51.5	51.5	56.5	58.5	n.a.
Hungary[2]	12.7	16.8	20.1	22.4	18.7	15.3	15.0
Poland	15.3	22.4	25.1	19.9	15.3	8.2	n.a.
Romania	n.a.	11.1	16.3	17.5	21.8	25.4	30.3
Soviet Union	16.1	25.1	34.0	38.2	47.1	50.0	54.3
Yugoslavia	18.2	19.7	22.9	20.5	28.1	58.5	n.a.

[1] Partly estimated. [2] Excluding convertible currency deposits; break in series after 1987.

Sources: UN Economic Commission for Europe, UN National Accounts, IMF International Financial Statistics and national data.

Monetary developments in the Soviet Union						
Items	1980–85	1986	1987	1988	1989	1990[1]
	percentage changes					
M_1	6.8	7.6	15.7	15.4	14.3	13.4
M_2	7.5	8.5	14.7	14.1	14.8	15.3
	changes in percentage points[2]					
held by:						
households	5.6	7.3	7.6	8.5	10.9	9.9
enterprises	1.9	1.2	7.1	5.6	3.9	5.4
"due to":						
credit to enterprises	10.8	−18.4	−5.5	− 6.2	−2.8	−2.6
credit to the government	2.9	6.0	14.7	20.7	17.2	21.9
	in percentages					
Memorandum items:						
Public sector deficit/GDP	*0.4*[3]	*− 6.2*	*−8.8*	*−11.0*	*−9.5*	*−8.3*
M_2/GDP	*35.5*[4]	*51.2*	*56.9*	*61.2*	*65.5*	*72.0*

[1] Preliminary or estimated. [2] Contributions to changes in M_2. [3] 1981–85. [4] 1980.
Sources: IMF, World Bank, OECD and EBRD: *A Study of the Soviet Economy.*

Need to include the financial system in the reform process

The set of measures most urgently needed differs from country to country, depending primarily on the degree of open and suppressed inflation, the external position and the extent to which relative prices are distorted. Much of the current debate is focused on privatisation, and this is obviously an essential component of the transition process. However, given the problem of inherited financial imbalances discussed above and the risk that failure to remove such imbalances will reduce the effectiveness and sustainability of stabilisation policies, reform of the financial system will also need to play a central role. Indeed, the existence of a stable financial system will not only facilitate other reform measures but may be a precondition for their success.

Financial systems under central planning

The development of the financial system in eastern Europe. In the traditional central planning model money played a purely passive role and the financial system was mainly designed to monitor payment flows and ensure compliance with the physical plan. The corresponding institutional structure was highly centralised, consisting of a state bank, which served as both central bank and the main commercial bank, complemented by a few specialised banks including a foreign trade bank, an investment bank, one or more banks serving special sectors and a savings bank which dealt only with households and offered housing loans at very low interest rates.

First steps towards financial reform

The first step in reforming the system was the creation of a two-tier banking system, separating the different functions of the state bank by setting up a few commercial banks, which took over the outstanding loans and were to serve particular regions or sectors, while leaving the responsibility for monetary and credit control with the state bank. Yugoslavia introduced a two-tier system as long ago as 1965, whereas most other countries did not take this first step until 1987–89 and Romania only last year. Several countries have added a third tier by permitting the creation of "new" banks (in some cases including foreign banks or foreign participation) which are not burdened with the non-performing loan stock of the earlier state banks and whose business activities are not confined to certain sectors or regions. Securities markets have also begun to develop, offering households a wider range of saving instruments and providing the authorities with alternative means of financing budget deficits and implementing monetary policy. Hungary is furthest advanced in this respect. A bond market was opened in 1983 and since December 1988 the National Bank has guided short-term interest rates through regular Treasury bill auctions. Marketable CDs have existed since 1988 and last summer the stock exchange was reopened. Poland started trading in equities this year and sales of National Bank bills have been introduced for short-term monetary control. In both countries, however, securities holdings constitute only a small proportion of the financial assets held by the private sector and credit ceilings, combined with the refinancing of bank credits to enterprises, have remained the principal tools of monetary control.

Remaining problems include ...

Issues of financial reform. Given the very recent changes in the banking system and the embryonic state of the securities markets the financial systems face many problems. Probably the most serious risk to the stability of the system is the stock of unprofitable enterprise loans held by the commercial banks. According to an official survey, in Hungary non-performing loans amounted to at least 28% – and possibly as much as 44% – of domestic credits to enterprises at the end of 1989, with a small number of "hard core" insolvent enterprises accounting for almost 30% of these loans. Similar figures have been derived for Yugoslavia, which recently set up a new agency for restructuring banks. By contrast, Romania has chosen to write off three-quarters of company debts against government deposits. Given the size of the stock of non-performing loans and the risk it poses to the whole financial system, a sharing of the burden between banks and the public sector may ultimately be required despite the already high public debt in most countries and the need to limit the size of budget deficits.

... the stock of non-performing loans ...

A related problem concerns the savings banks, which hold almost the entire stock of long-term housing loans at very low fixed interest rates. In those countries that have raised nominal and real interest rates savings banks are facing the same problems that US savings and loan associations encountered in the early 1980s. Poland has resolved this problem by rewriting earlier contracts and raising mortgage rates, while Hungary has created a special housing fund, which has relieved the banks of mortgage credits and replaced them with government securities. However, as in most other countries which cover the negative margin vis-à-vis deposit rates through government subsidies, budgetary transfers to certain end-users or the housing fund are still required.

... mortgages at low interest rates ...

In several countries involuntary savings balances have accumulated in recent years and create a risk of excess demand and accelerating inflation. To some extent this "monetary overhang" can be seen as the counterpart to the stock of unprofitable loans and as evidence of a serious misallocation of capital. The Soviet Union recently attempted to reduce the overhang by

... involuntary savings balances ...

withdrawing large-denomination notes from circulation. An alternative solution is to offer households more attractive but less liquid financial assets, which may happen as securities markets grow more important and the privatisation process gets under way.

The "stock problems" discussed above can be traced to various shortcomings of the earlier system, notably the lack of saving incentives and the practice of distributing credits without paying sufficient attention to the profitability of the underlying investment. Considering the large investment needs that most countries are facing, an important objective of financial reform will need to be the creation of incentives to mobilise savings and to channel them into those areas that offer the highest real rates of return. Hungary, Poland and Yugoslavia liberalised interest rates last year and other eastern European countries have taken similar steps this year. However, in the absence of market-based instruments it has proved difficult to keep real interest rates positive, especially at times of rapidly accelerating inflation. Moreover, because of the slow progress in restructuring enterprises and difficulties in imposing a "hard budget constraint", interest rates cannot be relied upon as a mechanism for allocating credits efficiently.

... absence of saving incentives and a "hard budget constraint" ...

Increasing the interest sensitivity of credit demand is not, however, the only obstacle. Because most of the changes in the financial area are of very recent date, efficient management and experience in processing and appraising loan applications are generally lacking. Only a few countries have as yet succeeded in adopting and implementing up-to-date accounting rules and regulatory and supervisory standards. Given the risks to the whole system from only a few failures this is obviously an urgent requirement and joint projects with western central banks have been launched to address these problems.

... loan appraisals and supervision ...

Another inherited problem is the highly segmented nature of the banking system and the associated low degree of risk diversification. Despite the relaxation of earlier restrictions on lending activities, most loans by the second-tier commercial banks are highly concentrated by region or sector. Moreover, although most commercial banks can now compete for deposits the bulk of household deposits has remained with the savings banks, with the result that the main source of funds for the commercial banks is the refinancing of enterprise credits at the central bank.

... market segmentation ...

Even in those countries that are furthest advanced in the reform process the financial system is highly concentrated and suffers from a lack of competition. This problem is partly related to that of segmentation and partly to the way that the second-tier banks were set up, and the lack of competition is reflected in unusually wide interest margins. The return on equity is very high compared with that observed for banks in industrial countries, but to some extent this reflects the low capital base and questionable accounting practices.

... lack of competition ...

The current ownership structure of banks is problematic. In some countries, most evident in Yugoslavia, non-financial enterprises hold a large proportion of banks' equity capital, creating a high risk of "insider lending".

... and problematic ownership structure

In one case the equity capital is largely held by the central bank, which may conflict with the central bank's responsibility for refinancing and regulation. In other countries the government is the major shareholder, posing a risk of excessive lending to projects given priority by the state. Most banks are also undercapitalised. Bulgaria, Hungary, Poland and Yugoslavia have adopted (or proposed) minimum capital/asset ratios, but many banks do not meet the standard and need fresh capital.

Above all, insufficient monetary control owing to ...

The final and probably most crucial problem concerns the central banks' ability to exercise effective control over the growth of the monetary and credit aggregates. As discussed earlier, a primary source of excessive money supply growth has been central bank financing of budget deficits and an essential requirement is that the central banks should be freed from the obligation to finance fiscal imbalances. Poland has gone furthest in this respect by legally prohibiting the National Bank from financing government deficits and the losses of state enterprises. In the Soviet Union, by contrast, the State Bank has very little autonomy, and central banks generally are constrained by the embryonic state of the financial markets and by the fragile condition of the commercial banks.

... state deficits ...

... informal credit markets ...

Another aspect of monetary control involves the informal credit market. In some countries inter-firm credits account for one-third to one-half of total lending and increases in such credits have frequently frustrated attempts to tighten monetary policy. Poland succeeded in reducing inter-firm credits last year, whereas in Hungary and Czechoslovakia they have increased further, in the latter case especially after the price reform early this year. The solution to this problem will depend in part on the creation of a more efficient payment system, complemented by stricter supervision. However, since inter-firm credits are often involuntary and linked to payment arrears, it will also depend on the adoption of clearly defined bankruptcy procedures.

... and the absence of economic accountability

Above all, effective monetary control hinges on establishing a system of commercial bank management in which credits are only granted to accountable economic agents. Past developments have clearly shown that the absence of economic accountability results in a serious misallocation of credit and real capital and, ultimately, in lower real growth and widening financial imbalances. At the same time, creating a higher degree of financial discipline may be the area of financial reform that will encounter the most serious obstacles, since it can only proceed in step with the transformation and privatisation of the enterprise sector.

IV. International trade and payments

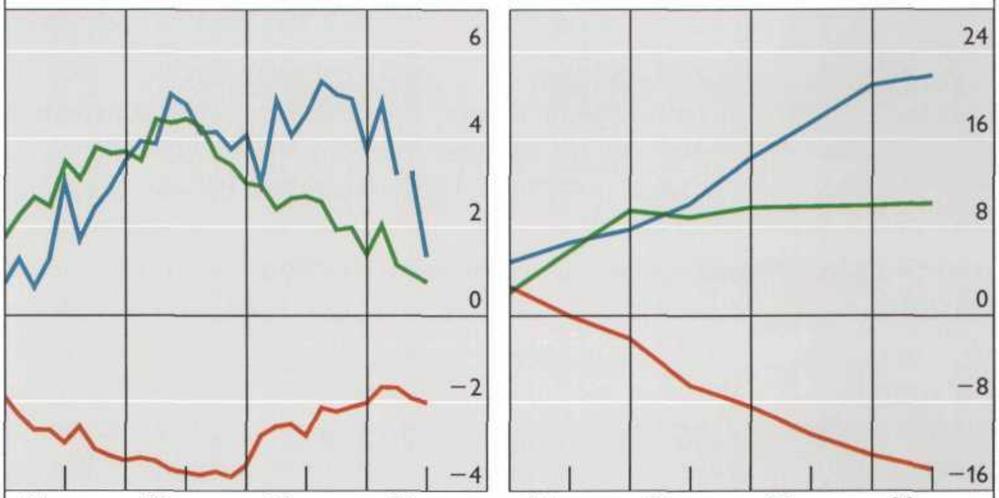
Highlights

External adjustment was much helped last year by the progressive desynchronisation of demand in the larger economies. The coincidence of continued buoyancy in Japan, a German boom intensified by unification and recession in both the United States and the United Kingdom did much to trim the largest imbalances in the industrial world. By the end of the year the current-account surpluses of Germany and Japan had both come down to about 1% of GNP, compared with around 4–5% at their peak. Although data for the first quarter of 1991 show that Germany's surplus has been eliminated, there are signs that Japan's surplus has started to widen again. The US deficit continued to decline modestly, to 1.8% of GNP, as exports rose strongly once again and the recession held down merchandise import growth. There was also a sharp improvement in the US balance on investment income, thanks largely to much-reduced earnings of foreign companies operating in the United States. Similar factors cut the UK deficit by over 1% of GNP.

But there was less adjustment in the rest of the industrial world. In particular, a number of European countries faced large and widening deficits. The commitment to the EMS exchange rate mechanism in some countries, and nominal exchange rate targets in others, has doubtless increased nominal exchange rate stability in Europe in recent years. In the absence of full convergence of inflation rates, however, certain real exchange rates have tended to diverge markedly. There were some indications last year that major changes in competitiveness have begun to undermine external equilibrium in a number of European countries.

The tendency for high-interest/high-inflation countries to attract private capital inflows well in excess of (often large) current-account deficits was again in evidence last year. Nevertheless, international portfolio flows fell sharply for the first time since 1985 as the attractiveness of the US market waned and Japanese financial institutions apparently became less inclined to commit funds abroad.

Of greatest concern, however, was the increasing difficulty eastern European countries experienced in attracting foreign capital from private sources. As the Soviet Union sank deeper into economic and political crisis, banks became most reluctant to extend further credit without guarantees from western governments. As Bulgaria stopped servicing its foreign debt early in the year, banks' unwillingness to lend tended to spread to most of eastern Europe. The old Comecon trading system began to crumble, depriving eastern European countries of seemingly captive Soviet markets



Note: The German current account includes the external transactions of the former GDR from July 1990.

[1] Quarterly. [2] At year-end; 1990 figures are partly estimated.

and forcing them to pay much more for oil imported from the Soviet Union.

The brief, if violent, hiccup in world oil prices during the Gulf crisis provided a temporary boost to the export revenues of the Soviet Union and other oil exporters, but prices were high for too short a time to have a lasting effect on world payments patterns. There were, however, signs that some developing countries (including some Latin American oil exporters) that had pursued policies of economic reform were beginning to find it easier to attract private capital from abroad. Increased direct investment, greater foreign interest in domestic equity, new international bond issues and bank lending all played a part.

World trade

Import growth falls almost everywhere

Weaker economic activity in most industrial countries, and the onset of recession in some, led to a progressive deceleration in the volume of industrial countries' imports last year. The most important exception to this trend was Germany, where import volumes expanded by around 15% between the fourth quarters of 1989 and 1990. Import growth in the other industrial countries over the same period slowed to only about 1%. Overall, the volume of imports by industrial countries – including Germany – rose by almost 6% in 1990 as a whole. In the developing world, oil exporters (excluding Kuwait and Iraq) were able to increase imports more rapidly than in the previous year (see Chapter III). The average volume of imports of the Asian NIEs also grew strongly until mid-1990, but then appeared to have reached a plateau. Elsewhere, import volumes decelerated sharply. Excluding Comecon trade, world trade growth slowed to 5% last year, from 7% in 1989. Comecon trade appears to have fallen by about 15% as special bilateral trading arrangements between the Soviet Union and its eastern European trading partners began to crumble.

Most non-oil commodity prices decline

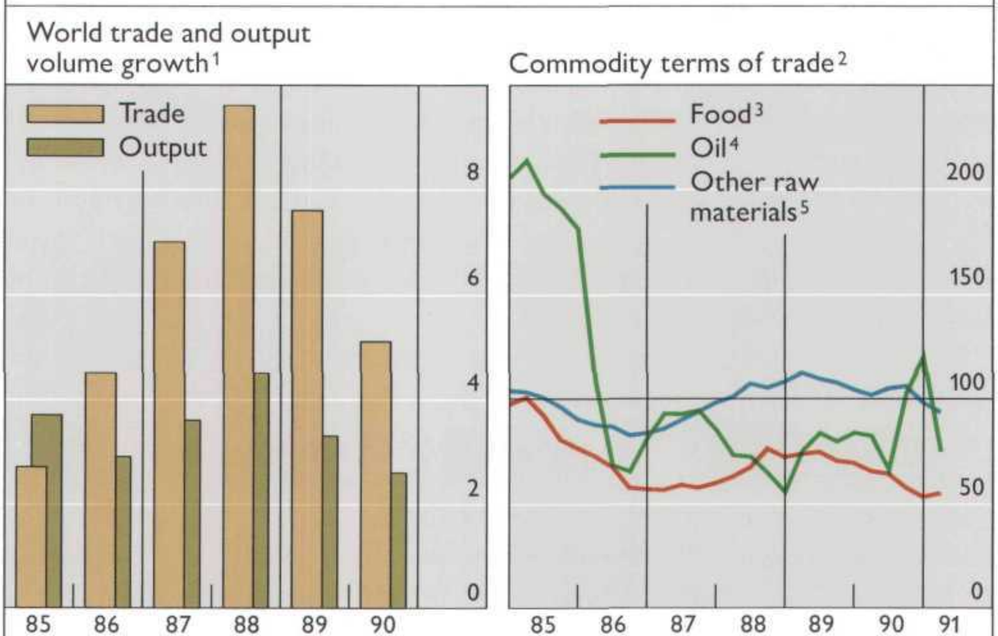
The terms of trade between the industrial and developing worlds were subject to two conflicting forces. As is discussed more fully in Chapter III, the dollar prices of the four major non-oil commodity groups all declined despite the depreciation of the dollar; with the export prices of manufactured goods rising markedly, the terms of trade for primary commodities deteriorated. Oil prices, on the other hand, rose by about 17–18% in real terms in 1990. At the same time, volatility increased enormously as oil markets were confronted both with major medium-term changes in oil demand and with war in the Middle East.

Oil

Renewed dependence on OPEC

One underlying trend of some importance is industrial countries' renewed dependence on OPEC oil. All but three industrial countries are net oil importers, a group that last year imported 22.6 million barrels a day, one-quarter more than in 1985 and not far short of the levels prevailing during the first oil shock (see the table overleaf). The greater part of this rise reflects a heavy increase in US imports. One reason for this is that the lower oil prices prevailing since the mid-1980s have tended to depress

Indicators of world trade



[1] Excluding eastern Europe. Output growth as measured by percentage changes in real GDP. [2] Ratio of commodity prices to export prices of manufactured goods (1978 = 100). [3] Excluding tropical beverages. [4] Saudi Arabian light crude. [5] HWWA index, industrial raw materials, excluding energy.

Sources: IMF, UN, HWWA and national data.

World trade in oil[1]						
Countries and areas	1973–74	1979–80	1985	1988	1989	1990
	in millions of barrels per day					
Industrial countries	26.0	25.1	15.9	19.1	20.4	20.7
Importing countries	23.9	25.0	17.8	21.2	22.1	22.6
of which:						
United States	*6.1*	*7.3*	*4.4*	*6.6*	*7.1*	*7.1*
Japan	*5.2*	*5.1*	*4.1*	*4.5*	*4.8*	*5.0*
Western Europe	*11.7*	*11.6*	*8.9*	*9.5*	*9.6*	*9.8*
Exporting countries	2.1	0.1	− 1.9	− 2.1	− 1.7	− 1.9
Canada	− 0.2	0.1	− 0.3	− 0.4	− 0.2	− 0.3
Norway	0.1	− 0.2	− 0.6	− 0.9	− 1.3	− 1.4
United Kingdom	2.2	0.2	− 1.0	− 0.7	− 0.2	− 0.2
Non-OPEC LDCs	2.7	2.5	0.2	0.7	1.0	1.1
of which:						
Asian NIEs and others[2]	*1.1*	*1.7*	*1.5*	*2.2*	*2.3*	*2.5*
Former centrally planned economies	− 0.5	− 1.2	− 1.9	− 2.2	− 1.9	− 1.7
OPEC[3]	−29.4	−26.8	−13.8	−17.7	−19.4	−20.6

Note: Data reported only in tonnes have been converted by a factor of 7.1 barrels per tonne for crude and 8.1 barrels per tonne for products. Because this is only an approximation, the sum of individual countries may not equal area totals.

[1] Net imports (− = net exports). [2] Including the Philippines and Thailand. [3] Plus Oman and Bahrain.

Sources: International Energy Agency, United Nations, national data and oil industry sources.

relatively costly oil production in the United States: between 1985 and 1990 US oil production fell by about 15%. Secondly, oil consumption per unit of output has fallen less in the United States than in other industrial countries. As a result, the volume of US net oil imports in 1990 was some 60% higher than in 1985. Moreover, developing-country demand has increased strongly in recent years, notably in the Asian NIEs. Since the net exports of the oil-producing industrial countries (Canada, Norway and the United Kingdom) have on balance remained relatively stable and Soviet exports have fallen, the lion's share of this extra demand has been met by OPEC members.

Increased oil production ...

Even so, OPEC's output was still below capacity at the end of the 1980s and agreeing production limits proved difficult as prices were still relatively low, though rising, and some members had a great need of foreign exchange. OPEC production therefore expanded strongly in 1989, yet prices still rose: by December 1989 the average price of imported oil had reached almost $19 a barrel compared with around $15 a year earlier.

... eventually depresses prices

But further increases in supply in early 1990 – notably from the Middle East – began to weigh heavily on prices. By June, prices had fallen to an average of less than $15 a barrel. However, speculation that a new OPEC agreement would rein back supply led to a substantial recovery in prices well before Iraq's invasion of Kuwait on 2nd August. The rapid imposition of a United Nations embargo on Iraqi-controlled trade effectively deprived

The Gulf crisis boosts prices ...

world oil markets of two major exporters which, on the eve of the invasion, were producing more than one-quarter of total Middle Eastern output. Oil prices rose steeply. Although increased production elsewhere quickly replaced a large proportion of lost Iraqi and Kuwaiti output, the threat that imminent war might disrupt production in Saudi Arabia and neighbouring states led to strong upward pressure on spot prices.

... but only for a time

Quite unlike the oil shock at the end of the 1970s – when oil prices rose for several months before reaching an apparently sustainable plateau – the rise in oil prices that occurred last year was widely expected to be fairly quickly reversed. Indeed, as world oil production rose above pre-invasion rates, and as stocks on land reached their highest level since 1981, prices weakened appreciably towards the end of the year. The eventual war in early 1991 was indeed short and did little damage to oil production facilities outside Iraq and Kuwait. Oil prices thus declined further, falling back to their pre-invasion levels in the early months of 1991.

The Uruguay Round

Trade talks stall

The Uruguay Round of GATT negotiations, launched in September 1986, was adjourned without agreement in December 1990, the original date for its completion. At the outset, its ambit had been particularly widely set. Whereas earlier rounds had sought to liberalise trade in well-trodden areas, the latest one addressed highly contentious fields that had previously been left to one side: agriculture, services, intellectual property rights and foreign direct investment. The Round's objectives also included the development of more explicit rules in the "grey areas" of increasingly used non-tariff restrictions, such as countervailing and anti-dumping duties, as well as "voluntary" export restraints.

Some achievements ...

The failure to respect the original timetable, however, does not necessarily preclude the achievement of at least some of the Uruguay Round's objectives. Some progress has already been made. Firstly, dispute settlement procedures have been extended and streamlined. In addition, GATT surveillance of national trade policies has been strengthened with the new Trade Policy Review Mechanism, under which members' trade practices are subject to detailed multilateral scrutiny. However, while a number of developing countries have taken some major steps towards greater trade liberalisation, most of the non-tariff barriers erected by industrial countries remain in place. Many of these supposedly "temporary" measures have no automatic expiry date and most are bilateral, not only discriminating between foreign suppliers but also encouraging bilateral connivance in undermining the multilateral trading system. Developing countries are particularly hard hit by such measures. UNCTAD statistics indicate that in 1990 one-quarter of industrial countries' imports of manufactured goods from developing countries were subject to a broad range of non-tariff barriers compared with only 15% in the case of their imports from each other. The drift towards managed trade on the part of industrial countries can hardly be considered acceptable now that many developing countries, as well as the nascent market economies in eastern Europe, have

... but many barriers remain

committed themselves to open and integrated trading regimes to support structural adjustment and to further economic efficiency – often at the behest of their industrial country creditors.

Failure dangerous

A conclusion to this round of trade negotiations that failed to widen the scope of the GATT or to deal with the new barriers to trade would not immediately undermine the international trading system. But if effective multilateral agreement is not reached, trading blocs – which have become more prominent in recent years – may be tempted to take matters into their own hands, exposing world trade to serious protectionist dangers.

Narrowing US and Japanese imbalances

Demand desynchronisation helps adjustment ...

... as does the dollar depreciation ...

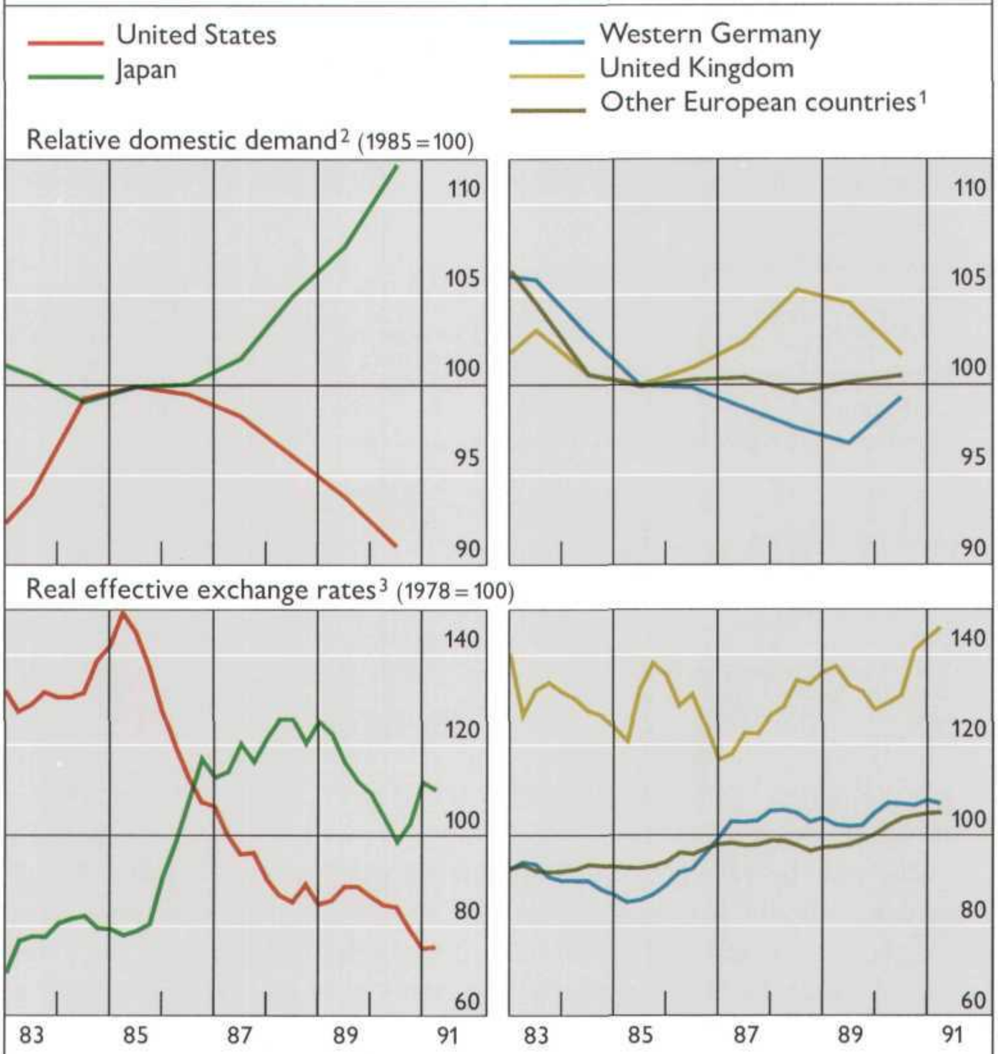
... while the yen still weak

Three factors shaped trends in the current accounts of the two largest economies in 1990. Firstly, differentials in domestic demand growth continued to support the expansion of both US exports and Japanese imports; indeed, demand differentials widened further in 1990, with the United States in recession from late in the year and growth being sustained in Japan (see the graph opposite). Secondly, the deterioration in US cost competitiveness in the first half of 1989 was limited and short-lived. The real effective exchange rate of the dollar started depreciating again at the end of 1989, and by the end of 1990 it had fallen to half its early-1985 peak. Until the middle of 1990, by contrast, the exchange rate of the yen moved in a direction that ran counter to external adjustment, largely because of steep declines vis-à-vis European currencies. Subsequently the yen recovered, but its real effective rate still ended the year well below levels reached earlier. Finally, in contrast to preceding years (and indeed contrary to the underlying medium-term changes in net external asset positions), changes in net investment income payments contributed to a further narrowing of the imbalances last year. While this was partly because interest rates on dollar-denominated assets fell relative to returns on most non-dollar paper, the main cause was declining foreign direct investment income – both on foreign investment in the United States and on Japanese investment abroad. However, it should be remembered that direct investment income estimates are among the least reliable of current-account statistics as national collection methods, coverage and accounting conventions all differ greatly. One indication of the magnitude of the problem is the discrepancy between reported aggregate direct investment income and payments. In 1989 (the latest year for which world data are available) aggregate direct investment income amounted to $107 billion while payments were $79 billion, leaving a discrepancy of some $28 billion.

United States

The US current-account deficit narrowed by almost $11 billion last year. Much of the reduction came from a recorded $8½ billion improvement in net investment income. The trade deficit fell by only $6 billion. As a result of the Gulf crisis, however, net transfer payments abroad rose appreciably. As most of the US costs incurred in the Gulf war – domestic as well as

Relative domestic demand and real effective exchange rates



Note: Averages have been calculated using 1988 GDP weights and exchange rates.

[1] Austria, Belgium, Denmark, Finland, France, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden and Switzerland. [2] Total domestic demand relative to average demand in the other industrial countries. [3] Nominal effective exchange rates adjusted for movements in relative unit labour costs.

foreign – are due to be met by foreign governments, the United States is likely to be the beneficiary of substantial foreign transfer payments during the first half of 1991, implying a deceptively favourable current-account position.

Strong US adjustment in volume terms ...

A further contraction of the trade deficit took place despite an \$11 billion increase in the oil import bill, due largely to higher oil prices. The non-oil trade deficit (both nominal and at constant prices) declined by about \$17 billion last year as export volumes continued to expand faster than import volumes and the non-oil terms of trade barely changed.

... as exports rise ...

The volume of non-agricultural exports rose by 10% in 1990 and held up quite well throughout the year. Although lower than in 1989, the increase exceeded growth in US export markets (weakened particularly by the Canadian recession): US penetration of foreign markets thus increased yet again in 1990. Exports of finished manufactured goods were particularly

The US current account

Items	1986	1987	1988	1989	1990 year	1990 fourth quarter[1]
	in billions of US dollars					
Current account	−145.4	−162.3	−128.9	−110.0	− 99.3	−111.0
Trade balance	−145.1	−159.5	−127.0	−114.9	−108.7	−115.4
Net investment income	11.0	5.3	1.6	− 0.9	7.5	17.1
Other services	4.7	6.5	11.5	20.5	22.9	23.8
Transfers	− 16.0	− 14.6	− 15.0	− 14.7	− 21.1	− 36.4
Memorandum items:						
Oil imports	*34.4*	*42.9*	*39.6*	*50.9*	*62.1*	*74.8*
Non-oil trade balance[2]	*− 95.5*	*− 79.5*	*− 36.9*	*− 19.5*	*− 2.7*	*3.8*
	percentage changes					
Export volumes	*6.2*	*16.2*	*22.4*	*11.4*	*8.8*	*8.4*[3]
Import volumes	*12.4*	*6.5*	*6.7*	*6.1*	*3.7*	*− 0.7*[3]
Terms of trade	*3.0*	*− 6.1*	*2.4*	*− 1.8*	*− 1.8*	*− 8.0*[3]

[1] At a seasonally adjusted annual rate. [2] At constant 1982 trade unit values. [3] Change over fourth quarter 1989.

strong. However, agricultural exports fell as price declines outweighed a small volume increase.

... and non-oil imports slow

The year-on-year growth of non-oil imports in volume terms fell from around 6% in the first quarter to just 2% by the final quarter. Capital goods imports (which in the preceding three years had grown at an annual average rate of 16%) expanded by less than 4% in value terms in 1990 as fixed investment spending stagnated. Similarly, the weakness of household spending depressed consumer goods imports, which in value terms rose by just over 3%, compared with an average rate of growth of 9% in the period 1987–89.

Invisibles balance improves ...

Improved US competitiveness has also stimulated the export of services: the non-factor services surplus (excluding military and government transactions) rose from $4 billion in 1985 to $28 billion in 1989 and almost $31 billion last year. Tourist receipts have increased particularly strongly over this period.

... especially on investment income ...

... reflecting cyclical ...

The balance on investment income, which had shown a small deficit in 1989, registered a surplus of $7.5 billion last year. This was almost entirely the result of a drop of nearly $10 billion in income payments on foreign direct investment (FDI) in the United States. Much of this precipitous decline appears to have been cyclical. The slump in investment income payments, reflecting depressed profitability and major capital losses, was most pronounced in the non-manufacturing sector, which accounts for about half of total FDI.

... and other factors

However, the weakness of direct investment earnings also appears to reflect more structural factors. At the beginning of the 1980s the return on FDI in the United States was around 12.5%; by 1989 this had fallen to

3.8%. Among the major players, Japanese investors have persistently had the lowest return. Last year the recession pushed the average return on all FDI in the United States down to only 1%. The consequence is that, while the direct investment liabilities of the United States rose by almost $350 billion over the decade, direct investment income payments last year were actually lower than in any year since 1982. This has been a major factor containing US imbalances, but, apart from cyclical influences, the underlying causes are far from clear. One explanation frequently advanced is that new investment inevitably takes time to show a profit, so that the recency of much FDI might explain the low average rate of return. It is also possible that foreigners have simply invested unwisely or have felt compelled to make unprofitable investments to forestall potential protectionist measures. Or perhaps profits have been manipulated to avoid US tax liability.

Japan

Japan's surplus falls in value but not in volume terms ...

For the third year in succession, Japan's current-account surplus narrowed in 1990, to just under $36 billion, thanks mainly to a $13 billion reduction in the trade surplus. This, however, can be entirely explained by a significant deterioration in the terms of trade. In volume terms, by contrast, there were signs that the merchandise surplus was rising. The net surplus on investment income showed little change in 1990 as a whole, despite increased net external assets.

The rise in the price of oil was the main factor behind the 6.5% deterioration in the terms of trade and added about $10 billion to Japan's import bill in 1990. This increase was rather greater than elsewhere

The Japanese current account

Items	1986	1987	1988	1989	1990 year	1990 fourth quarter[1]
	in billions of US dollars					
Current account	85.8	87.0	79.6	57.2	35.8	25.6[2]
Trade balance	92.8	96.4	95.0	76.9	63.5	67.2[2]
Net investment income	9.5	16.7	21.0	23.4	23.2	17.2
Other services	−14.4	−22.4	−32.3	−38.9	−45.4	−51.8
Transfers	− 2.1	− 3.7	− 4.1	− 4.2	− 5.5	− 7.0[2]
Memorandum items:						
Oil imports	*24.1*	*27.4*	*25.8*	*29.8*	*41.3*	*66.4*
Non-oil trade balance[3]	*74.0*	*63.0*	*49.0*	*44.8*	*45.1*	*51.2*
	percentage changes					
Export volumes	*− 0.6*	*0.3*	*5.1*	*3.8*	*5.5*	*9.5*[4]
Import volumes	*9.5*	*9.3*	*16.7*	*7.8*	*5.8*	*6.4*[4]
Terms of trade	*33.6*	*2.2*	*2.3*	*− 4.2*	*− 6.5*	*−10.9*[4]

[1] At an annual rate. [2] Seasonally adjusted. [3] At constant 1985 trade unit values. [4] Change over fourth quarter 1989.

because oil imports in Japan last year were above average in the period when oil was most expensive. Overall, the volume of energy imports rose by almost 5% in 1990.

... as yen depreciation ...

The sharp depreciation of the yen from late 1988 to April 1990 (see the graph of the real effective exchange rate on page 71) appears to have brought the reduction in Japan's real external surplus to a halt last year. One indication of this is that the non-oil trade surplus, which had fallen almost continuously since 1987, began to rise from mid-1990 (see the table on page 73). This reflected both greater export buoyancy and significantly slower import growth.

... stimulates exports ...

The volume of exports gathered strength as the year progressed, rising by 9.5% over the year to the fourth quarter. As world demand was weakening, Japanese export market shares thus appear to have risen, stimulated by the 20% improvement in cost competitiveness between end-1988 and mid-1990. The dollar value of exports to Europe and to South-East Asia rose by over 12%, while exports to the United States fell by about 3%. This pattern reflected not only cyclical factors (continued growth in Europe and Asia and recession in the United States), but also the fact that the yen had fallen most against European and some Asian currencies. Moreover, production by Japanese subsidiaries in the United States has continued to displace imports. Despite a deterioration in the cost competitiveness of Japanese exports after mid-1990 as the yen appreciated, the volume of exports continued to grow comparatively strongly in the first quarter of 1991.

... starts to bring the import boom to a close ...

Although domestic demand – rising by 5¾% – continued to exert a powerful stimulus, non-fuel import volume growth weakened significantly in 1990. For the year as a whole it averaged 6.2%, well below the annual average of about 15% recorded in the period from 1985 to 1989. This slowdown was most pronounced for raw materials, which fell by almost 4% in volume terms. By contrast, imports of manufactured goods – which include the products of Japanese overseas subsidiaries, notably in South-East Asia – rose by over 10% in volume terms. Imports of machinery and equipment and of durable consumer goods expanded strongly. There were, however, signs in the early months of 1991 that this long period of very rapid import growth might be drawing to a close: the volume of non-oil imports grew only slowly in the year to the first quarter.

... and limits the deterioration on invisibles

Expenditure on foreign travel by Japanese residents, which had already decelerated sharply in 1989, continued to grow relatively slowly in 1990 as the period of yen weakness apparently discouraged travel abroad. Conversely, the number of foreigners visiting Japan, after increasing by 24% in 1989, rose by a further 17% in 1990. Overall, the net travel deficit widened by about $2 billion, a rather moderate deterioration compared with earlier years.

Investment income stagnates ...

The virtual stagnation of the surplus on net investment income during the last couple of years, despite the continued accumulation of large current-account surpluses, and thus of net external assets, requires some explanation. The main reason is the growing share of direct investment

... because of low returns on direct investment

stocks in net external assets and the low and declining returns on Japanese foreign direct investment – at least as measured in the balance-of-payments statistics. In the mid-1980s, when direct investments represented about 30% of net external assets, the average return was around 6¼%; by 1990, when the direct investment share had risen to over half, it had fallen to less than 3% – well below that on financial assets.

Factors which may account for such low returns on foreign investment include depressed profits in the United States and rapidly rising labour costs in Asian subsidiaries. It may also be the case that direct investment designed mainly to circumvent protectionist barriers – potential as well as actual – is not very profitable. Moreover, Japanese balance-of-payments statistics on net investment income do not include Japanese subsidiaries' earnings retained abroad and thus may somewhat understate "true" earnings.

Germany: domestic boom and unification

A German boom ...

Domestic demand accelerated in western Germany last year just when demand in most partner countries was faltering. In such circumstances, the strong stimulus to eastern German demand resulting from unification served to produce a sizable reduction in Germany's trade surplus in real terms. In the year to the fourth quarter of 1990 the volume of non-energy imports rose by almost 18%, while export volumes changed little. The non-oil trade surplus fell steeply in constant price terms (see the table below). By the final quarter of the year, the current-account surplus was running at just over $20 billion at an annual rate. These trends continued in the early months of 1991; with large contributions being made to US and

The German current account

Items	1986	1987	1988	1989	1990 year	1990 fourth quarter[1]
	in billions of US dollars					
Current account	40.1	46.2	50.6	57.3	47.3	22.4[2]
Trade balance	54.6	68.6	78.3	76.2	69.6	45.6[2]
Net investment income	4.2	4.0	5.1	11.6	17.1	24.7
Other services	− 6.2	−10.1	−14.6	−12.4	−17.2	−15.9
Transfers	−12.5	−16.3	−18.2	−18.1	−22.2	−32.0[2]
Memorandum items:						
Oil imports	*15.5*	*16.9*	*14.7*	*16.1*	*22.1*	*31.3*
Non-oil trade balance[3]	*61.1*	*55.1*	*58.2*	*60.6*	*36.4*	*10.8*
	percentage changes					
Export volumes	*1.3*	*2.9*	*6.7*	*8.1*	*1.4*	*0.6*[4]
Import volumes	*6.2*	*5.4*	*6.4*	*7.3*	*11.6*	*15.1*[4]
Terms of trade	*15.3*	*3.5*	*− 0.1*	*− 2.7*	*1.3*	*− 1.4*[4]

Note: Includes the external transactions of the former GDR from July 1990.

[1] At an annual rate. [2] Seasonally adjusted. [3] At constant 1980 trade unit values. [4] Change over fourth quarter 1989.

other countries' military costs arising from the Gulf conflict, the German current account swung into deficit.

Between 1985 and 1989 the rate of growth of domestic demand in western Germany had been persistently lower than that in trading partners, a trend that was decisively reversed last year, in part because of increased spending in western Germany by eastern German residents (see the graph on page 71). This boom led to an 18% increase in the Deutsche Mark value of imports from other western European countries (fourth quarter of 1990 over fourth quarter of 1989). Thus the German trade surplus vis-à-vis the rest of Europe fell by some DM 36 billion last year.

... increases imports

The marked appreciation of the exchange rate against the dollar not only contributed to a weakening of German competitiveness outside Europe but also served to limit the domestic impact of higher oil prices. With the prices of other commodities declining even in dollar terms and the Deutsche Mark prices of US and Japanese exports falling, the German terms of trade actually improved somewhat.

Unification a major factor

All these developments were, however, dwarfed by the repercussions of the economic policies pursued since unification. Extremely favourable currency conversion rates, huge transfers from the Federal Government and special subsidies for investment in the five new Länder gave a strong boost to eastern German spending power that could not be met by eastern German industry. The net result was the development of a very large implicit trade deficit in eastern Germany. As production capacity in western Germany was already fully stretched at the time of unification, much of this extra demand was diverted abroad, leading to a dramatic drop in united Germany's surplus vis-à-vis the rest of the world.

Invisibles deficit changes little ...

Net investment income rose by over $5 billion, largely as a result of the further increase in interest-bearing net external assets. The non-factor services deficit widened by more than $4 billion, partly because of increased transport and insurance costs associated with the much higher level of merchandise imports, but mainly because of a bigger travel deficit last year. Although transfers to eastern Germany no longer appeared in the balance-of-payments statistics as from mid-1990 (when monetary union with the Federal Republic took effect), there was a further sizable increase in transfers abroad last year.

... but transfers rise

Other European countries

Germany stimulates the rest of Europe

The German boom provided a considerable stimulus to the exports of other European industrial countries, particularly those most closely linked to the German economy, viz. *Austria, the Netherlands* and *Switzerland.* This was a significant factor behind the trade-balance improvement seen in each of these countries last year. By the end of the year, faster-than-average growth in German demand was also adding over $4 billion annually to *Italy's* exports. The exports of *France,* Germany's largest trading partner, received a similar boost. Even European countries more distant from Germany – notably *Spain* and the *United Kingdom* – saw exports rise substantially.

Exports of European OECD countries to Germany

Years	Austria	BLEU*	Denmark	France	Italy	Netherlands	Spain	Sweden	Switzerland	United Kingdom	OECD Europe
	in billions of Deutsche Mark, at annual rates										
1989	21.9	35.8	9.5	53.2	48.2	52.9	10.1	12.7	20.2	34.5	325.0
1990	24.8	40.6	11.2	58.9	50.4	59.1	12.1	13.1	22.7	37.8	364.6
1990 Q IV	26.7	46.0	13.0	64.0	60.8	64.7	15.5	13.9	24.7	43.2	404.9
	percentage changes from year-earlier period										
1990	*13*	*14*	*19*	*11*	*16*	*12*	*20*	*4*	*13*	*10*	*12*
1990 Q IV	*19*	*32*	*26*	*12*	*21*	*19*	*20*	*7*	*14*	*17*	*18*

* Belgium-Luxembourg Economic Union.
Source: OECD.

Demand diverges elsewhere

A second important element in European trade developments last year was below-average growth of domestic demand, which helped to improve the current-account position in a number of European countries. The most striking case was that of the *United Kingdom*, where total domestic demand fell by 1.4% in the year to the fourth quarter of 1990: the volume of imports was flat while exports continued to rise strongly, in part reflecting an increase in exports by UK subsidiaries of foreign companies. Weak domestic demand also contributed to a trade-balance improvement in the Nordic countries. Thanks also to strong demand from Germany, *Denmark* recorded its first current-account surplus since 1963. By contrast, domestic demand expanded strongly in a number of southern European countries: the trade deficits of *Greece, Portugal, Spain* and *Turkey* widened substantially.

Changes in competitiveness begin to worsen imbalances ...

A third major influence on trade balances within Europe has been changes in international competitiveness. Since the last general realignment of EMS parities in January 1987, nominal exchange rates have been relatively stable both within and outside the exchange rate mechanism. As inflation differentials, though narrowing, have accumulated during the last three years or so, the real exchange rates of countries with current-account deficits have risen relative to those of surplus countries. Some simple comparisons of changes in consumer prices, expressed in a common currency, reveal a substantial loss of competitiveness in Spain, Sweden, the United Kingdom and, to a lesser extent, Italy – all countries with sizable current-account deficits. Among the surplus countries, the Netherlands has seen the greatest real depreciation vis-à-vis the deficit countries, followed by Germany (see the table on page 79).

... on trade ...

Deteriorating competitiveness contributed to a significant further decline in Sweden's export market share last year as the volume of manufactured exports grew only a little. Italy also lost market share for the second year running. Worsening competitiveness also contributed to a widening in Greece's deficit on trade in industrial goods. On the other hand, Spanish exports continued to expand strongly despite the marked weakening of competitiveness, aided in part by the sales of foreign-owned

Current-account balances of the industrial countries and the Asian NIEs

Countries and areas	Current-account balance			of which: Trade balance			of which: Balance on investment income		
	1988	1989	1990	1988	1989	1990	1988	1989	1990
	in billions of US dollars								
Industrial countries	−50.0	−78.3	−92.8	−8.0	−36.6	−39.0	−8.8	−10.9	−7.4
United States	−128.9	−110.0	−99.3	−127.0	−114.9	−108.7	1.6	−0.9	7.5
Japan	79.6	57.2	35.8	95.0	76.9	63.5	21.0	23.4	23.2
European Community	14.4	6.7	−0.1	17.1	2.6	−0.8	−8.4	−2.6	−2.6
BLEU*	3.5	3.6	4.4	1.4	1.0	2.4	0.3	1.3	1.0
Denmark	−1.8	−1.4	1.6	1.9	2.4	4.6	−4.3	−4.5	−5.5
France	−4.3	−4.3	−7.6	−8.6	−10.7	−13.7	0.1	−0.4	−2.2
Germany	50.6	57.3	47.3	78.3	76.2	69.6	5.1	11.6	17.1
Greece	−1.0	−2.6	−3.6	−6.1	−7.4	−10.1	−1.5	−1.5	−1.6
Ireland	0.6	0.5	0.9	3.8	4.0	3.8	−4.0	−4.5	−4.7
Italy	−6.3	−10.8	−14.9	−1.4	−2.2	0.6	−7.1	−8.3	−13.0
Netherlands	5.2	7.8	9.6	8.4	8.1	9.8	−0.7	1.1	1.2
Portugal	−0.6	0.1	−0.1	−5.1	−4.9	−6.6	−0.9	−0.7	−0.4
Spain	−3.8	−10.9	−16.0	−18.0	−24.5	−29.8	−3.5	−3.0	−4.0
United Kingdom	−27.7	−32.6	−21.7	−37.5	−39.4	−31.4	8.1	6.3	9.5
Other European countries	2.7	0.1	−1.4	−7.5	−9.9	−9.4	4.7	3.3	1.8
Austria	−0.5	0.1	0.0	−6.3	−6.6	−6.3	−0.9	−0.9	−1.3
Finland	−2.8	−5.5	−6.7	1.1	−0.2	0.6	−1.9	−2.4	−3.7
Iceland	−0.2	−0.1	−0.2	0.0	0.1	0.1	−0.2	−0.2	−0.2
Norway	−3.7	0.2	4.0	−0.1	3.8	7.6	−2.0	−2.5	−2.7
Sweden	−0.7	−3.1	−5.6	5.1	3.7	4.1	−1.7	−2.0	−3.7
Switzerland	9.0	7.5	9.7	−5.5	−6.5	−5.9	13.4	13.1	15.7
Turkey	1.6	1.0	−2.6	−1.8	−4.2	−9.6	−2.0	−1.8	−2.3
Other industrial countries	−17.8	−32.3	−27.8	14.4	8.7	16.4	−27.7	−34.1	−37.3
Australia	−10.2	−17.3	−14.3	−1.1	−4.0	−0.1	−8.1	−10.9	−11.8
Canada	−8.2	−14.1	−13.6	8.2	6.4	9.3	−15.4	−18.7	−20.8
New Zealand	−0.6	−2.1	−2.2	2.1	0.9	0.9	−1.9	−2.0	−2.0
South Africa	1.2	1.2	2.3	5.2	5.4	6.3	−2.3	−2.5	−2.7
Four Asian NIEs	28.5	23.8	14.9	21.8	18.9	9.2	3.0	4.3	5.9
Hong Kong	2.8	5.0	3.8	−1.1	0.6	−0.7	1.0	1.2	1.8
Singapore	1.3	2.3	2.3	−2.3	−2.5	−3.0	0.6	0.6	0.7
South Korea	14.2	5.1	−2.1	11.4	4.6	−1.9	−2.0	−1.3	−1.0
Taiwan	10.2	11.4	10.9	13.8	16.2	14.8	3.4	3.8	4.4

* Belgium-Luxembourg Economic Union.
Sources: IMF, OECD, national data and BIS estimates.

manufacturing enterprises. Spanish non-energy imports continued to grow significantly faster than output.

... and services

Changes in price competitiveness have not only affected merchandise trade but have also influenced international tourism. Foreign tourist earnings in Spain again declined in real terms last year. Spending on foreign travel by Italian residents doubled in dollar terms in 1990, offsetting much of the

Consumer prices in selected European countries in a common currency											
Years	Surplus countries[1]					Deficit countries[1]					
	Belgium	Germany	Nether-lands	Switzer-land	Average	France	Italy	Spain	Sweden	United King-dom[2]	Average
	in Deutsche Mark, 1987 = 100										
1988	100.4	101.3	100.9	101.4	101.0	101.3	102.2	108.5	107.0	110.7	105.9
1989	103.4	104.1	101.7	100.2	102.3	104.8	110.6	122.1	115.8	114.9	113.6
1990	108.4	106.9	104.3	107.0	106.7	109.1	115.4	130.1	119.8	114.7	117.8
1991 Q I	111.2	108.8	105.7	111.9	109.4	110.1	119.2	136.4	127.0	120.7	122.7

[1] According to current-account position in 1987–90. [2] Excluding housing.

World Cup-related boom in earnings: the surplus on tourism changed little. Low-inflation France has done much better, with the travel surplus rising again to reach $7.7 billion, nearly double the surplus recorded as recently as 1988. By last year real receipts from foreign visitors were some 25% above their 1988 level.

Other factors include oil ...

The rise in oil prices was the fourth factor affecting the pattern of trade balances in Europe. The value of *Norway's* net energy exports rose by $4½ billion. Energy exports of the United Kingdom, however, failed to increase much more strongly than imports: UK trade in fuels was in almost exact balance last year. At the other end of the spectrum, French and Italian net energy imports rose by $4½ billion and $3½ billion respectively.

... and investment income

Italy suffered a $5 billion increase in net investment income paid abroad. Changes in net investment income also tended to accentuate imbalances in most other countries (increasing in surplus countries and falling in deficit countries), with the exception of the United Kingdom, where net receipts rose by more than $3 billion last year despite the continued accumulation of large current-account deficits. The main reason was the recession-induced fall in UK corporate profits, which depressed foreigners' direct investment earnings.

The net result of these factors was that a number of European countries were confronted with large and widening current-account deficits last year. Greece (whose current-account deficit amounted to 5.4% of GDP), Finland (4.9%), Spain (3.2%), Sweden (2.6%) and Turkey (2.4%) all fell into this category.

Other industrial countries and the Asian NIEs

Deficits persist in Australia, Canada ...

In industrial countries outside Europe, current-account positions improved slightly. Following two years of sharp deterioration, the trade accounts of *Australia* and *Canada* strengthened significantly in 1990. This was due entirely to volume developments, as both countries suffered terms-of-trade losses. With both economies entering recession in 1990, the volume growth of imports slowed sharply, while that of exports quickened. Nevertheless, their current-account deficits remained large, reflecting persistently poor international competitiveness and substantial interest payments on large external debts. In Australia, factor income payments abroad rose to over 25% of exports of goods and non-factor services and prevented the current-account deficit from falling much below 5% of GNP, disturbingly high for a heavily indebted country in recession. Net Canadian investment income payments rose by a further $2 billion, to the equivalent of almost 15% of total exports, offsetting most of the trade improvement.

... and New Zealand

The *South African* and *New Zealand* economies have both grown slowly during the last five years or so. While depressed growth has led to large current-account surpluses in South Africa, a current-account deficit has persisted in New Zealand. This is largely explained by their very different export performance. South Africa has preserved the price competitiveness of its exports: in spite of sanctions, the country increased the volume of its non-gold exports at an annual average rate of over 6½% between 1985 and 1989. By contrast, export growth in New Zealand over the same period averaged only ½% as a sharp deterioration in competitiveness and trade barriers against its agricultural products limited exports. While South African external debt has fallen to around 20% of GDP, New Zealand's had risen to well over 70% of GNP by the end of 1990.

South Africa has done better

Some of these trends were again visible last year as South Africa's non-gold exports rose by close to 6% in volume terms while imports fell, contributing to a current-account surplus, which reached 2.3% of GNP. Although imports were flat, a small pick-up in the volume of exports in New Zealand merely offset a terms-of-trade deterioration, leaving the current-account deficit virtually unchanged.

South Korea in deficit ...

Rapid import growth and sluggish export growth marked the trade accounts of *Taiwan* and *South Korea* last year. Although an improving balance on net investment income provided some offset, their current-account balances deteriorated, with South Korea moving to a deficit of over $2 billion. *Singapore* and *Hong Kong* experienced a terms-of-trade loss but were able to keep export growth in better balance with import growth. The current-account position of Singapore changed very little, while Hong Kong saw a moderate deterioration.

... but other Asian NIEs in surplus

The demise of Comecon

Trade

Trade developments in eastern Europe in 1990 were marked by two main features: the beginning of the disintegration of the Comecon barter trading system and the further decline in Soviet oil production and exports. Comecon trading arrangements had distorted the trade of eastern-bloc countries, creating a dependence on the Soviet Union at the expense of trade with the rest of the world.

Bilateral barter in Comecon ...

Until very recently the bulk of trade between former Comecon members took place according to bilateral agreements whereby goods were simply exchanged by virtual barter. Such trade deals tended in principle to be balanced; moreover, any imbalance which happened to arise did not lead to payment in convertible currency. Instead, it was settled in "transferable" roubles – essentially credits/debits in the clearing system for use (subject to negotiation and so not automatic) in subsequent deals. Moreover, accumulated balances vis-à-vis one trading partner could not usually be used to offset balances with other Comecon members: the roubles were thus not transferable even within the mechanism. Under this system the Soviet Union exported oil and other energy products in exchange for manufactured goods from its partners.

... ending as Soviet oil exports fall

By early 1990 it had become clear that this system would soon be replaced by trading at world prices with settlement in convertible currency. Under the old clearing arrangements, oil exports to eastern Europe were "sold" at well below world prices. Since this system was still in operation last year, the Soviet Union had a strong incentive to divert oil exports from eastern Europe to industrial countries. The brunt of the decline in Soviet oil production therefore fell on exports to eastern Europe, which dropped by 30%, while the volume of Soviet oil exports to OECD countries fell relatively little.

Legacy of heavy dependence on the Soviet Union

Comecon trading arrangements have left most eastern European countries heavily dependent on trade with the Soviet Union – both as a provider of oil and other energy products and as an important export market. However, comparisons of export dependence among eastern European countries are to some extent vitiated by the use in trade statistics of very different notional cross exchange rates between the rouble and the dollar. While Bulgaria and the Soviet Union retained the long-established rate of around 0.6 roubles to the dollar for 1989 statistics – the latest available – most of the others have moved to a much lower exchange rate; such differences tend to exaggerate differences in dependence on the Soviet market (see the table overleaf). Applying a uniform exchange rate in the middle of the range of cross rates actually used suggests that an average of about 40% of eastern Europe's exports in 1989 had gone to other European Comecon countries, and about one-quarter to the Soviet Union alone. Bulgaria sent almost 50% of its exports to the Soviet Union, while Romania sent only 14%. Also, dependence on Comecon was often much greater for certain manufactured goods because of the earlier policy of specialisation – the production of buses in Hungary, steel in Poland and so on. Moreover, a significant fraction of exports went to developing countries, often under preferential arrangements not unlike those within Comecon. Overall, less than half of eastern European exports went to developed western economies.

Soviet deficit on non-convertible trade widens ...

To avoid accumulating transferable rouble credit balances, which had no certain convertible currency value, eastern European countries sought to reduce "clearing" exports in line with lower imports. In the event, however, this strategy could not always be fully implemented, so that the Soviet Union's non-convertible trade deficit may have widened by about R.7 billion in 1990. In particular, Poland failed to prevent the emergence of a non-convertible surplus with the Soviet Union that was much larger than its accumulated transferable rouble debt at the beginning of the year. Also the non-convertible surplus of the former GDR rose by over R.3 billion.

Exports to European Comecon partners as a percentage of total exports[1]

	Soviet Union	Other eastern Europe	of which Bulgaria	Czecho-slovakia	GDR	Hungary	Poland	Romania	Yugo-slavia[2]
	non-convertible trade valued at national rouble/dollar cross rate								
Rouble/dollar rate	0.63	–	0.65	1.51	1.74	2.09	2.96	0.96	..
Soviet Union	–	32	66	31	24	25	21	23	22
GDR	10	5	6	7	–	5	4	5	2
Other eastern Europe	36	15	12	17	18	10	10	10	11
	non-convertible trade valued at 2 roubles to the dollar								
Soviet Union	–	28	49	27	22	26	25	14	..
GDR	5	4	4	6	–	5	4	3	..
Other eastern Europe	17	13	9	14	17	11	12	6	..

1 Data refer to 1989. 2 Yugoslavia's non-convertible trade with the Soviet Union is not denominated in transferable roubles.
Sources: CMEA, UN Economic Commission for Europe and national data.

While monetary union with the Federal Republic of Germany made imports from eastern Europe uncompetitive, the Federal authorities used subsidies to ensure that the existing contracts for the delivery of exports to the Soviet Union were indeed fulfilled – as stipulated by the unification treaty.

... but convertible trade balance helped by higher oil prices

The temporary surge in oil prices during the Gulf crisis boosted Soviet oil export earnings in western markets by around $2½–3 billion, which was the major factor behind the *Soviet Union's* apparent surplus with industrial countries (according to western statistics: see the table on page 84). Moreover, the volume of grain imports from the West was cut and the dollar price of grain fell. Total imports from the United States therefore declined by over $1 billion. A third factor that helped the Soviet Union to economise on foreign exchange was a sharp reduction in exports to, and an increase in imports from, certain non-Comecon developing countries. Such exports – counted as convertible currency exports in the official statistics – were typically financed by Soviet credits that were often settled by the eventual delivery of goods or sometimes not repaid at all. By drawing on its accumulated credits with certain countries, the Soviet Union may have reduced its aggregate trade surplus with the developing world by about $¾ billion in 1990. Had it been able to receive Iraqi oil as planned, the surplus would have been cut further. This change tended to worsen the Soviet Union's current-account position, but did not require increased foreign borrowing. Finally, the shortage of foreign currency led to a draconian retightening of exchange controls: import restrictions were reimposed and, from the beginning of 1991, enterprises' convertible currency earnings were virtually confiscated.

Loss of Soviet and former GDR markets...

The Soviet Union was not very eager to pay hard currency for goods from eastern Europe, not only because of their relatively poor quality, but also because western suppliers could provide trade credits (sometimes government-guaranteed) that eastern European countries could not match – a key consideration given the Soviet Union's precarious external financing situation last year. The unification of Germany also diverted demand in eastern Germany to western goods. Other eastern European countries were thus faced with a sharp contraction of export demand in their major markets: all in all, the volume of exports to former Comecon members fell by around 20%.

... not replaced by exports to the West

Only a very small proportion of the eastern European goods no longer wanted on the Soviet market found an outlet on western markets: eastern Europe's share of western European markets, for instance, rose only marginally in 1990, failing to reverse the decline seen during most of the 1980s (see the table below). However, some countries did manage to increase their export market share somewhat, notably *Poland* and, to a much lesser extent, *Hungary*. Moreover, these countries' gains appear to have become much more marked towards the end of the year, while *Romania* fell further behind.

Recent signs of stronger exports of Poland

There were also signs that the commodity structure of Czechoslovakian, Polish and Hungarian exports was improving since the share of manufactured goods rose. As these are the countries that have liberalised their foreign trade regimes the most – allowing enterprises to trade abroad on their own initiative, easing access to imported inputs and so on – these recent signs of export vigour could be considered encouraging. However, such export strength may well be partly a lagged reaction to the substantial improvement in competitiveness resulting from earlier large devaluations that have since been reversed by high rates of inflation.

Massive current-account deterioration in Romania ...

Poland's convertible currency surplus improved by over $2 billion, largely thanks to a compression of imports as real domestic demand fell sharply and to the lagged effects of earlier currency depreciation. The Hungarian deficit was eliminated. Czechoslovakia shifted to current-account deficit last year as the volume of convertible currency imports responded strongly to import liberalisation. Bulgaria remained in deficit and the current account of Romania swung massively from surplus to deficit as the earlier policy of virtual autarky and extreme compression of domestic demand was abandoned.

Eastern European exports to western Europe

Countries	1980–84	1985–87	1988	1989	1990	
					year	fourth quarter
	as a percentage of western Europe's total imports					
Soviet Union	2.5	1.9	1.6	1.4	1.6	1.6
Yugoslavia	0.4	0.6	0.6	0.7	0.7	0.6
Other eastern Europe	1.5	1.4	1.3	1.3	1.3	1.3
Bulgaria	0.10	0.07	0.05	0.05	0.06	0.05
Czechoslovakia	0.32	0.30	0.28	0.28	0.27	0.28
Hungary	0.28	0.28	0.29	0.29	0.31	0.33
Poland	0.43	0.40	0.41	0.41	0.48	0.53
Romania	0.32	0.30	0.25	0.24	0.14	0.13

Note: Western Europe includes all European OECD countries except Finland (whose trade with the Soviet Union is governed by special bilateral arrangements).
Source: OECD.

Convertible currency balances in eastern Europe										
Countries	Trade balance with industrial countries[1]			Net interest payments due[2]			Current-account balance			
	1988	1989	1990	1988	1989	1990	1988	1989	1990	Change 1989 to 1990 as % of merchandise trade[3]
	in billions of US dollars									
Soviet Union[4]	−2.9	−4.5	1.6	1.5	2.2	4.4	2.3	−4.0	−4.3	..
Other eastern Europe	0.5	−0.8	−2.8	6.6	6.8	6.1	3.8	1.0	−5.2	..
Bulgaria	−1.7	−1.7	−0.7	0.4	0.6	0.4	−0.8	−1.3	−0.8	14
Czechoslovakia	0.0	0.2	−0.3	0.2	0.2	0.3	−0.1	0.4	−1.1	−29
Hungary	−0.2	−0.5	−0.1	1.1	1.4	1.5	−0.8	−1.4	0.1	24
Poland	0.3	−0.5	0.6	2.9	3.2	3.3	−0.3	−1.6	0.7	31
Romania	2.5	2.4	0.2	0.2	0.0	−0.2	3.6	2.9	−1.4	−92
Yugoslavia	−0.4	−0.7	−2.5	1.8	1.4	0.8	2.2	2.0	−2.7	−44

[1] Based on OECD cif imports data converted to fob by multiplying by a factor of 0.93. In 1990 the Soviet Union's trade balance thus calculated differs markedly from preliminary Soviet estimates. Trade with eastern Germany is excluded. [2] Interest due, whether paid or not. [3] Average of convertible currency imports and exports in 1989. [4] Excluding gold.

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

... and Yugoslavia

Yugoslavia faced a $4.7 billion deterioration in its external accounts last year – a huge shift equivalent to almost one-half of the value of merchandise trade (see the table above). In the final quarter of the year, the monthly trade deficits averaged about $¾ billion. A radical programme of import liberalisation and the massive real appreciation brought about by tying the dinar to the Deutsche Mark in December 1989 were the main causes. The dinar was devalued by almost 30% against the Deutsche Mark at the end of December 1990, reversing only the smaller part of the earlier real appreciation. Amid mounting economic and political turmoil, as well as strong inflationary pressure, a further 30% devaluation took place in April 1991.

For eastern Europe other than the Soviet Union, the aggregate trade balance with western industrial countries worsened by about $2 billion last year. In addition, a number of countries were increasingly obliged to pay for some Soviet oil deliveries in hard currency, with significant payments in the fourth quarter of the year. As interest payments on foreign debt also rose, the current-account deficit of eastern Europe excluding the Soviet Union widened by more than $5 billion.

Transition to trading at world prices benefits the Soviet Union ...

The underlying external position of most eastern European countries is even weaker than the recent statistics suggest. The introduction of world prices into trade between the Soviet Union and the rest of eastern Europe (with effect, in principle, from 1st January 1991) implies a substantial deterioration in eastern Europe's terms of trade vis-à-vis the Soviet Union. Estimates prepared on the basis of 1989 trade data suggest that an oil price of $18 per barrel – the market price in mid-1990 before the Gulf crisis broke, and close to that prevailing in early 1991 – would cost the other eastern European countries approximately an extra $8–9 billion a year. However, part of this potential burden can be avoided by closing down firms in the energy-intensive heavy industry sector and by letting energy

... but costs the rest of eastern Europe dear prices charged to other firms and to households reflect world prices, thus curbing demand. As the Soviet terms-of-trade gain needs to be set against a likely decline in oil production that may tend to limit the volume of Soviet exports, the region as a whole faces a significant widening of its external deficit.

External finance

Banks unwilling to renew Soviet credits ...

The greatly deteriorating internal situation in the Soviet Union and delays in meeting payment obligations have made western commercial banks extremely reluctant to extend any further credit not secured by official guarantees. According to BIS statistics on exchange rate adjusted changes in outstanding borrowing, net Soviet repayments of western bank credit amounted to $6.2 billion last year and were particularly large in the fourth quarter (see the table below). Gross repayments were much greater but were offset in part by new bank credits guaranteed by western governments; in particular, German banks' claims on the Soviet Union – usually government-guaranteed – rose by over $6 billion in the second half of 1990. To meet heavy net repayments, the Soviet Union dug deeply into its foreign exchange reserves (deposits with western banks fell by $6.5 billion). This meant that net Soviet recourse to BIS reporting banks fell to around $1/4 billion last year, compared with $8.2 billion in 1989.

By the end of the year the Soviet Union's external bank debt – net of deposits – exceeded $33 billion, up from only $5.3 billion at the end of 1984 before the introduction of perestroika. Much of this debt is short-term: almost half of BIS reporting banks' claims on the Soviet Union are due for repayment within one year. Moreover, delays in paying for imports from the West have left a legacy of $5 billion of unpaid trade debt.

Eastern European transactions with BIS reporting banks

Countries	Net recourse to bank deposits and borrowing		of which: Borrowing		of which: Drawing on bank deposits		Memorandum item: Net external banking debt at year-end		
	1985–89 cumulative	1990	1985–89 cumulative	1990	1985–89 cumulative	1990	1984	1989	1990
	in billions of US dollars								
Soviet Union	19.7	0.3	20.6	−6.2	−0.9	6.5	5.3	30.1	33.4
Other eastern Europe	−7.7	−5.4	−1.9	−3.6	−5.8	−1.8	24.0	25.8	22.7
Bulgaria	5.3	0.2	4.7	−0.4	0.6	0.6	0.1	6.6	7.3
Czechoslovakia	0.9	0.6	1.8	−0.4	−0.9	1.0	1.4	3.0	3.8
Hungary	3.2	−2.4	2.2	−1.9	1.0	−0.5	5.4	10.7	9.3
Poland	−4.7	−3.5	−2.8	0.0	−1.9	−3.5	7.4	6.4	3.5
Romania	−4.9	1.3	−3.8	0.0	−1.1	1.3	2.5	−1.6	−0.3
Yugoslavia	−7.5	−1.6	−4.0	−0.9	−3.5	−0.7	7.2	0.7	−0.9

Notes:
(i) Estimates of borrowing and drawings on bank deposits are derived from exchange rate adjusted changes in reporting banks' assets and liabilities.
(ii) Drawings on bank deposits are a large component of changes in official reserves.

A number of the special factors cited above which limited the Soviet Union's current-account deficit with the West last year may not recur, so that the country now faces acute external financing difficulties.

... and doubts about creditworthiness spread

Banks were also reluctant to extend further credit to other eastern European countries: Bulgarian payment difficulties early in the year provided a further reminder of the risks. Those countries facing substantial current-account deficits could not rely on new bank borrowing to meet their external financing needs and were therefore forced to use their reserves. According to BIS statistics – discussed more fully in Chapter VI – Bulgaria, Czechoslovakia and Romania drew down their bank deposits by a total of about $3 billion.

Capital movements in industrial countries

Portfolio flows decline ...

Aggregate portfolio outflows from the larger industrial countries fell steeply in 1990 and, for the first time for many years, were overtaken by direct investment outflows (see the graph opposite). The decline in portfolio investment in shares was particularly sharp as investors sought more liquid and less risky assets. Exchange rate expectations, interest rate differentials, equity market developments and growth differentials all played a role in determining the pattern of flows. The US and UK recessions reduced inward investment in those two countries. The decline in dollar interest rates relative to those of other major currencies reduced foreign demand for US bonds. There were also signs that foreign investment flows from and into countries that have only recently liberalised capital movements were beginning to eclipse those of the earlier liberalisers.

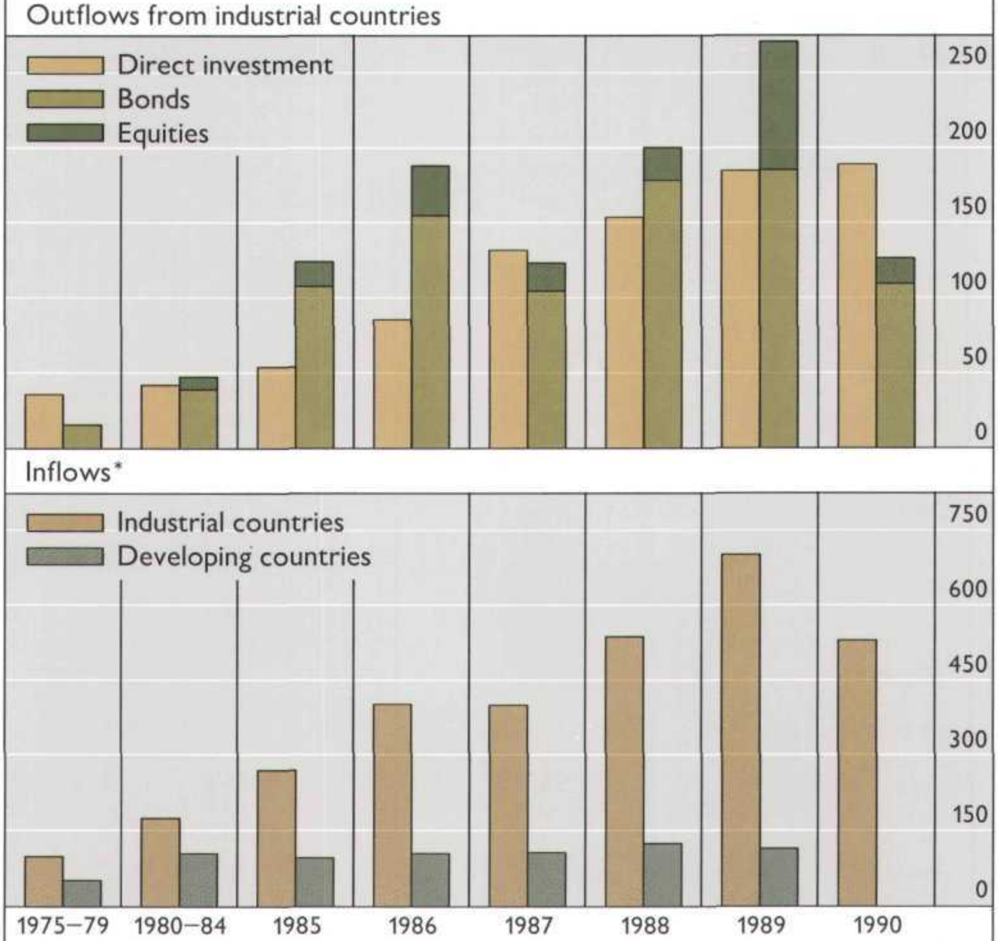
Portfolio investment

... as Japanese investors retreat

The disappearance of the interest rate differential in favour of dollar assets contributed to a $73 billion reduction in Japanese portfolio outflows last year. Indeed, short-term yen rates, which had risen above dollar rates in late 1989, remained above US rates all year, while the long-term interest premium on dollar paper narrowed progressively for much of the year. Large stock market losses also led some institutions to repatriate funds for window-dressing purposes. A more medium-term influence was the fact that financial institutions' diversification into foreign securities – which has sustained Japanese portfolio outflows since 1985 – appears to have reached completion. By the end of 1990, for example, life assurance companies' foreign securities holdings represented 30% of their total securities portfolios, down from almost 34% at the end of 1989. Furthermore, there was a sharp decline in corporate bond issuance abroad, with net issues of external bonds falling from $76 billion in 1989 to about $31 billion. Because a significant proportion of such bonds used to be resold soon after issue to Japanese residents, they typically gave rise to more or less simultaneous outflows and inflows. This was particularly true of foreign currency denominated equity-related bonds. The attractiveness of these bonds was severely dented by the sharp decline in the Tokyo stock market in early

Gross capital flows

In billions of US dollars; annual averages



* Excluding reserve movements. 1990 data for developing countries not available.

Sources: IMF Balance of Payments Statistics and national data.

1990; international issues of shares and equity-related bonds by Japanese entities were actually suspended from the end of March to early July.

US investors diversify abroad ...

US investors, by contrast, stepped up their purchases of foreign securities. In particular, there were signs that US pension funds, which have traditionally invested almost entirely in domestic paper, have started to diversify into foreign securities.

... and European flows fall

German and UK portfolio outflows both declined steeply last year. Outflows from other EC countries rose, however, perhaps as a result of the further liberalisation of foreign investment by financial institutions such as pension funds and insurance companies. The sharp decline in UK outward portfolio investment reflected a major redirection of institutional investment in the wake of heavy foreign investment in the late 1980s. In 1989, when expectations of sterling depreciation were at their strongest, UK non-bank financial institutions had increased their investments in overseas shares by over £13 billion, while new investment in domestic shares had amounted to just a little above £5 billion. This pattern was reversed in 1990 as confidence in sterling returned, with £2.3 billion flowing out of ordinary

Capital movements in thirteen industrial countries								
Items	1975–79	1980–84	1985	1986	1987	1988	1989	1990[1]
	in billions of US dollars, annual averages							
Portfolio investment								
Total outflows[2]	17.0	45.7	119.6	180.3	122.7	197.0	266.7	157.6
United States	5.8	5.8	7.5	4.3	5.3	7.9	21.9	26.7
Japan	2.6	13.8	59.8	102.0	87.7	87.0	113.1	39.7
European Community[3]	3.8	18.7	43.8	62.9	20.8	85.6	116.0	83.0
France	*0.9*	*1.2*	*2.5*	*6.0*	*3.3*	*4.2*	*6.7*	*6.8*
Germany	*1.5*	*4.3*	*11.0*	*9.7*	*13.5*	*41.4*	*26.7*	*14.6*
United Kingdom	*0.8*	*10.8*	*24.7*	*34.0*	*−6.7*	*17.8*	*58.8*	*28.5*
Others[4]	4.8	7.4	8.5	11.1	8.9	16.5	15.6	8.2
Total inflows[5]	21.8	57.3	146.4	170.3	110.6	153.1	288.9	160.5
United States	4.6	16.7	71.4	74.8	34.5	46.6	69.5	5.2
Japan	3.0	11.9	16.7	0.5	−6.1	20.3	85.1	34.7
European Community[3]	8.1	17.1	38.6	65.4	62.0	61.4	107.7	97.5
France	*1.3*	*5.2*	*8.9*	*7.8*	*8.7*	*11.9*	*29.0*	*39.5*
Germany	*3.9*	*8.7*	*12.5*	*33.5*	*11.4*	*−2.3*	*21.8*	*14.8*
United Kingdom	*1.7*	*1.6*	*12.5*	*17.9*	*33.8*	*25.3*	*17.4*	*9.7*
Others[4]	6.1	11.6	19.7	29.6	20.2	24.8	26.6	23.1
Direct investment								
Total outflows[2]	34.1	39.6	53.7	86.0	131.0	154.0	189.3	202.8
United States	15.9	9.6	13.2	18.7	31.0	16.2	31.7	36.4
Japan	2.1	4.3	6.5	14.5	19.5	34.2	44.1	48.0
European Community[3]	14.0	20.7	23.1	40.6	62.4	76.0	89.1	96.0
France	*1.6*	*2.9*	*2.3*	*5.3*	*8.8*	*12.7*	*18.1*	*26.6*
Germany	*3.0*	*3.6*	*4.9*	*10.0*	*9.1*	*11.4*	*14.2*	*22.5*
United Kingdom	*6.2*	*9.3*	*10.7*	*17.2*	*31.4*	*37.3*	*35.6*	*17.5*
Others[4]	2.1	5.0	10.9	12.2	18.1	27.6	24.4	22.4
Total inflows[5]	18.4	34.2	33.4	58.7	92.0	120.5	155.0	114.9
United States	6.1	18.6	19.0	34.1	46.9	58.4	72.2	25.7
Japan	0.1	0.3	0.6	0.2	1.2	−0.5	−1.1	1.8
European Community[3]	10.6	13.3	12.2	17.1	34.0	49.5	69.8	72.2
France	*1.9*	*2.2*	*2.2*	*2.8*	*4.7*	*7.2*	*9.7*	*8.1*
Germany	*1.3*	*0.8*	*0.5*	*1.1*	*1.9*	*1.0*	*6.8*	*1.5*
United Kingdom	*4.2*	*5.3*	*4.7*	*7.3*	*14.1*	*18.3*	*28.8*	*31.6*
Others[4]	1.6	2.0	1.6	7.3	9.9	13.1	14.1	15.2

[1] Partly estimated. [2] Increase in residents' assets. [3] Belgium-Luxembourg, France, Germany, Italy, the Netherlands, Spain and the United Kingdom. [4] Other Group of Ten countries plus Australia. [5] Increase in non-residents' assets.
Sources: National data and IMF Balance of Payments Statistics.

shares overseas and more than £11 billion being put in the domestic equity market. With long-term interest rates on Deutsche Mark paper rising, German investors also turned increasingly to their domestic market. Moreover, most foreign bonds purchased last year by German residents were denominated in Deutsche Mark, whereas in previous years the proportion had usually been below one-third.

US and UK markets' attractions wane

The major change in the pattern of portfolio inflows was the waning of interest in US financial markets as recession and a decline in interest rates reduced the attractiveness of US securities. Japanese investors were actually net sellers of US paper last year to the tune of some $16 billion, following net purchases of over $26 billion in 1989. Inward portfolio investment in the United Kingdom also flagged during most of 1990, although there were signs of some revival towards the end of the year. By contrast, the higher rate of inflows into Germany seen in 1989 was sustained last year. However, the time pattern of foreign purchases of German bonds was distinctly uneven as foreign residents, who were net sellers in the first quarter, purchased German government bonds on a large scale only in the fourth quarter, when yields were around 9%. Inflows to France also rose appreciably.

Direct investment

Direct investment data ambiguous

The picture for aggregate direct investment flows is confused by the fact that the statistics on outflows and those on inflows point to opposite conclusions. While identified aggregate outflows rose by $13 billion, reported aggregate inflows fell by about $40 billion. There is some evidence that inflows into some smaller industrial countries not included in the table opposite rose last year, but this would not have been enough to account for the discrepancy. Although only incomplete data are available at present, aggregate direct investment in the developing countries appears to have changed little last year. The chief reason for the discrepancy seems to lie rather in inconsistent recording and reporting practices: the treatment of foreign affiliates' investment, capital gains and losses, activity in offshore centres and unrepatriated profits all differ.

Greater interest in the European Community

It is clear, nevertheless, that direct investment in the European Community has overtaken that in the United States. Such investment is strongly cyclical so that the continuation of European growth as the United States entered recession may be an important factor behind this reorientation. Preparation for the single European market is also frequently cited as an important motive. But inflows continue to be unequally distributed among EC members, with the United Kingdom having a disproportionately large share even in recession and Germany a relatively small one. Unification is too recent for investment opportunities in eastern Germany to have attracted foreign direct investment capital on a large scale.

United States direct investment abroad increased last year, but by much less than in 1989. Continental European foreign direct investment again grew strongly; France and Germany together invested about as much as Japan last year.

The financing of current-account imbalances in the industrial countries

Capital flows readily to high-inflation countries

As in 1989, current-account deficits in industrial countries were generally financed by non-official capital inflows and not by running down reserves. Again, as in recent years, high nominal interest rates in countries with above-average inflation led to capital inflows that were more than sufficient to finance sizable current-account deficits.

Inflows into *Italy, Spain* and *Sweden* were large enough not only to finance substantial and widening current deficits, but also to increase official reserves significantly (Chapter VIII discusses this in more detail). *France,* now a low-inflation country, where the current-account deficit also widened somewhat last year, was also faced with non-official inflows much greater than the deficit and a sizable increase in reserves took place.

Inflows through banks were particularly large in countries with high interest rates last year. High rates not only attracted non-resident deposits in domestic currency, but also induced residents to borrow from domestic

Financing of major current-account imbalances in industrial countries

Items	1987	1988	1989	1990
	in billions of US dollars			
United States				
Capital account	105.4	92.6	126.8	72.2
of which: Direct investment	*15.8*	*42.2*	*40.5*	*−10.7*
Securities[1]	*29.2*	*38.7*	*47.6*	*−21.5*
Banks, other than above	*46.9*	*13.9*	*10.5*	*20.6*
Statistical discrepancy	*6.8*	*− 8.4*	*22.4*	*73.0*
Changes in the net official monetary position[2]	56.9	36.3	−16.8	27.1
Japan				
Capital account	−44.8	−64.1	−81.9	−56.7
of which: Direct investment	*−18.4*	*−34.7*	*−45.2*	*−46.2*
Securities	*−93.8*	*−66.7*	*−28.0*	*− 5.0*
Banks, other than above	*71.8*	*44.5*	*8.6*	*−13.6*
Statistical discrepancy	*− 3.9*	*2.8*	*−22.0*	*−20.9*
Changes in the net official monetary position[2]	−42.3	−15.5	24.7	20.9
Germany				
Capital account[3]	−22.8	−69.8	−67.3	−40.4
of which: Direct investment	*− 7.2*	*−10.4*	*− 7.4*	*−21.0*
Securities[4]	*− 2.0*	*−43.7*	*− 4.9*	*0.3*
Banks, short-term	*− 4.1*	*−10.4*	*−30.3*	*− 0.9*
Other private, short-term	*− 5.7*	*−12.5*	*−27.4*	*−12.0*
Changes in the net official monetary position[2]	−23.4	19.2	10.0	− 6.9
United Kingdom				
Capital account	20.3	28.2	22.2	19.4
of which: Direct investment	*−17.3*	*−19.0*	*− 6.8*	*14.1*
Securities	*40.5*	*7.5*	*−41.4*	*−18.8*
Banks, other than above	*0.4*	*22.1*	*24.0*	*13.1*
Statistical discrepancy	*− 0.2*	*13.6*	*24.7*	*6.6*
Changes in the net official monetary position[2]	−13.1	− 0.5	10.4	2.3

[1] Including US Treasury securities. [2] The net official monetary position is gold and foreign exchange reserves less liabilities to foreign monetary authorities. Valuation adjustments are excluded. A minus sign indicates an increase in official assets. [3] Including the statistical discrepancy. [4] Including official domestic borrowers' notes.

banks in foreign currencies. Banks limited their resulting foreign currency exposure by borrowing abroad. The main features of developments in foreign currency bank loans to residents and in capital flows through banks are summarised in Chapter VI.

Unclear how US deficit financed

The $27 billion decline in the net official monetary assets of the *United States* reflected a nearly $30 billion increase in liabilities to foreign official holders among the industrial countries. Slow US growth, steady dollar depreciation and the movement of interest rate differentials against dollar-denominated assets led to a fall in foreign direct and portfolio investment in the United States from about $142 billion in 1989 to less than $31 billion in 1990. By contrast, the liabilities of US banks rose last year, particularly in the second half of the year as the Gulf crisis led to a shift of preferences towards short-term assets. With US non-bank investment abroad increasing, non-official capital flows were, on balance, close to zero. However, these estimates – which are preliminary – imply a statistical discrepancy of some $73 billion, indicating, if the current account has been correctly measured, that capital inflows are understated, or outflows overstated, by a large amount.

Net direct investment abroad exceeds Japan's surplus ...

Direct investment outflows exceeded *Japan's* current-account surplus last year. For the first time for many years, Japanese acquisition of foreign securities was little larger than foreign acquisition of Japanese securities: the net outflow was only $5 billion. The deterioration in the net official monetary position reflected a $5½ billion loss of official reserves (resulting from heavy intervention in the first quarter when the yen was close to its low) and a $15 billion increase in official liabilities as foreign holdings of short-term government paper (Treasury and Financing bills) increased. However, there was again a sizable statistical discrepancy – with the opposite sign to that of the United States.

... and is about one-half of the German surplus

German net direct investment abroad increased threefold last year. Since net non-official capital outflows from *Germany* fell even more than the country's current-account surplus, net official monetary assets increased by $7 billion after falling in 1989. This took the form mainly of an increase in German reserves as liabilities to foreign monetary authorities – which had risen appreciably in the previous year – rose rather modestly.

Current-account developments and external financing in the developing countries

Developing countries' deficit falls

The combined current-account deficit of the developing countries narrowed by almost $18½ billion last year (see the table overleaf). The improvement was more than accounted for by the sharp increase in their aggregate trade surplus of over $29 billion. As is discussed in Chapter III, however, trade developments, and thus current-account trends, differed widely among the various groups of countries. Large terms-of-trade gains boosted the export earnings of oil exporters. Most debtor countries among the oil producers used the resulting room for manoeuvre to increase imports from their earlier depressed levels, so that their current-account position improved only a little. The Gulf crisis and the subsequent war considerably disrupted Middle Eastern oil exporters' imports, contributing to large external surpluses. By contrast, the external accounts of the non-oil-exporting countries improved only modestly, if at all.

Debt servicing costs rise

The deficit on net investment income payments expanded by a further $2 billion, mainly because of an increase in external debt of close to 6%. The implicit rate of interest on outstanding debt fell slightly from 7½% in 1989 to just over 7% last year. As in the preceding two years, actual interest payments fell significantly short of interest due (included in the current-account figures) and it appears that a further $12 billion was added to interest arrears last year.

Reserves increase ...

The narrowing of the current-account deficit of the indebted developing countries (i.e. all countries except the net creditor oil-exporting countries) to $40 billion was accompanied by an increase in external financing of $19 billion last year (see the table opposite). As a result, their international reserves rose by close to $30 billion. Oil-exporting countries together with China, Malaysia and Thailand accounted for most of this reserve build-up (see Chapter VIII). Argentina, too, recorded a large increase in reserves, though mainly as a result of the recession-induced widening of its trade surplus and the further build-up of arrears. But the aggregate reserve position of the group of small, low-income countries deteriorated; India and the Philippines also suffered a steep decline in reserves.

... and reforming countries' access to external funds improves ...

Encouraging signs of the determined implementation of economic reforms in a number of indebted oil exporters have helped to improve their external financing situation. Although borrowing from official creditors remained the main source of external financing, these countries were able to tap international capital markets last year. Access to "spontaneous" bank lending also improved. New lending by BIS reporting banks to

International current-account balances

Country groups	Current-account balance					Balance on investment income				
	1986	1987	1988	1989	1990	1986	1987	1988	1989	1990
	in billions of US dollars									
Industrial countries	−23.0	−55.5	−50.0	− 78.3	− 92.8	− 5.2	− 7.5	− 8.8	−10.9	− 7.4
Eastern European countries[1]	0.5	9.0	6.1	− 3.0	− 9.5	− 8.0	− 8.4	− 8.1	− 9.0	−10.5
Asian NIEs	23.2	30.4	28.5	23.8	14.9	0.1	0.9	3.0	4.3	5.9
Developing countries	−68.0	−34.9	−52.6	− 43.2	− 25.0	−40.6	−47.4	−51.1	−55.2	−57.2
Fuel exporters[2]	−32.8	− 8.0	−23.3	− 6.1	6.4	0.4	− 5.6	− 5.0	− 5.7	− 6.9
Non-fuel exporters	−35.2	−26.9	−29.3	− 37.1	− 31.4	−41.0	−41.8	−46.1	−49.5	−50.3
Total[3]	−67.3	−51.0	−68.0	−100.7	−112.4	−53.7	−62.4	−65.0	−70.8	−69.2
Memorandum item: Heavily indebted countries[4]	*−18.7*	*− 9.6*	*−12.6*	*− 9.1*	*− 9.6*	*−35.2*	*−36.5*	*−39.9*	*−44.3*	*−43.8*

[1] In convertible currencies. [2] Countries whose average ratio of fuel exports to total exports in 1984–86 exceeded 50%. [3] Equals the world discrepancy. [4] Excluding Yugoslavia.
Sources: IMF, OECD, UN, national data and BIS estimates.

Developing countries: estimated external financing of current-account deficits[1]

Items	Net debtor developing countries[2]			of which: Indebted fuel-exporting countries		
	1988	1989	1990	1988	1989	1990
	in billions of US dollars					
Current-account balance	−48	−45	−40	−19	−8	− 7
Changes in foreign assets (− = increase)	− 4	− 9	−33	9	−2	−12
Official reserves	*5*	*− 9*	*−28*	*12*	*−3*	*− 6*
Other assets	*− 9*	*0*	*− 5*	*− 3*	*1*	*− 6*
External financing[3]	52	54	73	10	10	19
Borrowing from official creditors	29	29	36	8	10	13
Borrowing from private creditors[4]	10	9	24	− 2	−8	1
of which: Increase in interest arrears[5]	*9*	*15*	*12*	..	..	..
IMF credit	− 3	− 1	− 2	0	2	3
Other	16	17	15	4	6	2
of which: Direct investment[5]	*15*	*18*	*19*	*3*	*5*	*5*
Memorandum item:						
Change in BIS reporting banks' claims[6]	*3*	*−22*	*−19*	*− 2*	*−4*	*−20*

[1] Totals may not add up owing to rounding. [2] Excluding the Asian NIEs and the major Middle Eastern fuel exporters in a creditor position. [3] Equals the sum of the current-account balance and changes in foreign assets, with the sign reversed. [4] Including interest arrears. [5] Estimated and incomplete. [6] Excluding bank lending to offshore centres. Figures exclude valuation changes due to exchange rate changes but include fluctuations in the balance-sheet value of bank claims due to debt reduction operations or write-offs.

Sources: IMF World Economic Outlook and BIS International Banking and Financial Market Developments.

Cameroon and Mexico was recorded in the second half of 1990, while lending to Indonesia rose from $1.6 billion in 1989 to over $5 billion last year. Moreover, after almost a decade of virtual absence, Mexico and Venezuela succeeded in re-entering the international bond market, though they raised only modest amounts. Non-debt capital inflows into these countries, too, appear to have picked up recently, as foreign equity investment has strengthened in Mexico, Indonesia and Venezuela. Furthermore, a number of local corporations took advantage of economic reform and privatisation policies to successfully issue shares abroad.

... yet most continue to face difficulties

Among the non-oil exporters, a number of Latin American countries regained access to international capital markets and also obtained some bank finance. However, most other developing countries outside Asia continued to face serious financing difficulties. In most cases, requirements could be met only by borrowing from official sources or by a further increase in interest arrears, which have now risen to about $40 billion.

V. Domestic financial markets

Highlights

Equity prices declined generally in 1990, while long-term interest rates ended the year unchanged or moderately higher. Oil prices were a major factor in global market developments, as bond markets focused on their inflationary implications and equity markets seemed to view them as the key element in determining the probability of global recession. The markets began to recover in the fourth quarter of 1990 and gained strength in early 1991. In a number of countries property prices weakened considerably as economic activity slowed.

Certain developments during the period under review may have lasting consequences for financial markets worldwide. The major downward correction in the Japanese stock market has had a significant impact on financial institutions and international capital flows. It may also mean that corporations could face some refinancing difficulties when equity-related bonds mature. The widespread weakening of economic activity has exposed the fragility of some segments of the financial industry. Last year securities firms in the major financial centres made losses or saw their profits decline markedly. Banks in most countries also experienced a significant reduction in profitability or only a modest increase from relatively depressed levels. Financial distress was widespread in segments of the financial industry in the United States and Norway, while more localised problems arose in Australia, Sweden and Japan.

Several developments related to the prolonged upswing in economic activity have contributed to the present weakness in the financial industry: the amplitude of, and increased exposure to, movements in equity and property prices; the rise in private sector indebtedness; and the major expansion in financial services in the wake of financial innovation and liberalisation. Some areas of the financial industry now face a need for consolidation.

The liberalisation of financial markets is set to proceed further. In the United States the Treasury has recently put forward a plan envisaging the removal of restrictions on interstate banking and greatly expanded bank powers. In Japan concrete proposals to promote the desegmentation of the financial industry are expected to be published shortly, while the deregulation of deposit interest rates is continuing. As was discussed in last year's Annual Report, in the European Community the adoption of the Second Banking Directive in late 1989 and related legislation in early 1990 sharpened the contours of the single market in financial services. The full liberalisation of capital movements in France and Italy last year was a significant step towards its completion.

Against this background, the strengthening of prudential regulation and supervision acquires particular significance. The plan presented by the US Treasury contains proposals for an overhaul of prudential arrangements. At the international level, in early 1991 the Basle Committee on Banking Supervision proposed a clarification of the definition of capital contained in the 1988 accord on bank capital standards, and work is in progress to extend the capital framework to capture market risk. During the period under review further steps were taken to improve co-ordination between banking, securities and insurance regulators.

Long-term interest rate developments

While there were significant fluctuations during the year, long-term interest rates ended 1990 unchanged or slightly higher in virtually all markets. The first quarter of 1991 reversed this trend as rates declined generally.

General pattern in the period under review

Long-term interest rates rose in early 1990, subsequently easing back in the United States and the United Kingdom but remaining firm in Japan and Germany. Sharp oil price increases following the invasion of Kuwait in August heightened inflation fears and significantly depressed bond prices as long-term yields rose by between 50 and 150 basis points in the major markets. Interest rates remained stable during the fourth quarter in Germany and Switzerland, eased in Belgium and France, and fell sharply in the United States, Japan and United Kingdom. Except in the United States, where they changed little, rates declined in the first quarter of 1991.

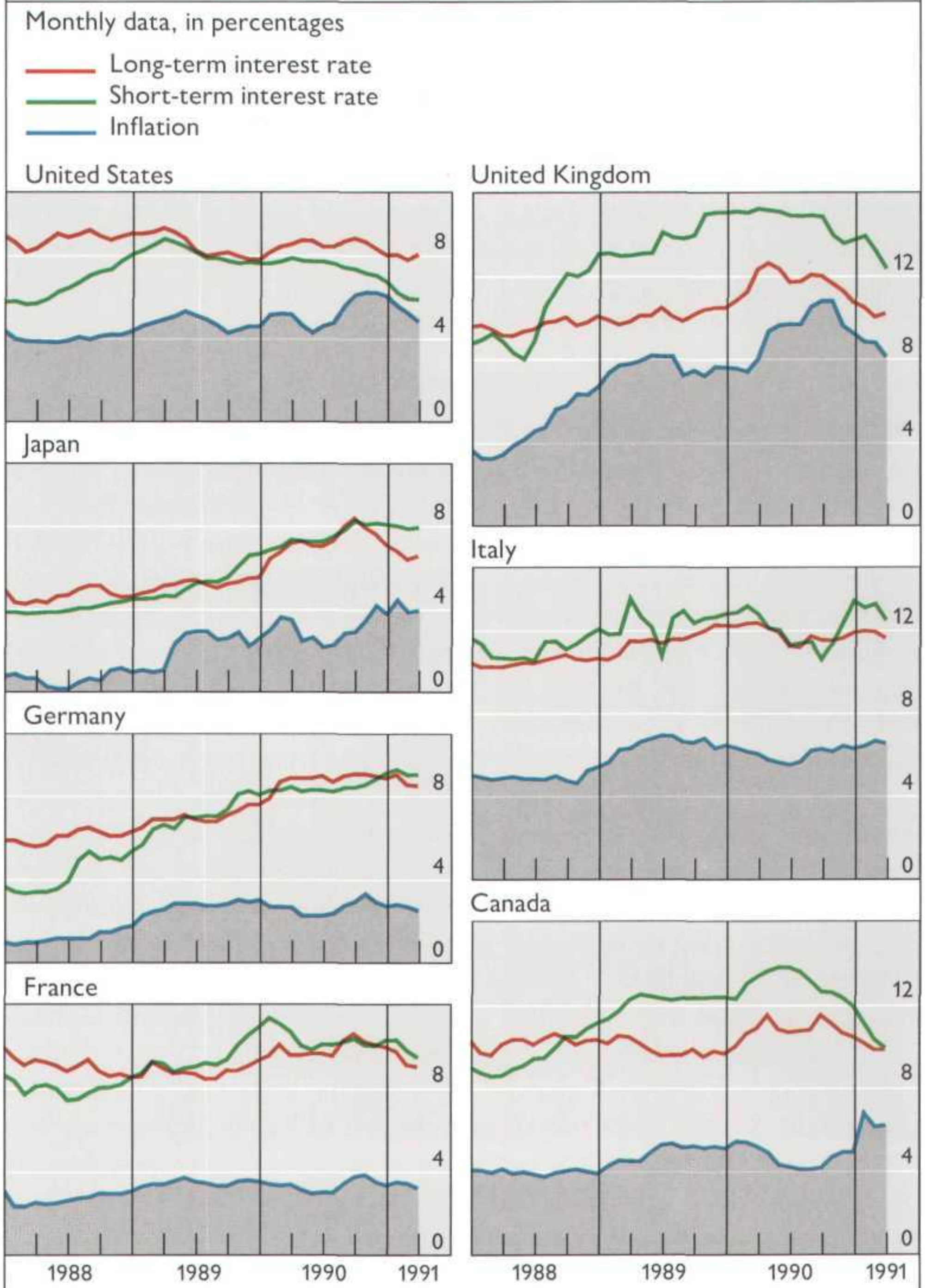
Widespread increases in early 1990

The decline in bond prices in Japan, the United Kingdom and Germany in late 1989 and early 1990 was largely attributable to tight monetary policies and inflationary expectations. Long-term interest rates in the United Kingdom rose sharply in reaction to data for the fourth quarter of 1989 indicating buoyant aggregate demand and accelerating inflation. German rates increased in early 1990, as the combination of tight monetary policy, robust growth and approaching monetary union with the German Democratic Republic gave rise to expectations of higher future rates. The fall in Japanese bond prices was a reaction to the progressive tightening of monetary policy and a substantial revision of investor expectations, as policy was not relaxed even when the stock market plummeted. The rise in interest rates in the US market was partly attributable to heavy government bond issuance, including funding for the liquidation of savings and loan associations, and the weakening of foreign demand for US securities caused by declining US yield premiums over those offered by foreign bonds. Expectations of a firming of rates also arose as recessionary fears dissipated and the perception that the US economy was about to experience a "soft landing" gained ground among investors.

Subsequent declines in the United States and the United Kingdom ...

As the second quarter progressed, evidence of economic weakness led to reductions in long-term rates in the United States and the United Kingdom. US rates peaked in May following the publication of poor employment and car sales figures and subsequently declined into the

Nominal interest rates and inflation*



* Representative long-term bond yields and money market rates; inflation as measured by percentage changes in consumer prices over twelve months.

summer in response to growing expectations of an economic slowdown and some easing of monetary policy. Despite disappointing wage and retail price inflation figures, UK rates began to ease in the second quarter as rumours of entry into the EMS exchange rate mechanism (ERM) gave rise to a reassessment of sterling's foreign exchange risk.

In the second quarter long-term rates declined in the ERM member countries, notably in Italy, France and Belgium, and premiums over German rates contracted. The narrowing of interest rate differentials partly reflected the convergence of inflation performance. The large gains in the Italian bond market during the first half of 1990 can be ascribed to the strength of foreign demand, which rose sharply in response to the diminished exchange risk after the entry of the lira into the narrow ERM band in January 1990 and the greater liquidity of the market following the introduction of a screen-based trading system.

... and some ERM countries

In the wake of the Gulf crisis world bond prices fell sharply as oil price increases strengthened inflationary fears. Long-term yields rose by between 50 and 150 basis points in most markets, with the largest increases occurring in some of the economies with good inflation prospects. In the ERM countries the Gulf crisis triggered a temporary widening of premiums over German rates, probably reflecting both the traditionally strong credibility of German monetary policy and the heightened attraction of Germany as an alternative to the United States and Switzerland as an investment haven.

Response to the Gulf crisis

By the end of September long-term rates had peaked in many countries and in the fourth quarter they fell in most markets, though not in Italy, Switzerland and Germany. US rates declined substantially as monetary policy was eased in view of the deterioration in US economic conditions. The fourth-quarter gains in the Japanese bond markets took many by surprise. Against the background of weakening economic growth, decelerating monetary expansion and an easing of pressure on the yen with the fall in US interest rates, Japanese investors anticipated some relaxation of monetary policy. Although these expectations were countered by statements from the central bank, they continued to exert upward pressure on bond prices. German and Swiss rates remained firm throughout the fourth quarter, reflecting domestic inflationary pressures and concomitant monetary restraint.

Narrowing differentials within the ERM

Among the ERM member countries, long-term rates in France and Belgium turned down. Their premiums over German rates narrowed from late October and by the end of the first quarter of 1991 had fallen below their pre-Gulf crisis levels, with the French premium declining by almost 100 basis points over this period. Much of the late-summer widening of differentials was already reversed in October, as oil and bond markets stabilised in response to the easing of the inflationary fears triggered by the Gulf crisis.

General declines in 1991

German long-term rates began to ease back in early 1991, reflecting expectations of lower inflation as the anti-inflation stance of the monetary authorities was underlined with a rise in official interest rates. In addition, proposed tax increases led to a downward revision of the budget deficit estimates. Rates in other ERM countries followed those in the German market. In Japan long-term rates declined somewhat until March, when they rose partly under the influence of pressures from a weakening yen. In the United States long-term rates eased slightly up to mid-February, when they increased in response to an apparent revision of inflationary expectations in the light of a further easing of monetary policy and the publication of data indicating unanticipated strength in the economy's core rate of inflation. In the UK market rates fell by about 100 basis points before the decline was reversed in mid-February.

Equity market developments

Broad movements

Equity markets declined virtually everywhere last year (see the table opposite). All markets suffered major losses in the wake of the invasion of Kuwait, but those in Japan, Taiwan and South Korea had already fallen sharply well before then. The Gulf crisis initially led not only to a doubling of oil prices but also to increased economic uncertainty, contributing further to the weakening of the US and UK economies. From their late-July levels, equity indices fell by almost 25% on average in August–September. Although markets in many countries began to recover in the fourth quarter, with the exception of that of South Korea none had reached its pre-invasion level by the end of the year. Following the outbreak of hostilities in mid-January 1991, equity markets gained worldwide as oil prices and long-term interest rates eased and economic uncertainty subsided.

The performance of equity markets in the period under review can be characterised in part as reflecting a greater focus on "fundamentals", i.e. on a realistic assessment of the longer-term returns on equity in relation to those on alternative assets. A correction in the stock markets of Japan and Taiwan had been anticipated on these grounds, which is why the extent of their fall cannot easily be attributed to any specific economic developments. In addition, unlike the global stock market crashes of 1987 and 1989, the global market losses following the invasion of Kuwait were clearly rooted in fundamentals, as were the subsequent gains in late 1990 and early 1991.

With hindsight, however, the scale of market reactions to some of these developments may appear difficult to comprehend. Equity markets reacted more strongly to the 1990 oil price shock than they had to any of the previous ones, even though it was the mildest. Similarly, in some countries the market gains following the drop in oil prices seem disproportionate in view of the other uncertainties clouding the world economic outlook in early 1991.

Major corrections take place in Japan ...

Last year began with a major correction in Japanese equity prices. From its peak on 29th December 1989, the market fell by almost 30% before staging a modest recovery in early April. There was no specific economic factor that can readily be said to account for the size of the fall. Despite a tightening of monetary policy and an increase in domestic interest rates, the real side of the economy remained robust.

The sharp fall in Japanese equity prices adversely affected consumer confidence but had little effect on domestic demand, which remained strong throughout the summer. Nor did the market crash spill over into other equity markets as the US-led mini-crash in October 1989 had done. Nonetheless, it was not without impact. Responding to the large losses in domestic equity values and narrowing US/Japanese yield differentials, Japanese investors significantly reduced their demand for US bonds: they

World stock price movements*

Countries	1990				1991	End-December 1990 to end-April 1991
	Beginning of August	End-August	End-September	End-December	End-April	
	end-1989 = 100					percentage changes
Australia	96	91	85	78	93	19.9
Belgium	97	87	77	77	89	16.3
Canada	91	85	80	82	88	7.3
France	95	84	75	75	87	16.1
Germany	106	91	74	78	88	13.5
Hong Kong	122	109	97	107	127	18.6
Italy	105	91	81	75	84	11.5
Japan	78	69	55	60	68	13.2
Netherlands	101	87	78	79	81	2.1
Singapore	105	86	74	78	105	34.6
South Korea	76	68	66	77	71	−7.4
Spain	99	87	71	75	92	22.8
Sweden	105	92	72	69	82	19.5
Switzerland	106	90	77	75	89	18.4
Taiwan	67	42	31	47	68	44.6
United Kingdom	97	89	82	88	103	16.0
United States	101	91	87	93	106	13.7

* For the United States, S&P 500 composite index; for Japan, Tokyo TOPIX index; for the United Kingdom, FT 100 index; for Germany, Commerzbank index, Frankfurt; for France, CAC general index; for other countries, representative indices.

Sources: National stock exchanges.

cut their net purchases back in the first quarter of 1990 and disinvested heavily in the second. These developments coincided with a sharp increase in US bond yields and a significant rise in their volatility.

The reduction in Japan's equity market values may have longer-term implications for both financial and non-financial Japanese firms. During the period of rising equity prices they had issued significant amounts of equity-related debt instruments, such as convertible bonds and bonds with equity warrants. After the 1990 drop in equity values investors may find it unattractive to exercise their equity conversion options at maturity. It is estimated that some Yen 20 trillion of these bonds will mature by the end of 1994, with the largest portion due in 1993. Without a recovery in the Japanese equity market the refunding volume may become a significant factor in the future development of interest rates.

... Taiwan and South Korea

The Taiwanese and South Korean equity markets also suffered from extreme price volatility and corrections in the course of 1990. Taiwan's stock price index plunged by no less than 80% from its peak in mid-February to its trough at the beginning of October, a loss equivalent to 1.5 times 1989 GNP. The South Korean market fell by almost 40% from its level at the end of 1989 before bottoming out in mid-September. By 1st August the Taiwanese market had already dropped by over 40%, and that of South Korea by around one-quarter. In Taiwan the fall was triggered by a tightening of monetary policy and took place against a background of a deceleration in real growth, which nevertheless remained above 5%. The previous upswing had been fuelled by heavy borrowing secured against real estate, as property prices soared. In South Korea, although output growth actually rose and monetary policy was not tight, there was concern about the sustainability of rapid economic expansion, as the current account deteriorated and inflation increased.

Equity prices react strongly to the Gulf crisis ...

Although most forecasts had suggested that the repercussions of the oil price hike on the real economy would be relatively moderate (see Chapter II), equity markets appear to have reacted more strongly to the 1990 oil price shock than to any of the preceding episodes of major price changes (as shown in the table below). On the previous three occasions the response of the major stock markets of net oil importers was broadly in line with these countries' dependence on oil imports at the time of the shock. Except in the case of France in 1979, greater dependence was generally associated with greater stock market sensitivity, as measured by the ratio of the percentage change in the share index to that in the oil price. This pattern clearly broke down in 1990, however, when the markets' sharp reaction occurred despite a reduced dependence on oil.

... as attention is focused on oil prices

There are a number of indications that during the Gulf crisis stock markets focused their attention on developments in the oil market. The rise in equity price volatility was generally greater in those countries which are more dependent on oil imports, such as Japan, Germany and France (see the graph opposite). In addition, statistical evidence points to greater responsiveness of equity prices to oil prices as the crisis unfolded, as is illustrated in the graph on page 102. The graph plots rolling sample estimates of the daily sensitivity of equity returns to the return on an oil futures contract, as measured by the correlation between stock index returns and the return on a one-month Brent oil contract. Clearly, stock

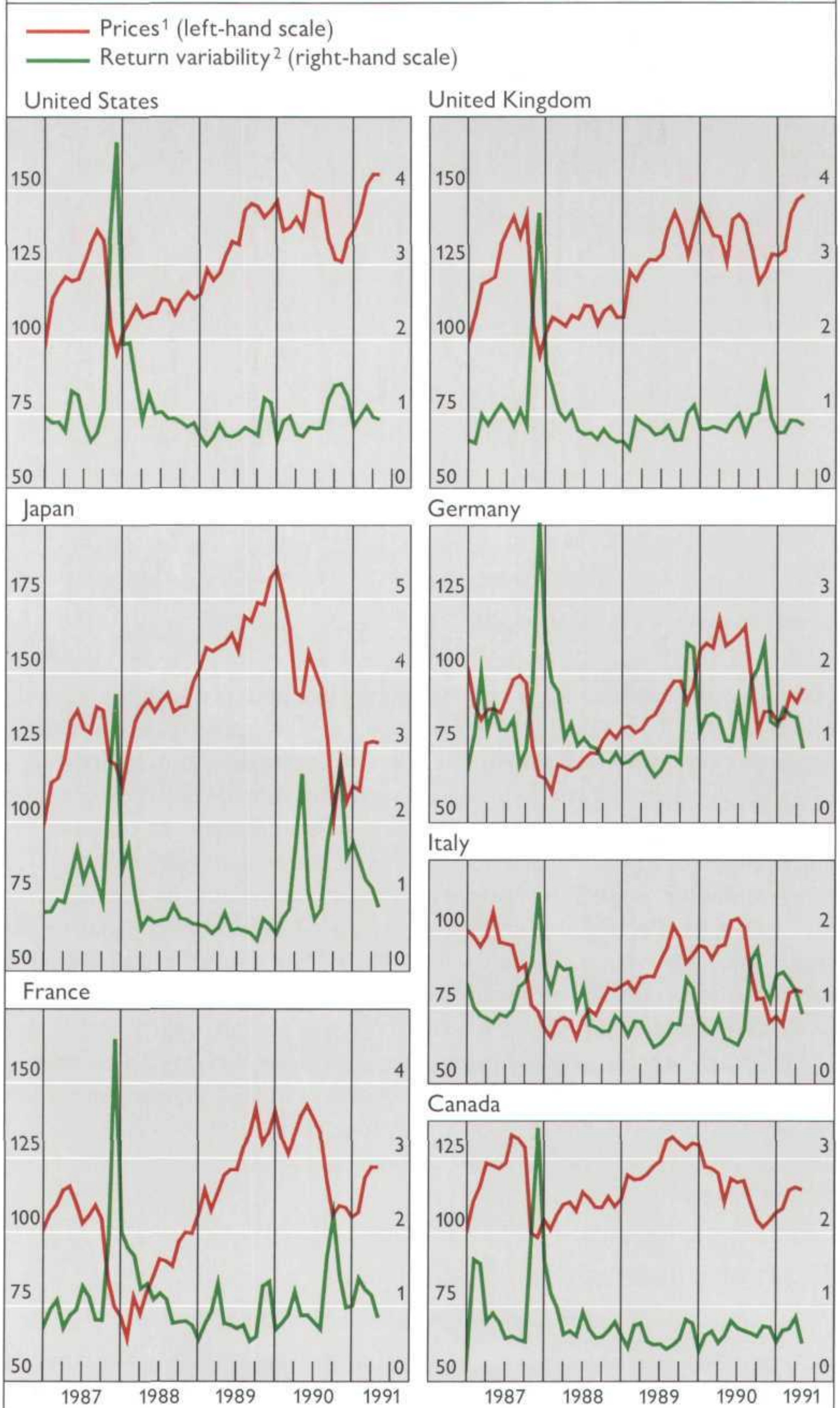
Stock market sensitivity to oil prices and oil dependence

Countries	1974	1979	1986	1990
United States				
Elasticity	−0.03	−0.12	−0.18	−0.21
Oil dependence	0.6	2.0	1.4	1.0
Japan				
Elasticity	−0.05	−0.06	−0.18	−0.45
Oil dependence	2.0	3.2	4.2	1.5
Germany				
Elasticity	−0.04	−0.10	−0.35	−0.47
Oil dependence	1.8	3.1	5.0	1.7
France				
Elasticity	−0.06	0.04	−0.37	−0.36
Oil dependence	1.8	2.5	4.6	1.7

Note: Elasticity is measured by the monthly percentage change in the representative stock price index relative to that in the price of fuel oil, averaged over selected months. Oil dependence is measured by oil imports as a percentage of GDP in the previous year.

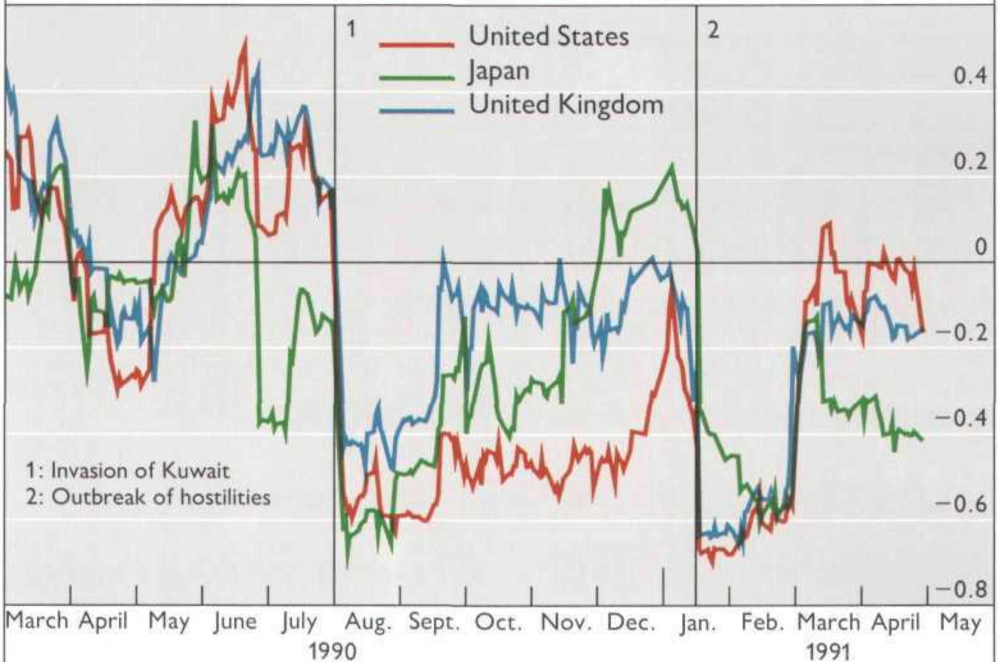
Sources: OECD and national data.

Stock market prices and return variability



[1] Month-end data, December 1986 = 100. For a description of the indices used, see the table on page 99. [2] Variability is measured by monthly estimates of the standard deviation of daily percentage returns.

Stock market sensitivity to oil prices*



* Measured as a thirty-working-day rolling correlation between the return on a stock market index and the return on a Brent oil one-month forward contract. For a description of the stock market indices used, see the table on page 99.

markets were not focusing on oil market developments before the invasion of Kuwait. Prior to August the correlation coefficients varied around zero, suggesting no clear relationship. The invasion increased the markets' sensitivity to oil prices and the outbreak of hostilities in mid-January heightened it further. As investors gained confidence as to the outcome of the conflict, equity markets appear to have lost interest in oil price developments, since the correlation coefficients returned to their pre-invasion pattern.

Markets regain ground in 1991

Largely reflecting the greater focus on oil price movements, world stock markets rose strongly in the New Year as oil prices declined markedly. In a number of countries, including the United States and the United Kingdom, the equity price recovery was already clearly under way in the fourth quarter of 1990, spurred by falling interest rates. The gains in early 1991 occurred despite negative economic developments in several countries. By early March 1991, notwithstanding the recession, broad market indices had reached record levels in the United States and the United Kingdom.

The restructuring of the financial industry

Profitability and financial strength: recent performance

Last year was a difficult one ...

Last year was a difficult period for financial institutions. Profits declined in many countries and across a wide spectrum of financial intermediaries. In some cases the erosion of profitability was accompanied by financial distress. The extent to which individual institutions were affected varied considerably, depending on their line of business, the geographical location of operations, national macro-economic conditions and the characteristics of the specific financial environment. There is little doubt, however, that common longer-term forces were at work.

... in the securities ...

Securities firms and investment banks were among the institutions that experienced the worst operating results. Member firms of both the New York Stock Exchange and the London International Stock Exchange posted an overall loss. In the United States this was the first loss since the early 1970s and in the United Kingdom the second since the "Big Bang" in late 1986. There were reports indicating widespread losses also among brokerage firms in Paris. In Japan the profits of securities firms fell by over 60% between April and September 1990 compared with a year earlier, the sharpest drop since 1974.

... and banking industries

Complete information on the performance of banking systems in 1990 is not yet generally available. However, operating results for samples of large institutions and other indications suggest that the performance of banks tended to deteriorate, primarily on account of higher provisions against domestic bad debts and falling interest rate margins (see the table overleaf). Banks active in securities business were also affected by the slump in equity markets.

At one end of the spectrum are countries such as the United States and Norway, where financial distress was widespread. This necessitated the intervention of the supervisory authorities in order to avoid broader financial instability and prompted the study or implementation of changes to the regulatory and supervisory framework, notably the strengthening of bank insurance funds.

Widespread weakness in the United States ...

In the United States, while the overhaul of the loss-making savings and loan industry continued, the number of bank failures remained high in 1990 and a large regional bank was declared insolvent in January 1991. The return on assets for the industry as a whole was as low as in 1989. It held up for the smaller banks, fell somewhat among medium-sized institutions and sank to a ten-year low in the case of large second-tier institutions (with assets of between $1 and 10 billion). Only the top fifty banks recorded a rise, mainly as a result of the scale of provisioning against loans to developing countries by some of the largest banks in this group in 1989. Judged on the basis of the proportion of assets not accruing interest, asset quality was the poorest in the last decade.

... and Norway

Norwegian banks continued to face the serious difficulties which had been triggered by the oil-induced recession of 1987 and had led to the failure of a number of institutions. Last year negative aggregate net earnings were reported by both commercial and savings banks.

Poor results and localised distress in other countries

In most other countries the earnings of the major banks were disappointing but there was no cause for concern as regards their underlying financial strength. Sizable declines in profits were posted in Australia, Sweden, Finland, Denmark, France, Japan and Switzerland. In the United Kingdom and Canada profitability remained low, although it actually improved somewhat from its depressed 1989 level, which had reflected country risk provisioning. While the financial viability of the major banks

Profitability of major banks in 1989 and 1990[1]

Countries	Number of banks	Return on assets[2]		Loan loss provisions		Net interest margin	
		1989	1990	1989	1990	1989	1990
		in percentages					
United States	15	0.90	0.73	1.35	0.90	3.08	2.95
adjusted[3]		*1.67*	*0.78*	*0.57*	*0.86*	*3.08*	*2.95*
Japan[4, 5]	12	0.82	0.58	0.07	0.22	0.96	0.78
Germany[6]	3	0.89	0.91	n.a.	n.a.	1.97	2.04
France[4, 5]	6	0.55	0.42	0.53	0.57	2.42	2.24
United Kingdom	4	0.04	0.51	1.81	1.05	3.25	3.00
adjusted[3]		*1.32*	*0.51*	*0.53*	*1.05*	*3.25*	*3.00*
Canada[5]	6	0.83	1.34	1.20	0.37	3.40	3.13
adjusted[3]		*1.78*	*1.32*	*0.24*	*0.39*	*3.40*	*3.13*
Australia[5]	4	1.67	1.03	0.70	1.06	3.77	3.50
Finland	3	0.44[7]	0.35[7]	0.33	0.42	1.58	1.65
Netherlands	3	0.61	0.57	n.a.	n.a.	2.11	2.08
Norway	4	0.26[7]	−1.05[7]	1.41	2.01	2.97	2.75
Spain	7	1.73	1.54	0.47[8]	0.41[8]	4.33	4.06
Sweden	4	0.95[7]	0.53[7]	0.16	0.51	1.90	1.95
Switzerland	3	0.71	0.56	n.a.	n.a.	0.94	0.92

[1] The data are not strictly comparable across countries. [2] Ratio of pre-tax profit to average total assets. [3] Results excluding provisions against lending to developing countries. [4] Half-year results at an annual rate. [5] Fiscal year. [6] Partial net operating profit, which excludes loan loss provisions, gains/losses on own trading and extraordinary items. [7] Net income before appropriations. [8] Six banks.

Source: IBCA Ltd.

was not at issue, in some countries the underlying condition of other institutions was weaker in the period under review. In particular, two state-owned banks and a number of non-bank intermediaries in Australia and several finance companies in Sweden suffered severe solvency problems, in some cases leading to closure or takeover. In Japan a number of non-bank intermediaries went bankrupt and several small banks received financial assistance from, or were forced to merge with, larger banks.

The profits of Spanish banks rose on average but at a considerably slower pace than their assets. The aggregate profits of a sample of German, Dutch and, according to preliminary results, Italian banks appear to have held up.

The breadth of the recent deterioration in the profit performance of the banking industry has already been reflected to some extent in changes in the credit ratings of the major banks. Since 1989 banks have been downgraded in several countries, notably in English-speaking and Nordic countries and in Japan.

Profitability and financial strength: short and long-term determinants

The impact of slowing economic activity ...

Undoubtedly, the widespread slowing of economic growth and faltering business confidence following the invasion of Kuwait are important reasons for the weaker performance of the financial industry last year. These factors partly explain the higher levels of provisioning against loan losses by commercial banks. They also lie behind the reduction in secondary market, issuing and merger and acquisition (M & A) activity, which cut into the revenue of institutions engaged in securities business and investment banking in the United States and the United Kingdom. As confidence and the equity market rebounded in early 1991, for instance, so did revenue and profits in the US securities industry.

... is intensified by other factors:

Nonetheless, certain developments which took shape during the prolonged upswing in economic activity have also contributed to the present weakness in segments of the financial industry. Three partly related factors can be identified: the amplitude of, and increased exposure to, movements in equity and real estate prices; the rise in private sector indebtedness; and the adjustment difficulties associated with the unprecedented expansion in financial services in the wake of financial innovation and liberalisation.

the amplitude of, and increased exposure to, equity ...

The sharp drop in equity prices in Japan last year was one cause of the poor results, and in some cases financial distress, of commercial banks

Inflation-adjusted property prices[1]

Countries and cities	1985	1986	1987	1988	1989	1990	1980–84	1985–89
	percentage changes						cumulative	
	Commercial property							
United States[2]	2	3	0	−4	−5	−8[3]	10	−4
Japan[4]	11	50	60	2	2	0	14	175
United Kingdom	−6	−5	2	12	25	−7	−4	28
Canada	−1	0	2	4	3	−6	n.a.	7
Australia[5]	3	2	33	21	−1	−28	−18	66
Norway[6]	26	32	8	−13	−22	−20	3[7]	21
	Housing							
New York	23	18	10	−4	−5	−10	26[8]	46
Los Angeles	−1	6	4	17	1	8	−3[8]	30
Tokyo	1	23	67	−1	3	2	12	114
London	6	20	16	12	−2	−7	−3	62
Paris	4	7	15	17	20	15	−3[7]	81
Frankfurt	−7	−10	4	11	−3	17	24	−6
Milan	n.a.	−3	4	8	25	4	n.a.	36[9]
Toronto	11	33	20	21	−3	−21	−2[10]	108
Brussels	−3	5	5	10	28	16	−37	50
Oslo	15	0	13	−11	−13	−7	−17[7]	1
Stockholm	−2	5	17	21	11	0[11]	−32	61
Sydney	3	4	16	42	−19	−15	−10	43

[1] Deflated by the nationwide consumer price index; national data and definitions. [2] The North-East. [3] Third quarter. [4] Tokyo. [5] Sydney. [6] Oslo. [7] 1981–84. [8] 1982–84. [9] 1986–89. [10] 1983–84. [11] First three quarters.

Sources: For the United States, National Association of Realtors and California Association of Realtors; for the United Kingdom, Richard Ellis, Building Societies Association and Department of the Environment; for France, Chambre Interdépartementale des Notaires de Paris; for Germany, Ring Deutscher Makler; for Italy, Associazione Italiana Consulenti Immobiliari; for Canada, Morguard Investments Ltd. and Multiple Listing Service; for Norway, OPAK AS; for Belgium, AN-HYP s.a. Valeur Immobilière; for Australia, JLW Research and Consultancy and Real Estate Institute of Australia; for other countries, national data.

and securities firms. The stock market crash of 1987 still marks a watershed in the profitability of securities operators in the United States and the United Kingdom. It has also been significant for a number of banks active in securities business, notably some UK and Swiss institutions. Reflecting the inroads made into securities operations in the second half of the 1980s as a result of deregulation, many banks are now more sensitive to such price fluctuations. This is the case, for example, of institutions in France, the United Kingdom and Canada.

... and real estate price movements

For most banks, however, it is movements in real estate prices which have been more important, owing to the scale of their lending for the construction and acquisition of property or other lending secured against property (see the table on the previous page). The current difficulties of US banks are primarily connected with their commercial real estate lending. Property exposures have also played a significant role in the United Kingdom, Australia, Sweden and Norway, represent a potential source of problems in Japan and have recently attracted the attention of the supervisory authorities in France.

Banks in several countries have become more vulnerable to a weakening of property prices as a result of their increasing exposure to the market (see the table below). In some cases the exposure is indirect, through the ownership or funding of non-bank credit institutions which are heavily involved in the market, notably in Sweden and Japan. In Japan banks provide the bulk of funding for less stringently regulated non-bank intermediaries, some 60% of whose loans are ultimately secured against real estate; this is equivalent to over half of the banks' direct property lending. The serious financial crisis experienced by several Swedish finance companies last year was in large part due to their property loans and caused sizable losses to their parent or lending banks. With the growing internationalisation of markets, cross-border exposures have become significant. Part of the losses of the Swedish finance companies were the result of their lending to the UK property market, as their exposure outside Sweden had grown markedly following the relaxation of capital controls. Similarly,

Banks' real estate lending in selected countries[1]

Countries	1980	1985	1987	1990	Countries	1982	1985	1987	1990
	as a percentage of total loans outstanding					as a percentage of loans to the private sector			
United States					Canada	30	33	39	46[2]
Total	28	29	34	40[2]	France	27	28	29	31[2]
Commercial	10	13	17	18[2]	Germany	44	46	45	39[3]
United Kingdom					Norway	51[4]	48	41	47
Total	12	19	23	31[5]	Portugal	23	28	33	34[2]
Non-housing[6]	7	7	8	12[5]	Spain	19[4]	19	20	17[2]
Japan[7]	11	13	15	17	Switzerland	27	28	29	34[8]

[1] The data are not strictly comparable across countries. [2] September. [3] Including eastern Germany. [4] 1983. [5] Break in series resulting from the inclusion of a building society which was converted into a bank. [6] Construction and property companies. [7] Construction and real estate management firms. [8] Estimated.

Sources: National central banks and BIS estimates.

close to 60% of the total loans of foreign banks in Japan represent claims on non-bank intermediaries.

increased indebtedness

The rise in private sector indebtedness recorded in a number of countries has affected both the securities and banking industries (see the table below). It was through debt that much of the lucrative M & A wave had been financed in the United States and, in the late 1980s, in the United Kingdom. These operations often raised the debt burden of restructured corporations well above historical standards (highly leveraged transactions (HLTs)). The refinancing difficulties faced by several corporations and the collapse of the junk bond market partly explain the sharp drop in M & A activity last year, by around one-third and 60% in value terms in the United States and the United Kingdom respectively, with HLTs recording the greatest decline.

Private sector indebtedness in selected countries

Countries	Non-financial companies				Households			
	1975	1980	1985	1989	1975	1980	1985	1989
	as a percentage of GNP/GDP				as a percentage of disposable income			
United States	36	34	39	48	67	77	83	96
Japan	94	86	101	130	45	58	68	92
Germany	66	69	73	74	62	76	88	87
France	63	57	60	65	52	56	54	68
United Kingdom	47	40	47	80	47	48	76	105
Canada	64	68	67	71	77	85	73	87
Australia[1]	86	85	105	132[2]	n.a.	n.a.	n.a.	n.a.
Norway	n.a.	n.a.	n.a.	n.a.	n.a.	91	115	154
Sweden	n.a.	59	66	91	94	100	103	134

[1] Total private sector. Fiscal years. [2] 1988, as the series has since been discontinued.
Sources: National data.

Increasing indebtedness has also tended to raise the credit risk for lenders, as borrowers' ability to meet their obligations becomes more sensitive to fluctuations in their income and the realisable value of their assets. While innovations in financial practices and greater hedging possibilities have allowed better risk and cash flow management, there are already indications that the impact of debt burdens is being felt. The large US banks have raised the level of provisioning against HLT loans, as the quality of their sizable exposures has deteriorated. Last year the percentage of HLT loans not accruing interest more than doubled from 2 to over 5% at the fifty largest bank holding companies. High corporate indebtedness has also contributed significantly to bank loan losses in the United Kingdom, Australia, Norway, Sweden and, in certain cases, Japan.

and the previous major expansion in financial services

To varying degrees, virtually all countries have experienced a major expansion of financial services during the past ten years following deregulation and advances in information technology. While the characteristics and the intensity of this process are industry and country-specific, its ultimate results are fundamentally similar. Over time, it has tended to heighten the risks connected with, and reduce the returns on, the provision of many financial services.

To some extent, deregulation and financial innovation lie behind both the increase in private sector indebtedness and the amplitude of movements in equity and real estate prices. The relaxation of credit constraints has greatly facilitated investment in financial and real assets. Innovations such as junk bonds and bank takeover "bridge loans" were instrumental in fuelling the US HLT wave, which contributed to sharp increases in the prices paid for corporations. Since the mid-1980s the easing of restrictions on Japanese corporations' access to international capital markets has helped them to expand their investments in both equity and property markets. The abolition of quantitative (direct or indirect) credit restrictions in the United Kingdom and, above all, broad deregulation in Australia, Sweden and Norway in the early to mid-1980s triggered a rapid expansion of credit to both corporations and households, also encouraged by tax provisions and relatively lax monetary policies. Part of this credit was related to property and, in Australia and the United Kingdom, corporate restructurings. Financial innovations such as "portfolio insurance" strategies in equity and derivative markets may have exacerbated the upswing in equity prices and the subsequent 1987 crash. The expansion and internationalisation of the financial industry contributed significantly to the sharp increases in property prices in major cities.

It was, of course, both expected and intended that greater competitive pressures would generally lead to better terms for the ultimate suppliers and users of funds at the expense of the profitability of financial institutions. However, the costs of adjustment to the new environment were often underestimated by both market participants and policy-makers.

Adjustment costs

For many institutions the previous tradition of cartels and direct controls on their portfolio and pricing decisions was the primary source of the adjustment difficulties. In some cases, it had resulted in portfolio configurations ill-suited to the new environment of greater interest rate and asset price volatility. The pricing and maturity mismatch of savings and loan associations in the United States is one such example. More generally, it had bred inefficient cost structures and left institutions less well-equipped to operate, evaluate risks and set prices in a liberalised environment. A similar kind of problem has been faced by supervisory authorities confronted with the need to adjust their policies to the new realities. At times adjustment has been complicated by the speed and breadth of change and by the macro-economic context in which it took place, which was often one of rapid economic expansion. Typically, the difficulties have been compounded by an apparent tendency for operators to give priority to aggressive growth or market share objectives over return on capital. As a result, in some areas of the financial industry there are now signs of overcapacity and a need for consolidation.

Experience in the securities industry ...

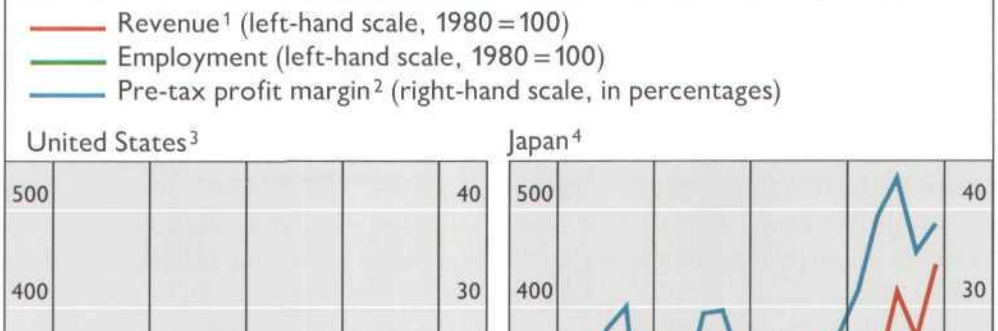
It is in the securities industry that this process is most evident. In the United States the liberalisation of commissions in 1976 put significant downward pressure on the industry's profitability, whose long-term decline accelerated after 1987 (see the graph below). The decline occurred despite an increase in total revenue and, after 1987, major cutbacks in employment. A similar process has taken place in London since the abolition of fixed commissions and entry barriers in 1986 and, more recently, in Paris. In Japan, where commissions are fixed and account for around half of total revenue, compared with less than 20% for firms in the United States, profit margins remained high until the 1990 market crash.

... and in banking

While the picture is more blurred in the banking industry, some longer-term signs of deteriorating profitability are also visible in certain countries. Even before last year's poor results, profit margins had already fallen below the levels reached in the 1980–82 recession in the United Kingdom and Norway and were below their mid-1980 levels in Sweden, Finland and Belgium. Margins were higher than in the mid-1980s in Spain, Italy and Australia. In the other countries they exhibited no clear trend (see the table overleaf).

Moreover, accounting profitability may understate the change that has already occurred. The nature of core banking activities is such that, in comparison with securities business, profit and loss statements tend to reflect changes in underlying profitability with a lag. Because of the limited information available it is particularly difficult to assess the current value of loans. Banks inevitably exercise a certain amount of discretion in the timing and extent of the recognition of losses. Consequently, recorded

Performance indicators in the securities industry



[1] Deflated by the GNP deflator. [2] As a percentage of total revenue. [3] New York Stock Exchange member firms. [4] Revenue and profit of the major securities firms, employment of all firms.
Sources: For the United States, Securities Industry Association; for Japan, Ministry of Finance and Japan Securities Dealers Association.

Bank profitability in the 1980s[1]

Countries	1980–82	1983–85	1986–87	1988–89	1989
United States[2]	0.83	0.78	0.44	0.93	0.64
Japan[2, 3]	0.40	0.46	0.56	0.55	0.46
Germany[2]	0.50	0.92	0.80	0.90	0.92
France[2]	0.34	0.21	0.31	0.35	0.34
United Kingdom[2]	1.04	0.92	0.68	0.74	−0.03
Italy	0.68	0.78	1.01	1.02	1.14
Canada[3]	0.63	0.76	0.86	1.03	0.72
Australia[3]	1.39	1.33	1.23	1.50	1.46[4]
Belgium[3]	0.34	0.35	0.41	0.27	0.19
Finland	0.49	0.48	0.54	0.51[5]	0.24[5]
Netherlands	0.31	0.61	0.73	0.63	0.66
Norway	0.63	0.85	0.22	−0.08	0.17
Spain[2]	1.09	0.91	1.10	1.72	1.77
Sweden	0.38	0.39	0.82[6]	0.52	0.46
Switzerland	0.65	0.69	0.71	0.69	0.74

[1] Ratio of pre-tax profit to average total assets of commercial banks. [2] Large commercial banks. [3] Fiscal years. [4] The ratio in 1990 was 0.94. [5] Estimated because of break in series. [6] Break in series.

Sources: For the United Kingdom, British Bankers Association; for Australia, Reserve Bank of Australia; for other countries, OECD.

profitability tends to exhibit considerable inertia and signs of potential stress are less visible when loan books are growing rapidly; when the deterioration occurs, it can be quite swift. Typical illustrations are the unheralded sharp fall in Norwegian banks' profits during the 1987 recession and the delayed recognition of losses on loans to developing countries in 1987 and 1989 in some countries.

On the basis of share price movements, the longer-term deterioration in the profitability of the banking industry appears to be fairly generalised (see the table opposite). In almost all countries bank share prices lagged significantly behind the overall share price index during the 1980s. This contrasts with experience in the 1970s, when with few exceptions they either rose broadly in line with or outperformed the overall index.

Characteristics of the growth of competition in banking

Increase in competition:

Certain characteristics of the growth of competition in the banking industry apply to all countries. Competition increased both within the banking industry itself and between banks and non-bank financial institutions as a result of shifting patterns of demand among the ultimate users and suppliers of funds, the abolition of price and quantitative portfolio restrictions and the erosion or elimination of line-of-business and geographical barriers, both within and across national borders. A common example is the growing competition between banks, insurance companies and mutual funds for a typically wealthier and older private saver. Another is the competition between commercial banks, savings banks and, in several European countries, the postal savings and payment system following the relaxation of restrictions on balance sheets and business activities.

between banks and non-bank financial institutions in the wholesale and retail sectors

Competition was generally felt first in the wholesale sector. The more sophisticated large corporate customers were less dependent on longer-term bank relationships and more responsive to the growing opportunities developing in the domestic and international capital markets. Large corporations were also more demanding as regards the terms on which they would place the surplus of internally generated funds arising from the major improvement in profitability during the prolonged upswing. The less mobile retail customers generally benefited later, as banks searched for alternative sources of revenue or competed for a narrowing deposit base. Partly as a result of these developments there has been a widespread shift from wholesale to retail lending, as is confirmed by evidence from the United States, the United Kingdom, Japan, France, Italy and Spain.

in international markets

Banks active in the highly competitive international markets were among the first to feel the pressure. The drive to lend to developing countries at increasingly narrow margins in the late 1970s, encouraged by overly sanguine judgements of sovereign risk, sowed the seeds of the problems which undermined the asset quality of many banks in the course of the 1980s, notably in the United States and the United Kingdom. Competitive pressures intensified in the second half of the 1980s, heightened by the rapid expansion of Japanese banks, as margins for corporate borrowers narrowed. Moreover, there is evidence to suggest that some borrowers were obtaining considerably lower spreads than in the past despite a deterioration in their credit ratings.

and in domestic markets

The timing and intensity of the increase in competition in domestic markets have differed considerably from country to country, largely as a result of the nature of the deregulation process. In Norway, Sweden and

Long-term movements in bank share prices

Countries	1970	1980–82	1983–85	1986–87	1988–89	1990	1991 Q I
	ratio of bank index to overall index, 1980 = 100						
United States	142	111	115	118	95	69	59
Japan[1]	71	103	130[2]	180[2]	176	160	171
Germany	95	95	83	87	77	74	75
United Kingdom	85	97	90	90	82	87	87
Italy	n.a.	139	114	68	67	85	91
Canada	113	106	111	101	108	108	125
Australia	103	131	157	123	157	158	144
Belgium[1]	110	97	89	97	92	84	84
Finland	84	98	85	73	65	58	62
Netherlands[1]	n.a.	92	77	77	60	56	56
Norway	101	103	73	66	42	30	22
Spain	56	112	88	83	93	86	87
Sweden	69	99	77	94	92	83	88
Switzerland	64	99	91	89	71	62	60

[1] Including other financial institutions. [2] The rise between 1983 and 1987 is largely due to the breakdown of restrictive arrangements aimed at controlling bank share prices.

Sources: National stock exchanges.

Commercial paper markets in selected countries[1]							
Countries	Market opening	1986	1990	Countries	Market opening	1986	1990
		amounts outstanding as a percentage of bank credit to non-financial companies				amounts outstanding as a percentage of bank credit to non-financial companies	
United States	pre-1960	12.0	18.9	Netherlands	1986	0.1	1.3
Japan	end-1987	0.7[2]	5.5	Norway	end-1984	8.5	13.0
France	end-1985	1.0	3.9	Spain	1982	2.8[3]	4.4[3]
United Kingdom	1986	0.7	2.5	Sweden	1983	8.6	8.2
Canada	pre-1960	4.1	9.7				

[1] Issues by non-financial companies only. [2] 1987. [3] Excluding direct placements, which are thought to be sizable.
Sources: National central banks.

Australia, for instance, the main elements of a wide-ranging liberalisation were concentrated in a short period between the early and mid-1980s. In many other countries, including France, Italy, Spain, Belgium and Japan, the process has primarily taken place since the mid-1980s, has been considerably more gradual and is still incomplete. The liberalisation of short-term capital movements occurred as recently as 1990 in Italy and France and has only been partial in Spain; ceilings on retail deposit rates are being eroded but they still exist in Japan, France and Belgium; branching restrictions were relaxed in Italy in 1990 and still apply in Japan; with the exception of France and Belgium (since 1991), in all these countries access by banks to the stock exchanges is either prohibited or restricted and commissions are in principle fixed even for large transactions; as elsewhere, commercial paper markets are either non-existent or, particularly when compared with that in the United States, still in their infancy (see the table above).

Varying impact on banks

The impact of growing competition on banks has taken different forms. For some, hampered by restrictions on their lines of business or geographical area of operation, it resulted in disintermediation. US banks are the clearest example, given the constraints on their investment banking activities and interstate branching restrictions. For the majority, freer to adapt their services to customer needs, the impact of competition mainly took the form of a reduction in the margins on existing or expanding business. French banks, for instance, fit this pattern, as they have been able to cater to the needs of investors and large borrowers through the sale of mutual funds (SICAVs) at market-related returns and by providing a variety of investment banking services. For a third group, including Spanish, Italian and Australian banks, the impact on margins has been at least partly compensated by the reduction in certain forms of implicit taxation, such as compulsory reserve or investment requirements.

Prospects

Further liberalisation ...

Looking ahead, the prospects are for a further broadening of access to geographical and product markets throughout the financial industry and for continued upward pressure on the financing costs of banks in the retail sector. Deregulation and the internationalisation of financial markets have not yet run their full course.

In the United States the Treasury has recently put forward a plan for the overhaul of the financial system, including the abolition of the remaining restrictions on commercial banks' investment banking activities (the Glass-Steagall Act) and on interstate branching (the McFadden Act), discussed in more detail below. By mid-1991 the committee advising the Japanese Finance Minister is expected to submit its final report on the desegmentation of the financial industry, notably as between different categories of banks as well as between banking and securities business; changes in legislation on the basis of the report are anticipated. In addition, interest rate deregulation is to continue. Canada is in the process of eliminating most of the remaining restrictions separating banks, trust and mortgage business, life assurance companies and securities dealers. In the European Community much of the impact of the legislation on the establishment of a single market in financial services is already being felt: capital movements have been liberalised; major progress has been made in the adoption of common capital standards; and there has been a considerable relaxation of line-of-business and geographical constraints. However, 1993 will still represent a significant step towards full integration, particularly in insurance services. The liberalisation of securities markets is set to proceed further in several countries, including Italy and Spain. Remaining bank cartels are coming under pressure. In Switzerland, for example, price-fixing agreements on deposit-taking and money transfers are to be discontinued by 1993, following the abolition of those on securities business in 1990.

It is difficult to assess how far market participants will attempt to exploit the new opportunities, in particular in terms of further foreign expansion. In the late 1980s there was an acceleration in financial sector M & A activity in the European Community, especially across borders. Similarly, the declared objective behind a very large bank merger in the Netherlands last year was expansion abroad. However, more recently the trend seems to have shifted towards domestic consolidation, with several defensive mergers between large domestic banks in Nordic countries and Italy. In addition, there has been growing disenchantment with earlier foreign expansion in the securities and banking industries.

... will heighten the need for consolidation

Regardless of whether new opportunities are exploited, considerable further restructuring and consolidation is likely in certain areas of the financial industry. Consolidation ultimately requires a reduction either in the cost of producing financial services or in the supply of these services. This may come about in a variety of ways. It may be achieved by individual institutions exercising tighter control over costs or reducing the resources devoted to particular activities, possibly including a complete withdrawal from certain markets. It may take place through mergers or interbank agreements which have a similar effect. Finally, it may take the form of the exit of failed institutions from the market. At all events, the period ahead poses serious challenges not only for market participants but also for supervisors and regulators.

Prudential supervision and regulation

The rapid evolution of the financial system has rendered the task of ensuring its safety and soundness increasingly complex. In the United States the difficulties facing the banking industry have prompted plans for what is regarded as an overdue reform of the financial system, including an overhaul of prudential supervision and regulation. As in Norway, these difficulties have also called for immediate action to strengthen the banking system's back-up funds to meet potential losses. At the international level, further steps have recently been taken in the standardisation and refinement of capital requirements and in the broader area of co-ordination of prudential supervisory and regulatory policies.

Responses to difficulties in the banking industry

The US Treasury plan

In February 1991 the US Treasury put forward a plan designed to tackle what it identified as the deep-seated structural problems undermining the competitiveness and soundness of the financial system. These include the restrictions on permissible lines of business and on geographical diversification, the limited market discipline on banks because of a generous deposit insurance system with premiums unrelated to risk, the insufficient focus on capital standards in the prudential framework and the fragmentation of supervisory responsibilities. While it is still unclear to what extent the proposals will be translated into law, the plan will serve as the main framework of reference for future initiatives.

According to the plan, line-of-business and geographical restrictions on banks' operations would be substantially relaxed. Commercial banking, securities business and insurance underwriting could be conducted by separately capitalised units of a financial services holding company, with funding and disclosure firewalls controlling the flow of transactions between the bank and its affiliates. Commercial companies would be allowed to own these holding companies, thereby removing a key constraint of the 1956 Bank Holding Company Act. Deposit insurance coverage would be reduced and risk-related premiums introduced. The authorities would, however, retain discretion to protect all depositors of a failing bank in the light of the potential systemic consequences of the failure (the "too-big-to-fail" principle). The supervisory authorities would intervene sooner when banks faced potential difficulties. The capitalisation of an institution would underpin the whole framework: only institutions with capital in excess of the minimum requirements would be allowed to diversify into new activities or be owned by commercial companies, while both the insurance premiums and the stringency of supervision would be related to capitalisation. The number of federal bank regulators would be reduced to two (the Federal Reserve Board and a Treasury agency), the present securities and insurance regulators would retain responsibility for the oversight of the related affiliates and the "primary bank regulator" would oversee the holding company.

Because of the deepening problems in the banking industry, the US

The strengthening of bank insurance or guarantee funds

authorities have also addressed the more immediate task of strengthening the resources of the bank insurance fund. At a time when segments of the industry are weak, the main difficulty has been that of adhering to the principle that the necessary costs should be paid by the industry while avoiding exacerbating the condition of those banks which are already financially vulnerable. A number of proposals are still under discussion, differing in terms of the amounts to be raised and the distribution of the costs both over time and between the participants in the arrangements. To deal with similar problems, the Norwegian Government presented a bill in January 1991 providing for a new guarantee fund, to be financed out of the budget, which would grant subordinated loans to the existing funds of commercial and savings banks as the need arose.

The Basle accord on capital standards

One important element in the adaptation of the supervisory framework to the changing financial environment is the accord reached on minimum capital standards for internationally active banks by the Basle Committee on Banking Supervision, comprising representatives of the banking supervisory authorities of the Group of Ten countries. Although the accord was in fact concluded in 1988, it attracted considerable attention again last year, as poor profitability put pressure on the capital cushion of banks in some countries, while unreceptive equity markets made it harder to raise funds.

The need for an agreement of this kind became evident in the early 1980s, when bank supervisors in several countries were confronted with a deterioration in the quality of banks' claims on developing countries and with the potentially riskier environment implied by rapid liberalisation. Its main objectives were to strengthen banks against potential losses, notably through a more balanced treatment of credit risk and the inclusion of off-balance-sheet exposures in the capital framework, while reducing competitive inequalities arising from differences in national arrangements. In order to allow banks sufficient time to adjust to the new standards and to give other countries an opportunity to introduce similar arrangements, the Committee adopted a transitional timetable envisaging the attainment of the final 8% ratio of recognised capital to aggregate risk-weighted credit exposures by the end of 1992. At least half of the recognised capital must be in the form of "core" (Tier 1) capital, including disclosed reserves, common stock and non-cumulative preference shares. The remainder (Tier 2) includes components such as undisclosed reserves, general provisions, asset revaluation reserves, hybrid capital instruments and subordinated term debt. In contrast to Tier 1 capital, the items recognised as Tier 2 by individual national authorities vary. For the end of 1990 the required ratios were set at 7.25% and 3.62% for total and Tier 1 capital respectively.

Features of the accord

Some supervisory authorities have reported the progress their banking systems are making towards attaining the 8% target, and several banks have chosen to publish their ratios. However, in many cases the figures are difficult to interpret because of the transitional concessions, notably with regard to the definition of capital. In addition, averages for banking systems may conceal some significant differences among individual institutions.

Varying need for adjustment by banks:

Despite these shortcomings, the evidence on the whole suggests that by the end of 1989 most of the major banks in the countries covered by the accord were on their way to satisfying the final requirements with little difficulty even well before the 1993 deadline, and that in fact many already did so. Preliminary data for the end of 1990 appear to indicate that the decline in earnings and asset quality last year did not fundamentally alter this general picture. It did, however, lead several banks to pay significantly greater attention to their capital position in their portfolio and cost decisions.

Germany and Switzerland

At one end of the spectrum are well-capitalised banks which, even if recently posting lower profits, have seen little need for adjustment. Typical examples are the large Swiss and German banks. German banks, for example, have recently limited their capital-raising activities primarily to the issue of Tier 2 components in the form of "Genußscheine" (non-voting tax-favoured participation certificates) as a means of financing future expansion, notably in eastern Europe.

France and Italy

For another group of banks, including a number of institutions in France and Italy, the main constraint has been the limitation on their capital funding resulting from public ownership. French banks, for instance, have raised capital through share exchanges with other public sector companies, both financial (insurance companies) and non-financial. In Italy the introduction in September 1990 of a law permitting public sector banks to become joint-stock companies has broadened the scope for external equity financing.

For most of the other banks raising equity or Tier 2 capital became considerably more expensive in 1990, particularly after the stock market fall, but did not call for major policy adjustments. The main exceptions are some of the largest US and Japanese institutions.

Japan and the United States

In Japan, while the recent recovery of the equity market has given banks some respite, its weakness last year posed two problems. By reducing revaluation reserves (Tier 2 capital), it raised their need for capital; by markedly increasing the cost of equity and equity-related funding, it made capital more expensive. By contrast, it has been estimated that in the five years to September 1990 the equity base of some of the largest city banks had risen by over 300%, with well over half of the increase being accounted for by new issues and a further quarter by realised capital gains. Banks have responded to the slump in the equity market by issuing subordinated loans (Yen 2.6 trillion, or almost $18 billion, in June–September) following authorisation granted by the Ministry of Finance in mid-1990, by reducing asset growth, primarily through a scaling-back of their foreign exchange and money market positions, and by selling loans. A number of large US banks adjusted to poor earnings and sharply rising funding costs last year by intensifying asset sales and cutting dividends and operating expenses. Their capital-raising activities resumed in earnest only in the first quarter of 1991, as share prices rebounded.

The capital standards and the "credit crunch" in the United States

It is unclear, however, to what extent the capital standards may be responsible for what has become known as the "credit crunch" in the United States, in the sense of a generalised tightening of lending terms with less attention being paid to the individual merits of loan applications. Evidence as to the existence of a credit crunch is mixed and the impact of the standards uncertain in view of the capital position of most banks at the end of 1990. Almost 80% of the 300 largest banks already met the 8% ratio while smaller banks were better capitalised. It is, moreover, difficult to isolate the effects of other factors, such as greater caution on the part of both lenders and borrowers reflecting heightened perceptions of risk as the economy weakens and a reaction to past excesses in the real estate and HLT sectors.

Even if the standards became more onerous, it would be imprudent to relax them. For it is precisely when banks face a more difficult micro and macro-economic environment that capital is most needed to protect depositors, limit excessive risk-taking and reduce the likelihood of financial distress. This may in the short term precipitate retrenchment among the weaker institutions but should lead in the medium term to a stronger banking industry. The Basle Committee's proposal in February 1991 to clarify the outstanding issue of the kinds of general provisions to be admitted as capital, which provides for the exclusion of country risk provisions after a transitional period, confirms the conviction in the validity of the approach.

The coverage of market risks

The Basle accord on capital standards focuses almost exclusively on credit risk. Work is in progress to refine it to cover also "market risks", which arise from sensitivity to changes in securities prices, interest rates and exchange rates. No modification will be made to the accord, however, without formal consultation with the banking industry. Proposals for the treatment of foreign exchange risk are well advanced. Work on securities positions was taken a further step forward by a joint decision by banking supervisors and securities regulators last autumn to come to an agreement on a set of prudential rules applying equally to banks and non-bank financial companies operating in the securities markets. The treatment of overall exposure to interest rate risk raises more complex questions of measurement. Given the limited experience that existing supervisory systems can provide in this area, the final acceptance of common standards may well be years off.

Further steps in international co-operation

Closer links between banking, securities and insurance regulators

The progressive relaxation of constraints on banks' activities and the ensuing growth of financial conglomerates have highlighted the need for co-operation between different supervisory and regulatory authorities. At the international level co-operation first began to develop a few years ago between banking and securities regulators. Recently it has been extended to include their insurance industry counterparts in response to increasing linkages between banks and insurance companies in several countries, including France, the Netherlands, Germany, Denmark, the United Kingdom and Australia. An agreement was finalised in spring 1990 between banking and securities supervisors on the need for the progressive removal of barriers to the exchange of prudential information; it has since been endorsed by insurance regulators. Work is now beginning on the more difficult task of developing a common set of principles for the supervision of multinational groups comprising banks and other financial entities.

The Report on Interbank Netting Schemes

While most of the steps taken in the prudential regulation and supervisory fields have tended to be in response to market developments, the Report on Interbank Netting Schemes of the central banks of the Group of Ten countries is primarily forward-looking. Issued in November 1990, the Report addresses the credit and liquidity risks connected with bilateral and multilateral interbank netting arrangements through which banks may attempt to limit their reciprocal exposures and payment volumes. Only a small number of cross-border payment netting schemes are currently in operation, but several multilateral schemes for foreign exchange contract netting have been proposed. The Report also recommends a set of minimum standards for the operation of cross-border and multi-currency schemes and sets out the principles for co-operative central bank oversight. The central banks propose to continue the monitoring and analysis of risks in clearing and settlement systems, both nationally and internationally, in an effort to identify areas where systemic risks may call for co-operative action.

VI. International financial markets

Highlights

Against a background clouded by heightened political uncertainties, signs of financial fragility and recessionary trends in large parts of the world economy, activity in the international financial markets was somewhat less buoyant last year. Although in the international banking sector the volume of net new credit was only slightly lower than in 1989, the growth of interbank activity slowed down markedly, reflecting increased concern about credit-standing and the need to comply with the interim targets for the new capital adequacy standards. These capital constraints contributed to some tightening of lending conditions, led to some offloading of loans and particularly affected the volume of funds provided by the market to meet year-end needs. There was, moreover, a shift of activity towards continental European banks, which in most cases did not suffer from a shortage of capital and benefited from the liberalisation of exchange controls in a number of countries. By contrast, the market shares of US and Japanese banks declined.

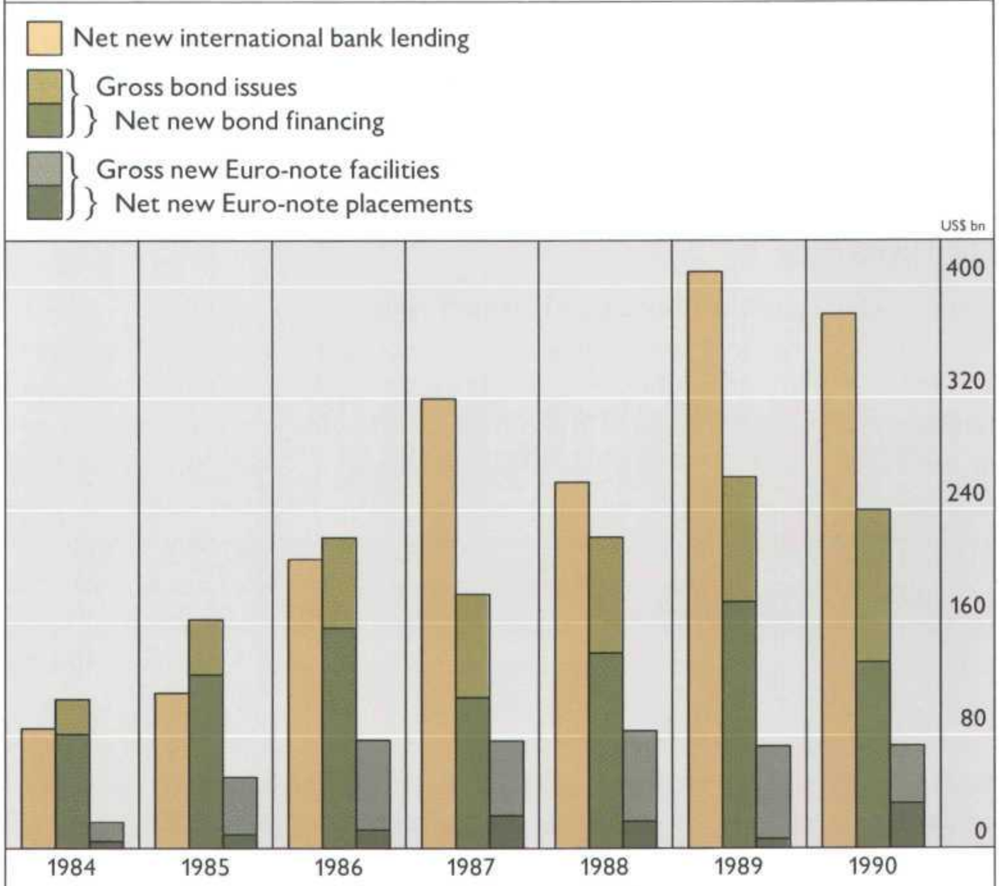
Owing partly to the tighter credit conditions in the international banking sector, Euro-note financing staged a remarkable comeback in 1990, with certain denominations other than the US dollar, such as the ecu, becoming increasingly popular. The international bond market was strongly influenced by the fall in Japanese equity prices and the associated slump in equity-related bond issuance. Overall new issuing activity declined somewhat from its 1989 level, although issuance of both straight fixed rate bonds and floating rate notes rose. A marked expansion was witnessed in certain smaller currency sectors of the market, notably those of the French franc and Italian lira.

The markets for most kinds of derivative financial instrument continued to experience rapid growth in 1990, especially outside the United States. There was a sharp increase in the trading of options on interest rates and interest rate futures. The market for interest rate swaps was also buoyant until mid-year, the latest date for which figures are available, whereas activity in the currency swap market was more subdued.

One notable feature in the period under review was the rapid expansion of the markets for ecu-denominated assets. The issuance of ecu-denominated bonds rose sharply, boosted by some benchmark offerings by official national and supranational borrowers. The ecu also continued to gain popularity for shorter maturity financial instruments.

There was some easing of the international debt situation last year. A number of countries with large debts to commercial banks benefited

Activity in international financial markets



Sources: BIS data and estimates, Bank of England, AIBD and Euroclear.

from officially supported debt relief under the Brady Initiative, and the weight of LDC exposures in banks' balance sheets continued to decline. In addition, some countries obtained relief on their official debt, while a handful of previously troubled debtors began to regain access to the international financial markets. Nonetheless, several countries, including large ones like Brazil and Argentina, have not yet convincingly succeeded in their efforts to reform their economies and to achieve macro-economic stability. Their continuing debt servicing difficulties and the deterioration of the external positions of some eastern European countries were among the darker features of the evolution of the international debt situation last year.

Overall international financial market activity

More restrained growth of international banking activity

The international financial markets continued to expand rapidly last year, although the total volume of new lending was somewhat lower than in 1989. In the banking sector total cross-border claims plus local claims in foreign currency rose by 9%, after increasing by 15% in the previous year, with developments in the interbank market accounting for much of this slowdown.

Excluding the double-counting resulting from interbank operations, the total amount of new credit intermediated by the international banking

Continuing strong expansion of final lending within the reporting area ...

system contracted from \$410 billion in 1989 to \$380 billion. However, at 18%, the growth in international lending to residents of countries within the BIS reporting area itself was well above that recorded for domestic bank credit aggregates in that area. There was, in particular, a surge in foreign currency lending to non-bank entities in high interest rate countries in Europe, and a sizable volume of domestic credit in Japan was channelled through the international markets.

... but contraction in claims on the rest of the world

Outstanding claims on outside-area countries fell for the second consecutive year. The implementation of the Brady Initiative resulted in a very pronounced write-down of banks' claims on Mexico and may have prompted further downward revaluations of exposure vis-à-vis other heavily indebted countries. The uncertain economic outlook in eastern Europe also led banks to scale back their claims on countries in that region.

Marked decline in bond financing

The volume of new bond issues completed in 1990, at \$239 billion, was 9% below the level in the previous year. There was a sharp fall in new issues of equity-related bonds, reflecting the weakness of the Japanese equity markets throughout 1990, whereas new issues of floating rate notes recovered strongly. Activity in the straight fixed rate sector accelerated somewhat, particularly in some non-dollar segments such as those of the yen, the ecu and the Swiss franc. The actual net volume of new funds raised

Estimated net financing in international markets

	Stocks at end-1985	Changes[1]					Stocks at end-1990
		1986	1987	1988	1989	1990	
	in billions of US dollars						
Total cross-border claims of reporting banks[2]	2,574.3	509.5	601.8	436.1	684.9	480.0	5,907.2
Local claims in foreign currency	562.8	147.7	163.0	74.8	122.2	109.0	1,309.4
minus: Double-counting due to redepositing among the reporting banks	*1,652.1*	*452.2*	*444.8*	*250.9*	*397.1*	*209.0*	*3,866.6*
A = Net international bank lending[3]	1,485.0	205.0	320.0	260.0	410.0	380.0	3,350.0
B = Net new Euro-note placements	16.0	13.4	23.4	19.5	6.9	32.0	111.2
Total completed international bond issues		220.5	180.0	220.7	263.6	239.4	
minus: Redemptions and repurchases		*64.6*	*73.0*	*82.6*	*89.4*	*108.4*	
C = Net international bond financing	572.5	155.9	107.0	138.1	174.3	131.0	1,472.5
D = A + B + C = Total international financing	2,073.5	374.3	450.4	417.6	591.2	543.0	4,933.7
minus: Double-counting[4]	*133.5*	*79.3*	*50.4*	*67.6*	*76.2*	*78.0*	*558.7*
E = Total net international financing	1,940.0	295.0	400.0	350.0	515.0	465.0	4,375.0

[1] Non-dollar flow banking data are converted into dollars at constant end-of-quarter exchange rates, and non-dollar bonds at rates ruling on announcement dates. Stock data are converted at current exchange rates. [2] Banks in the Group of Ten countries plus Luxembourg, Austria, Denmark, Finland, Ireland, Norway, Spain, the Bahamas, Bahrain, the Cayman Islands, Hong Kong, the Netherlands Antilles and Singapore, and the branches of US banks in Panama. [3] In addition to direct cross-border claims on end-users, these estimates include certain interbank positions: firstly, claims on banks outside the reporting area, the assumption being that these "peripheral" banks will not, in most cases, borrow the funds from banks in the financial centres simply for the purpose of redepositing them with other banks in these centres; secondly, claims on banks within the reporting area to the extent that these banks switch the funds into domestic currency and/or use them for direct foreign currency lending to domestic customers; thirdly, a large portion of the foreign currency claims on banks in the country of issue of the currency in question, e.g. dollar claims of banks in London on banks in the United States; here again the assumption is that the borrowing banks obtain the funds mainly for domestic purposes and not for re-lending abroad. [4] International bonds taken up by the reporting banks, to the extent that they are included in the banking statistics as claims on non-residents; bonds issued by the reporting banks mainly for the purpose of underpinning their international lending activities.

on the international bond markets last year fell quite markedly owing to a further pronounced increase in reflows from scheduled redemptions and early repayments. Reflows in relation to completed new issues rose from 34% in 1989 to 45%.

Surge in Euro-note issues

At the shorter end of the maturity spectrum net issues of Euro-notes surged from \$6.9 billion in 1989 to \$32 billion, or from 4 to 20% of total net international securities financing.

Reduced role of Japanese banks and non-banks in the international markets

A wide variety of factors contributed to the dampening of activity in the international financial markets in the course of 1990. Early in the year the "triple decline" in asset prices in Japan – the sharp drop of the Tokyo stock market, the downturn in yen bond prices triggered by a tighter monetary policy stance, and the depreciation of the yen – acted as a constraint on the borrowing and lending activities of Japanese entities. With equity-related bond issuance falling off, Japanese non-financial companies shifted their borrowings away from the international securities markets. The share of total financing of Japanese companies accounted for by international bonds contracted from 13% in 1989 to 5.4% in the first nine months of 1990. At the same time, in the face of rising domestic interest rates and wide swings in exchange rates, Japanese investors retrenched their position in the international markets. Finally, Japanese banks' capital ratios came under pressure as the decline in the stock market cut their revaluation reserves by more than 50%. Under the Basle capital accord, 45% of banks' revaluation reserves may be included in Tier 2 capital, and in the case of Japanese banks such reserves accounted for some 90% of Tier 2 at the end of March 1990. As a result of the lower stock prices, at the end of September 1990 banks' capital ratios had fallen by an estimated 1½–2% from their end-March levels, despite the sharp appreciation of the yen which reduced the yen value of their dollar books. In an attempt to alleviate these pressures, the Japanese authorities allowed the issuance of subordinated bonds on the international markets (commercial banks in Japan had previously not been allowed to issue such bonds). During the third quarter of 1990 Japanese banks were able to raise a total of \$6.7 billion in this way. At the same time, they sharply cut back their window-dressing activities at end-March and end-September.

Impact of Gulf crisis on banking activity in the Middle East

The invasion of Kuwait in August and the subsequent pronounced increase in oil prices shook world financial markets. There were abrupt movements in asset prices, with stock markets and bond prices falling sharply. International banking activity was also affected, above all that with banks located in the Middle East. Business involving Kuwait and Iraq was suspended. There were also large withdrawals of deposits from banks elsewhere in the region and reductions in their lines of credit. Between the end of June and the end of September the international claims of offshore banking units in Bahrain fell by 14%; however, in the months that followed, the increase in the oil revenues of OPEC countries resulted in a large reflow of funds to these banks.

In the fourth quarter there were a number of publicised downgradings in the credit-standing of internationally active banks and, in the interbank

End-of-year tensions in the interbank market

market, some financial institutions were said to have encountered funding difficulties. Several major banks appear to have been unwilling to meet the liquidity needs of their counterparties at the end of the calendar year and either reduced their credit limits or, in some extreme cases, failed to renew deposits reaching maturity. As a result, at the end of 1990 funding pressures were much more pronounced than in previous years. The overnight federal funds rate in the US domestic market rose sharply, reaching 20–25% by the end of November. After subsiding momentarily in early December, the scramble for funds intensified towards the end of the year, with Euro-dollar rates for over-the-year-end funds rising at one point to 30%. Credit quality concerns were also evident in the Euro-dollar bond market and the yield spread of highly rated corporate bonds over US Treasury securities widened by between 40 and 60 basis points. However, by the beginning of 1991 spreads had returned to more normal levels.

The international banking sector

The development of the overall aggregates

Changing nature of interbank activity

Last year the reporting banks' cross-border claims plus their claims in foreign currency on local residents increased by $589 billion, or by $218 billion less than in the previous year. Within the reporting area interbank activity fell back markedly, accounting for only 58% of the total expansion of the gross international banking aggregates, or for only about 40% if transactions between related offices are excluded. This was considerably less than in the preceding years. The deterioration in the credit-standing of some banks, the need to comply with the capital adequacy standards, the wider use of derivative instruments and the continuing liberalisation of money markets in several countries, most notably Japan, contributed to this decline in the share of interbank transactions. At the same time, the international interbank market remained an important source of finance for domestic lending: the ratio of reporting banks' net borrowing in the international interbank market to their gross volume of international interbank operations has increased continuously, from 12% in 1986 to 39% in 1990.

Further shift towards lending to non-banks inside the reporting area

Last year new credits were essentially limited to the reporting area. Net of double-counting, the increase in final lending to this group of countries amounted to $375 billion, of which over $240 billion represented direct credits to non-bank entities. By contrast, identified claims on outside-area countries decreased by $17 billion. On the sources side of banks' balance sheets, however, outside-area countries were large suppliers of new funds, adding nearly $70 billion to their outstanding deposits. As a result, the overall net debtor position of these countries vis-à-vis the reporting banks contracted to $62 billion, or only one-quarter of its level of three years earlier. Finally, geographically unallocated assets, which include certain securities holdings and claims on international institutions, expanded by $22 billion.

Main features of international banking activity

	Changes, excluding exchange rate effects				Stocks at end-1990
	1987	1988	1989	1990	
	in billions of US dollars				
A = Claims on outside-area countries	11.6	13.5	− 1.7	−17.0	718.6
of which: On non-banks	*2.7*	*−4.3*	*−11.5*	*−15.3*	*390.5*
B = International claims on entities within the reporting area	740.9	496.4	793.8	583.6	6,336.1
(1) Claims on non-banks	*187.2*	*159.9*	*229.5*	*241.0*	*1,684.4*
(2) Banks' own use of international interbank funds for domestic lending	*108.9*	*85.6*	*167.2*	*133.6*	*785.1*
(3) Interbank redepositing	*444.8*	*250.9*	*397.1*	*209.0*	*3,866.6*
C = Unallocated	12.4	1.1	15.0	22.4	161.9
D = A + B + C = Total gross international bank assets	764.8	510.9	807.1	589.0	7,216.6
E = D−B *(3)* = Estimated net international bank credit	320.0	260.0	410.0	380.0	3,350.0
A = Liabilities to outside-area countries	48.7	41.5	57.6	69.4	656.3
of which: To non-banks	*12.0*	*21.1*	*27.8*	*20.2*	*252.5*
B = International liabilities to entities within the reporting area	725.6	460.8	720.1	525.9	6,177.6
(1) Liabilities to non-banks	*71.0*	*66.3*	*159.7*	*111.3*	*1,044.7*
*(2) Banks' own supply of domestic funds to the international interbank market**	*164.1*	*118.8*	*147.0*	*171.3*	*1,333.0*
(3) Interbank redepositing	*490.5*	*275.7*	*413.4*	*243.3*	*3,799.9*
C = Unallocated	36.2	33.3	45.7	28.0	316.0
D = A + B + C = Total gross international bank liabilities	810.5	535.7	823.4	623.3	7,149.9

* Including trustee funds channelled into the market via banks in Switzerland.

The nationality structure of international banking activity

The phasing-in of the new capital adequacy guidelines, less receptive equity markets and, in some countries, a deterioration of banks' credit-standing left a clear imprint on the distribution of international banking activity last year as seen from the point of view of the nationality of ownership of reporting banks. Japanese banks, which had hitherto been the main driving force behind the expansion of the international banking market, accounted for less than 20% of the rise in the current dollar value of reporting banks' international assets (exchange rate adjusted changes are not available), with their share in total outstanding positions receding from a peak of 38% in 1988 to 35.5% at the end of last year. US banks' international assets fell by $15 billion and their share of the total outstanding slipped further to an all-time low of 12%. If claims on related offices are excluded, the share of US banks in total international claims, at less than 8%, is now clearly lower than that of German and French banks (11.5 and 10.5% respectively). In fact, European banks, whose growth share had averaged about 35% in the preceding years, accounted for more than three-quarters of last year's expansion in international bank assets.

Pronounced shifts in market shares

In current dollar terms the growth of Japanese banks' international

Reduced role of ...

... Japanese banks ...

assets slowed from $202 billion in 1989 to $153 billion. However, excluding exchange rate effects the expansion last year was only one-third of that in 1989. Following several years of sustained expansion, Japanese banks trimmed the cross-border claims of their US affiliates by $24 billion and cut back new international lending operations booked in Tokyo (by more than 50% if allowance is made for exchange rate changes) and London. On the other hand, they continued to strengthen their presence in continental Europe, especially in France and Belgium. On the sources side of their balance sheets the slower growth was due primarily to the reduction in recourse to the international interbank market, which in the past had been their main source of funding. Even in current dollar terms new borrowing from unaffiliated banks was scaled back by nearly two-thirds.

Types of international bank assets and liabilities, by nationality of banks*

	Change in current dollars in 1989				Change in current dollars in 1990				Total stocks	
	Total	of which vis-à-vis			Total	of which vis-à-vis			end-1985	end-1990
		Related offices	Non-related banks	Non-banks		Related offices	Non-related banks	Non-banks		
	in billions of US dollars									
Japanese banks										
Assets	202.0	87.0	79.6	35.3	153.0	71.6	49.9	31.6	707.0	2,120.4
Liabilities	211.1	41.9	160.5	8.6	135.1	38.5	56.4	40.3	672.5	2,059.8
US banks										
Assets	60.9	46.2	1.4	13.2	−15.3	10.1	−30.3	4.9	593.3	712.4
Liabilities	68.3	45.3	−8.1	31.2	− 2.7	14.3	− 6.2	−10.9	555.2	741.6
German banks										
Assets	81.6	18.9	50.8	12.0	166.2	36.8	82.2	47.1	191.0	601.8
Liabilities	54.2	14.9	6.7	32.7	130.2	34.5	41.8	53.8	157.4	459.3
French banks										
Assets	45.5	4.3	25.0	16.4	122.3	39.3	49.8	33.1	245.2	555.2
Liabilities	56.1	0.3	25.8	30.0	154.2	52.6	49.0	52.6	248.9	610.9
Italian banks										
Assets	52.6	3.3	25.6	23.7	73.5	8.4	27.7	37.4	113.5	328.0
Liabilities	47.7	0.8	31.2	15.8	74.0	7.7	45.6	20.7	115.1	330.5
UK banks										
Assets	7.9	7.5	−3.2	3.6	25.2	0.0	20.8	4.4	191.0	272.3
Liabilities	39.8	6.2	−5.8	39.7	13.2	0.3	11.6	1.1	200.8	321.6
Other										
Assets	102.9	27.2	11.8	64.0	262.2	68.6	89.6	104.1	672.7	1,379.2
Liabilities	83.6	8.8	41.8	32.3	321.6	77.6	115.7	128.5	664.9	1,444.3
Total										
Assets	553.4	194.4	191.0	168.2	787.1	234.8	289.7	262.6	2,713.7	5,969.3
Liabilities	560.8	118.2	252.1	190.3	825.6	225.5	313.9	286.1	2,614.8	5,968.0

* The table shows the cross-border positions in all currencies plus the foreign currency positions vis-à-vis local residents of banks in the following seventeen countries: Austria, Belgium, Luxembourg, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, the Netherlands, Spain, Sweden, Switzerland, the United Kingdom and the United States (cross-border positions in domestic currency only). The figures for US banks also include the cross-border positions reported by US banks' branches in the Bahamas, the Cayman Islands, Panama, Hong Kong and Singapore. The international assets and liabilities in this table are classified according to the nationality of ownership of the reporting banks. Non-bank positions include official monetary institutions and, on the liabilities side, banks' issues of CDs and other securities.

The absolute decline in US banks' international assets was distributed across virtually all reporting centres with the exception of London. The largest part of the fall ($20 billion) was accounted for by their US home offices, although in relative terms the contraction recorded by their affiliates in continental Europe was even greater. By types of counterparty, there were marked differences between business with related institutions and that with unrelated entities. Outstanding claims on unaffiliated banks fell by $30 billion, whereas inter-office claims expanded by $10 billion as London affiliates were used to fund the shortfalls stemming notably from $11 billion of withdrawals of non-bank deposits at US banks elsewhere.

... and US banks

European banks, particularly those with head offices on the Continent, stepped up their international business sharply last year. In current dollar terms their cross-border claims in all currencies plus local claims in foreign currencies surged by $595 billion, or 28%. The expansion was broadly shared among nationality groups. While in absolute terms it was most marked for German and French banks, the highest growth rates in international activity, of 40% or more, were recorded by Swedish, Spanish and Finnish banks. There was a huge increase in loans to non-bank residents of countries which had recently dismantled their remaining foreign exchange restrictions. These foreign currency credits were largely extended by the recipients' own banking systems, which in turn refinanced themselves in the international interbank market. This was notably the case in Finland, France, Italy and Sweden. Moreover, the rapid development of activity in various EC centres, which was associated with mergers and acquisitions, inevitably resulted in a substantial build-up of business between different nationality groups of banks. Banks from continental European countries also accounted for the great bulk of the growth in international non-bank deposits and in direct lending to non-banks last year.

Strong growth in the international books of continental European banks

Developments in individual market centres

The growth in international banking activity in 1990 was largely concentrated on the European market centres, which accounted for over 70% of total new cross-border plus local foreign currency lending. The largest increase in cross-border assets ($85 billion) was recorded for banks in the United Kingdom. These banks were very large net takers of sterling funds from abroad ($19 billion). The external assets of banks in France registered further strong growth (18%), but on a net basis they were large borrowers of external funds in domestic currency as they repatriated deposits shifted abroad by French non-bank entities (see pages 129–130).

Buoyant activity in European market centres

About $20 billion of the recorded growth in the external positions of banks in Germany was due to the inclusion of eastern German banks as reporting institutions. Banks in Germany remained large net exporters of funds, supplying $14.5 billion of domestic currency funds to the international market, of which a very sizable share was in the form of longer-term credits. External asset growth was also particularly strong for banks in Spain (33%) and Denmark (20%).

The growth of the cross-border assets of banks in Japan slowed down

Developments in individual reporting market centres: assets									
Positions of banks in	Changes, excluding exchange rate effects						Stocks at end-1990		
	1989			1990			External positions in		Local positions in foreign currency
	External positions in		Local positions in foreign currency	External positions in		Local positions in foreign currency	domestic currency	foreign currency	
	domestic currency	foreign currency		domestic currency	foreign currency				
	in billions of US dollars								
United Kingdom	5.1	50.0	10.6	8.3	76.8	27.2	97.6	971.4	315.0
France	4.3	50.3	4.3	8.9	55.8	−2.3	66.6	358.1	77.8
Germany	34.3	20.0	0.2	29.6	38.8	3.0	244.6	124.4	7.8
Luxembourg	0.2	36.3	4.4	0.9	40.5	6.1	4.9	291.1	50.3
Belgium	0.5	19.3	1.8	1.9	20.9	4.9	13.8	183.2	57.0
Netherlands	5.8	16.4	5.1	0.6	21.8	3.1	33.1	141.3	27.2
Switzerland	−5.7	−0.3	3.6	− 3.6	6.9	0.3	66.0	76.6	20.5
Sweden	1.6	4.4	16.6	− 1.9	4.7	21.7	1.7	24.4	73.4
Other European countries	12.0	18.5	18.4	− 7.3	26.8	25.0	34.4	225.8	151.9
Total European countries	58.1	214.9	65.0	37.4	293.0	89.0	562.7	2,396.3	780.9
Japan: Offshore market	69.0	46.0	26.0	18.6	34.0	25.0	215.0	280.0	92.0
Other	4.0	33.5	29.3	1.3	18.7	−9.5	202.8	252.8	406.3
United States: IBFs	29.2	−0.7	0.0	−38.5	− 6.2	0.0	251.3	51.5	0.0
Other	15.4	2.6	0.0	15.3	1.4	0.0	261.1	14.5	0.0
Asian market centres	−1.1[1]	117.6[2]	..	2.2[1]	115.3[2]	..	6.8[1]	827.9[2]	..
Other centres[3]	0.5[4]	95.9	1.9[4]	0.1[4]	−12.7	4.5[4]	4.4[4]	580.0	30.2[4]
Total	175.1	509.8	122.2	36.4	443.5	109.0	1,504.1	4,403.0	1,309.4

[1] Hong Kong only. [2] Including Bahrain. [3] Including Canada. [4] Canada only.

Slower growth of cross-border operations of banks in Japan ...

from $153 billion in 1989 to $73 billion. Developments were once again focused on accounts in the Japan Offshore Market, through which Japanese banks channelled a net $15 billion to the international market, in particular to the offshore centres in Asia. The external business of banks in Hong Kong and Singapore expanded very rapidly (20%), with over 75% of the growth in their cross-border claims being vis-à-vis Japan.

... and cutbacks by banks in the United States

The external assets of banks in the United States contracted by $28 billion. Much of the decline was accounted for by write-offs of banks' exposures to less developed countries, a large part of which had been carried on the books of the IBFs. The decrease in assets booked through the IBFs was also to some extent related to the lowering of reserve requirements at the end of 1990. The sharp turn-round in the claims of banks located in the offshore centres of the Caribbean (excluding non-US banks in the Cayman Islands), from a $94 billion expansion in 1989 to an absolute contraction of $15 billion, partly reflected the decline in the business of banks in the United States.

Developments in individual reporting market centres: liabilities

Positions of banks in	Changes, excluding exchange rate effects						Stocks at end-1990		
	1989			1990			External positions in		Local positions in foreign currency
	External positions in		Local positions in foreign currency	External positions in		Local positions in foreign currency	domestic currency	foreign currency	
	domestic currency	foreign currency		domestic currency	foreign currency				
	in billions of US dollars								
United Kingdom	17.7	62.7	−8.3	27.3	75.0	35.9	175.8	1,025.5	282.1
France	15.9	50.1	12.5	40.9	47.2	−12.3	96.9	385.1	62.4
Germany	12.1	13.1	1.3	15.1	31.8	3.7	126.1	98.8	10.8
Luxembourg	0.7	34.2	6.5	0.8	35.4	7.8	5.2	266.0	62.6
Belgium	1.8	15.8	5.8	2.3	13.1	8.2	22.7	194.6	47.9
Netherlands	1.1	8.1	7.7	2.6	18.1	5.9	24.6	123.6	34.9
Switzerland	3.8	6.1	2.1	7.4	4.2	2.3	37.9	73.5	23.3
Sweden	0.2	18.4	0.7	− 0.4	21.8	4.0	3.9	86.7	12.4
Other European countries	10.3	36.0	4.6	1.5	39.2	15.5	43.9	355.7	57.2
Total European countries	63.6	244.5	32.9	97.5	285.8	71.0	537.0	2,609.5	593.6
Japan: Offshore market	19.7	38.0	35.0	9.5	28.0	30.0	136.0	282.0	90.0
Other	36.5	46.6	13.9	− 6.1	15.6	− 2.5	177.2	363.3	325.6
United States: IBFs	48.6	−1.9	0.0	−16.7	−4.4	0.0	317.5	55.9	0.0
Other	15.2	−0.6	0.0	19.8	1.0	0.0	269.3	13.2	0.0
Asian market centres	4.0[1]	109.2[2]	..	2.0[1]	99.1[2]	..	12.7[1]	761.2[2]	..
Other centres[3]	2.0[4]	114.9	1.3[4]	0.6[4]	−7.7	0.8[4]	9.9[4]	584.6	11.5[4]
Total	189.6	550.7	83.1	106.6	417.4	99.3	1,459.5	4,669.7	1,020.7

[1] Hong Kong only. [2] Including Bahrain. [3] Including Canada. [4] Canada only.

Banks' direct business with non-bank entities within the reporting area

Acceleration in lending to non-bank entities

The further acceleration in reporting banks' direct business with non-bank entities inside the reporting area encompassed a broad spectrum of countries. In Europe the recent dismantling of exchange controls in many countries led to a very perceptible further integration of domestic and international markets. In fact, an unprecedented share of total bank credit was channelled through the international market last year. Especially in high interest rate countries, where exchange rates were expected to remain stable over the short term, borrowing in foreign currency, or externally, proved to be very attractive. Italian residents took up a record $23 billion directly from banks abroad and a further $5 billion in foreign currency from banks at home. This international borrowing was equivalent to 40% of total domestic bank credit expansion. Similarly, international credits to Swedish non-banks, largely in foreign currency from banks at home, amounted to thirteen times the volume of new domestic credits in Swedish kronor. On a somewhat smaller absolute scale Finnish entities borrowed $6 billion locally in foreign currency. The record $18.8 billion of new lending to residents of the Netherlands cannot be compared directly with credit developments in that country because a large share of the funds was raised and rechannelled abroad by the special financing vehicles of foreign companies.

Further increase in lending to Japanese non-banks

Cross-border lending to Japanese non-bank entities accelerated from $48 billion in 1989 to $64 billion. This was more than accounted for by new credits extended from the offshore centres in Asia. One reason for this massive offshore lending to Japanese residents may have been the imposition of informal guidelines on banks' domestic credit expansion. Lending to UK and US non-bank entities was somewhat lower last year owing to the decline in merger and acquisition related business and increasing concern about credit risk.

Rapid expansion in non-bank deposits ...

As regards the sources side of banks' balance sheets, international deposits received from non-bank entities from inside the reporting area expanded by $111 billion, or 12%. In numerous continental European countries there appeared to be an increasing substitutability between domestic and external deposits. The historically high level of short-term interest rates raised the implicit cost of reserve requirements in Germany and widened the interest rate differential between domestic and Euro-deposit rates. As a result, deposits by German non-bank residents with banks abroad went up by a further $26 billion. This expansion was equivalent to about 50% of the growth of the broad domestic monetary aggregate in Germany, M_3. Following the removal of exchange controls last year, reserve requirements also played a very important role in diverting deposits of French residents, particularly short-term money market funds,

... even in relation to domestic monetary aggregates

BIS reporting banks' claims on non-bank entities in the Group of Ten countries

Claims on non-bank entities in	Changes, excluding exchange rate effects						Stocks at end-1990		
	Cross-border positions		Local positions in foreign currency		Memorandum item: Domestic bank credit[1]		Cross-border positions	Local positions in foreign currency	Memorandum item: Domestic bank credit[1]
	1989	1990	1989	1990	1989	1990			
	in billions of US dollars								
United States	35.5	11.7	0.0	0.0	89.5	−9.3	231.5	0.0	4,344.1
Japan	47.5	63.5	11.4	8.4	398.4	381.6	196.7	226.8	4,528.1
Germany	1.7	2.5	−0.2	1.5	80.0	117.9[2]	82.7	4.5	1,779.7[2]
France	1.8	5.8	0.2	0.8	90.3	115.8	28.9	21.3	1,363.4
Italy	10.9	22.9	7.0	5.0	57.1	69.6	73.3	51.8	771.3
United Kingdom	8.3	10.1	29.7	9.6	146.2	138.4	53.4	132.7	1,147.7
Canada	5.2	5.1	1.8	4.3	28.1	22.2	30.3	27.8	280.7
Netherlands	7.8	15.5	3.9	3.3	13.2	15.8	54.3	18.9	332.5
Switzerland	4.0	4.2	2.3	1.4	34.7	28.6	25.4	12.7	343.0
Sweden	2.8	4.9	15.8	17.8	5.4	1.7	19.2	65.3	126.6
Belgium-Luxembourg	3.3	2.6	2.9	0.4	29.5	14.6	27.2	36.8	335.1

[1] Excluding lending in foreign currency. [2] Western Germany only.

The international banking market as a deposit outlet for non-bank entities in the Group of Ten countries									
Liabilities vis-à-vis non-bank entities in	Changes, excluding exchange rate effects						Stocks at end-1990		
	Cross-border positions		Local positions in foreign currency		Memorandum item: Broad monetary aggregates[1]		Cross-border positions	Local positions in foreign currency	Memorandum item: Broad monetary aggregates[1]
	1989	1990	1989	1990	1989	1990			
	in billions of US dollars								
United States	18.7	0.5	0.0	0.0	159.7	63.6	257.9	0.0	4,035.4
Japan	13.5	−3.6	..	..	350.5	260.0	21.0	..	3,757.2
Germany	23.0	25.5	1.1	2.1	38.8	49.2[2]	112.8	7.4	889.6[2]
France	5.1	10.1	8.0	−6.5	68.0	73.4	30.6	12.3	970.7
Italy	1.6	5.4	1.1	0.9	96.3	100.0	14.4	4.7	1,032.3
United Kingdom	7.0	8.8	12.8	18.6	109.7	98.6	50.5	94.6	919.2
Canada	0.1	0.4	1.5	0.5	28.3	20.3	12.6	9.1	270.5
Netherlands	10.4	1.1	6.9	5.6	14.8	10.7	49.9	26.1	144.9
Switzerland	13.4	9.4	2.1	1.3	13.8	8.6	66.8	12.9	288.3
Sweden	1.1	0.0	−0.3	0.6	8.8	10.0	4.1	5.0	116.9
Belgium-Luxembourg	5.2	6.1	8.8	5.4	17.5	6.6	33.1	40.0	194.0

[1] M_2 for Belgium-Luxembourg and the Netherlands, M_2+CDs for Japan, M_4 for the United Kingdom, M_3-overnight and term Euro-dollars for the United States, M_3 for other countries. [2] Western Germany only.

from the domestic to the Euro-markets. In the first three quarters of 1990 identified cross-border deposits by French non-banks amounted to $15 billion, or the equivalent of 18% of the growth of M_3. However, after reserve requirements were lowered in October, French residents reduced their external deposits by $4.5 billion. The outstanding cross-border deposits of Italian entities expanded by 60% to $14.4 billion. Cross-border deposits by Swiss non-bank entities grew rapidly and in absolute amounts their increase in 1990 exceeded that of domestic M_3.

There was also a pronounced expansion in cross-border deposits by UK entities ($8.8 billion), mainly non-bank financial institutions. By contrast, it appears that deposits by US residents in the Euro-markets amounted to only $0.5 billion last year; however, no figures are as yet available for non-US banks in the Cayman Islands, which had recorded a very strong increase in such deposits in the preceding year. Finally, an estimated $45 billion of non-bank funds was channelled to the international markets via the trustee accounts of Swiss banks.

Developments in business with countries outside the reporting area

Sizable decline in claims on outside-area countries

Banks' outstanding claims on countries outside the reporting area, which had already contracted by $2 billion in 1989, fell by a further $17 billion last year. In the non-OPEC developing world the reduction in reporting banks' exposure vis-à-vis Latin America accelerated, from $17 billion in 1989 to $27 billion. By far the sharpest decline was recorded vis-à-vis Mexico, whose banking debt was cut by $15 billion (22%). The fall reflected in large measure banks' preference for the option of exchanging their claims for

BIS reporting banks' business with countries outside the reporting area

	Changes, excluding exchange rate effects							Stocks	
	1984	1985	1986	1987	1988	1989	1990	end-1983	end-1990
	in billions of US dollars								
Borrowing from reporting banks									
Non-reporting developed countries	5.2	7.2	7.2	4.8	2.1	2.9	7.1	85.9	145.8
Eastern Europe	−0.1	5.7	3.7	2.3	8.3	9.3	−9.9	52.0	78.5
of which: Soviet Union	*1.6*	*3.7*	*3.6*	*0.3*	*5.5*	*7.5*	*−6.2*	*16.2*	*42.1*
OPEC	−2.1	0.2	0.4	2.2	5.4	5.7	−4.7	111.1	134.5
Middle East	*0.3*	*−1.4*	*−0.9*	*2.2*	*4.5*	*7.6*	*−0.8*	*44.0*	*60.6*
Venezuela	*−2.8*	*0.4*	*−1.1*	*−0.5*	*0.8*	*−1.6*	*−7.1*	*28.3*	*17.6*
Other	*0.4*	*1.2*	*2.4*	*0.5*	*0.1*	*−0.3*	*3.2*	*38.8*	*56.3*
Non-OPEC LDCs	9.8	11.0	3.1	2.3	−2.3	−19.6	−9.5	326.3	359.9
Mexico	*0.8*	*0.8*	*−1.2*	*−0.5*	*−3.6*	*−1.2*	*−15.4*	*72.1*	*55.0*
Other Latin America[1]	*4.5*	*0.9*	*2.7*	*−3.3*	*−1.3*	*−15.5*	*−11.1*	*137.0*	*126.8*
China	*1.4*	*4.9*	*0.7*	*4.9*	*7.1*	*−0.5*	*7.5*	*3.0*	*30.9*
Taiwan	*−0.8*	*−0.6*	*4.0*	*8.3*	*−1.7*	*−0.5*	*0.6*	*6.9*	*16.4*
Other Asia	*4.2*	*3.8*	*−2.1*	*−5.4*	*−1.5*	*1.3*	*9.7*	*71.1*	*93.0*
Africa	*0.1*	*0.9*	*−0.2*	*−0.6*	*−0.6*	*−1.8*	*−0.1*	*19.8*	*23.4*
Middle East	*−0.4*	*0.3*	*−0.8*	*−1.1*	*−0.7*	*−1.4*	*−0.8*	*16.4*	*14.3*
Total borrowing	12.8	24.1	14.4	11.6	13.5	−1.7	−17.0	575.3	718.6
Memorandum item:									
Fourteen heavily indebted countries[2]	*2.3*	*0.7*	*2.0*	*−5.7*	*−8.1*	*−23.1*	*−37.2*	*264.8*	*217.4*
Deposits with reporting banks									
Non-reporting developed countries	2.7	3.5	7.4	6.1	13.4	17.3	6.2	27.6	98.9
Eastern Europe	4.3	2.8	0.2	−0.7	4.1	0.2	−5.7	19.7	21.0
of which: Soviet Union	*1.7*	*0.9*	*0.8*	*−1.9*	*1.8*	*−0.7*	*−6.5*	*10.9*	*8.7*
OPEC	4.1	6.6	−22.1	19.2	11.6	14.4	18.0	147.9	215.2
Middle East	*1.0*	*0.8*	*−13.5*	*17.5*	*12.0*	*9.5*	*12.4*	*118.9*	*171.1*
Venezuela	*2.0*	*3.1*	*−5.6*	*−0.6*	*−0.3*	*0.5*	*4.4*	*17.1*	*20.8*
Other	*1.1*	*2.7*	*−3.0*	*2.3*	*−0.1*	*4.4*	*1.2*	*11.9*	*23.3*
Non-OPEC LDCs	19.4	5.7	12.9	24.1	12.4	25.7	50.9	152.5	321.1
Mexico	*3.8*	*−0.3*	*0.7*	*6.5*	*−5.3*	*−1.6*	*3.4*	*18.0*	*26.3*
Other Latin America[1]	*6.4*	*0.7*	*0.0*	*0.2*	*8.7*	*6.2*	*6.1*	*40.3*	*70.4*
China	*1.3*	*−5.3*	*−0.9*	*5.3*	*5.2*	*1.6*	*16.1*	*16.0*	*40.1*
Taiwan	*5.4*	*6.7*	*14.4*	*6.5*	*−7.9*	*6.5*	*7.5*	*11.9*	*53.1*
Other Asia	*3.1*	*1.1*	*−0.4*	*2.2*	*10.4*	*8.4*	*8.0*	*34.6*	*72.8*
Africa	*1.0*	*1.4*	*0.0*	*1.5*	*1.5*	*1.7*	*3.3*	*9.3*	*23.1*
Middle East	*−1.6*	*1.4*	*−0.9*	*1.9*	*−0.2*	*2.9*	*6.5*	*22.4*	*35.3*
Total deposits	30.5	18.6	−1.6	48.7	41.5	57.6	69.4	347.8	656.3
Memorandum item:									
Fourteen heavily indebted countries[2]	*13.5*	*2.6*	*−4.6*	*7.1*	*2.4*	*7.3*	*11.4*	*74.5*	*118.4*

[1] Including those countries in the Caribbean area which are not classified as offshore banking centres. [2] Baker countries excluding Yugoslavia.

discounted bonds under the agreement concluded in March 1990, although debt buy-backs, debt/equity conversions and outright debt sales were also contributing factors. At the same time, Mexico added $3.4 billion to its outstanding balances with the banks and by the end of the year recorded net claims on Mexico amounted to $29 billion, or only about one-half of their 1985 figure. Other sizable declines in identified claims were recorded for Brazil ($7.1 billion) and Argentina ($3.5 billion). Debt conversion programmes accounted for the bulk of the decline recorded for Argentina, while in the case of Brazil, which at year-end had accumulated arrears with its creditor banks of over $8 billion, the reported reduction in bank debts reflected a combination of write-offs and informal debt buy-backs.

Impact of the Mexican rescheduling package

Claims on Asia rose by $17.8 billion, or 15%. New lending to China alone amounted to $7.5 billion, a figure which was, however, dwarfed by the $16 billion surge recorded in that country's deposits, raising its net creditor position vis-à-vis the reporting banks to $9 billion. Lending to other countries was essentially concentrated on Thailand ($4.6 billion), South Korea ($4.1 billion) and India ($1.2 billion). On the other hand, Taiwan and Malaysia added considerably to their deposits with the reporting banks ($7.5 and 2.8 billion respectively).

Large deposit build-up by China and Taiwan

The sharp rise in oil revenues boosted the deposits of OPEC countries, with more than the whole of the total $18 billion increase taking place in the later part of the year. The largest change in banks' positions was recorded vis-à-vis Venezuela. Owing primarily to the debt relief agreement signed with its creditor banks in August, reporting banks' claims on that country fell by $7.1 billion, or by nearly 30%, while its deposits, which benefited from buoyant export earnings, jumped by $4.4 billion, or by 27%. At the end of the year Venezuela showed a net creditor position vis-à-vis the banks, of $3.2 billion, for the first time since March 1978. On the assets side of the banks' balance sheets, only Indonesia and Iran were major recipients of new credits ($5.4 and 1.2 billion respectively).

Venezuela shifts from a net debtor to a net creditor position

A marked shift in banks' attitudes vis-à-vis eastern Europe became apparent last year. Following a 43% expansion over the previous five years, their total identified claims vis-à-vis this group of countries fell by $9.9 billion, or 11%. Claims on the Soviet Union alone contracted by $6.2 billion, in spite of an officially sponsored $3 billion credit from German banks in the third quarter. At the same time, the country's deposits with the reporting banks fell by an almost equal amount. Hungary paid back $1.9 billion of its outstanding banking debt and added some $0.5 billion to its deposits. Romania, whose banking debt had virtually been eliminated by the end of 1989, drew down its deposits by $1.3 billion. By contrast, thanks to a substantial current-account surplus, Poland's deposits jumped by $3.5 billion (or 80%). By the end of the year the country's net debtor position vis-à-vis the reporting banks had declined to only $3.5 billion.

Reduction of banks' business with eastern Europe

There was some revival in lending to developed countries outside the reporting area, with only two countries, Australia and Turkey, together accounting for 90% of the total increase ($3.2 billion each).

The syndicated loan market

Decline in new facilities related to M&A operations ...

Announcements of syndicated loans, at $157 billion, were marginally higher in 1990 than in the previous year. However, the types of lending facility and the geographical distribution of borrowers differed markedly. Because of concerns regarding highly leveraged transactions, there was a contraction in lending related to mergers and acquisitions, from $57 billion in 1989 to $29 billion. In particular, borrowing by US corporations for this purpose fell sharply. On the other hand, there was a substantial increase in the volume of credits announced for European borrowers. A number of large facilities related to specific project financing were arranged for UK entities and a sizable volume of credits, often denominated in ecus, were announced for Italian financial institutions, which used the proceeds mainly for domestic mortgage lending. Borrowers from Scandinavian countries and from Canada also made increasing use of the market.

... and increase in margins for prime borrowers

On average, the spreads on announced new syndicated credits were marginally lower than in 1989 but remained well above the levels recorded in 1987–88. However, whereas in 1989 the increase in the average margins had been due to the lower credit-standing of many borrowers, last year the larger spreads reflected the more realistic pricing of loans to prime borrowers. Another significant development was the shift towards smaller syndications, marking some return to "relationship banking".

The international securities markets

The Euro-note market

Pronounced recovery of the Euro-note market...

Reflecting the tightening conditions for bank credit and the decline in the credit-standing of some banks, the markets for short and medium-term Euro-notes underwent a pronounced recovery in 1990. The volume of announced new facilities, at $72.8 billion, was only marginally higher than in the previous year but borrowers made much greater use of existing facilities, with the total stock of Euro-notes outstanding soaring by $32 billion, almost five times as much as in 1989. In particular, very strong growth was recorded in the medium-term Euro-note (EMTN) sector, with the outstanding credit volume rising by nearly 130% to $22 billion. The market for Euro-commercial paper (ECP), which had experienced a serious setback in 1989 following the defaults of two major borrowers and the deterioration in the credit-standing of several others, benefited from the decline in short-term interest rates, steepening yield curves and investors' desire to limit their longer-term credit exposures.

... and a shift in currency composition

There was a notable shift in the currency composition of Euro-notes outstanding, with the share of dollar-denominated securities declining from nearly 85% at the end of 1989 to just over 75%. Strong growth was recorded in particular for issues denominated in ecus, Italian lire, yen and sterling. As regards the nationality of issuers, the largest borrowers were entities in the United Kingdom ($8.7 billion), the Benelux countries ($6.8 billion), Australia ($4.1 billion) and Sweden ($2.7 billion). US companies,

Main features of the Euro-note market	Years			1990				Stocks at end-1990
	1988	1989	1990	Q I	Q II	Q III	Q IV	
	in billions of US dollars							
New facilities announced								
Euro-commercial paper	55.6	49.3	44.4	10.5	12.4	9.2	12.3	
Other short-term Euro-notes	10.6	10.3	3.0	0.3	0.6	1.4	0.7	
Medium-term notes*	17.0	12.9	25.4	10.7	4.0	2.1	8.6	
Total	83.2	72.5	72.8	21.6	17.0	12.6	21.6	
Net new issues								
Euro-commercial paper	19.9	5.3	11.8	6.9	3.7	7.6	−6.4	70.3
Other short-term Euro-notes	−3.4	−2.4	8.0	0.9	0.3	3.0	3.8	19.1
Medium-term notes	3.0	4.0	12.3	1.6	3.5	3.6	3.5	21.9
Total	19.5	6.9	32.0	9.4	7.5	14.2	0.9	111.2

* Including Euro-commercial paper programmes with the option to issue medium-term notes.
Sources: Bank of England and Euroclear.

which had been major takers of funds in recent years, marginally reduced their recourse to Euro-note credit.

Changes in market structures and techniques

Intermediation in the ECP market continued to undergo a process of consolidation. Market-making remained highly competitive and continuing low profitability led to further withdrawals of major dealers from the market. One notable development, aimed at restoring profitability, was the move towards charging commissions on a scale based on the size and credit rating of borrowers. This change was accompanied by an increase in arrangement fees. The growing concentration of intermediaries and better pricing have tended to make the market increasingly similar to the US domestic commercial paper market, where a handful of dealers account for the lion's share of dealerships and where fixed fees are common.

As in other areas of the financial markets last year, developments were strongly affected by credit risk considerations. In the early months of 1990 the default of Drexel Burnham Lambert was followed by a temporary widening of the differential between interest rates on Euro and domestic US dollar commercial paper. Nevertheless, the market proved very resilient, its comeback being more rapid than that witnessed in the US domestic commercial paper market in the 1970s after the default of Penn Central. One important supportive factor has been the increased use of credit ratings; in 1990 the share of new facilities carrying a rating rose to 90%.

Further rapid expansion of the EMTN market

As already noted, the EMTN market recorded strong growth in 1990. Issuance was extended to many new currencies and at the end of the year one-third of outstanding medium-term notes were denominated in currencies other than the US dollar, a share well above that in other sectors of the Euro-note market. Other factors favouring the expansion of the EMTN market have been the establishment of global programmes and a certain shift of borrowers away from the international bond market. Medium-term notes also fit the requirements of the growing private placement market for highly structured securities tailored to the specific needs of issuers and investors. Accordingly, many EMTN issues have been linked to a variety of indices or carry special option features.

Strong growth of domestic commercial paper markets

The expansion of the market for Euro-notes accompanied the further strong growth of domestic commercial paper markets. In 1990 the outstanding volume of such paper issued in domestic markets expanded by over 15% to $900 billion. The internationalisation of the domestic markets kept pace with this expansion. In the United States issues of commercial paper by foreign entities, which in terms of outstanding volume exceed those of ECP, accounted for 35% of net new placements. In France foreign non-bank entities were allowed to borrow on the domestic commercial paper market in early 1991. Measures liberalising domestic issuing procedures were also announced in Germany, the United Kingdom, Japan and Finland.

The international bond market

Slump in equity-related issues but strong activity in other market sectors

After two years of strong growth, the volume of newly announced issues in the international bond market fell to $242 billion last year, $20 billion less than in 1989. The principal factor underlying this contraction was very subdued activity in the equity-related sector, which was seriously affected by the sharp decline in Japanese equity prices. Issuance of straight fixed rate bonds rose, despite the fact that long-term interest rates in most non-dollar sectors were relatively high compared with recent years, and swap-related business was less prominent. Uncertainty about the outlook for interest rates probably contributed to the popularity of floating rate notes (FRNs), the issuance of which was only slightly lower than the record

Main features of international bond market activity

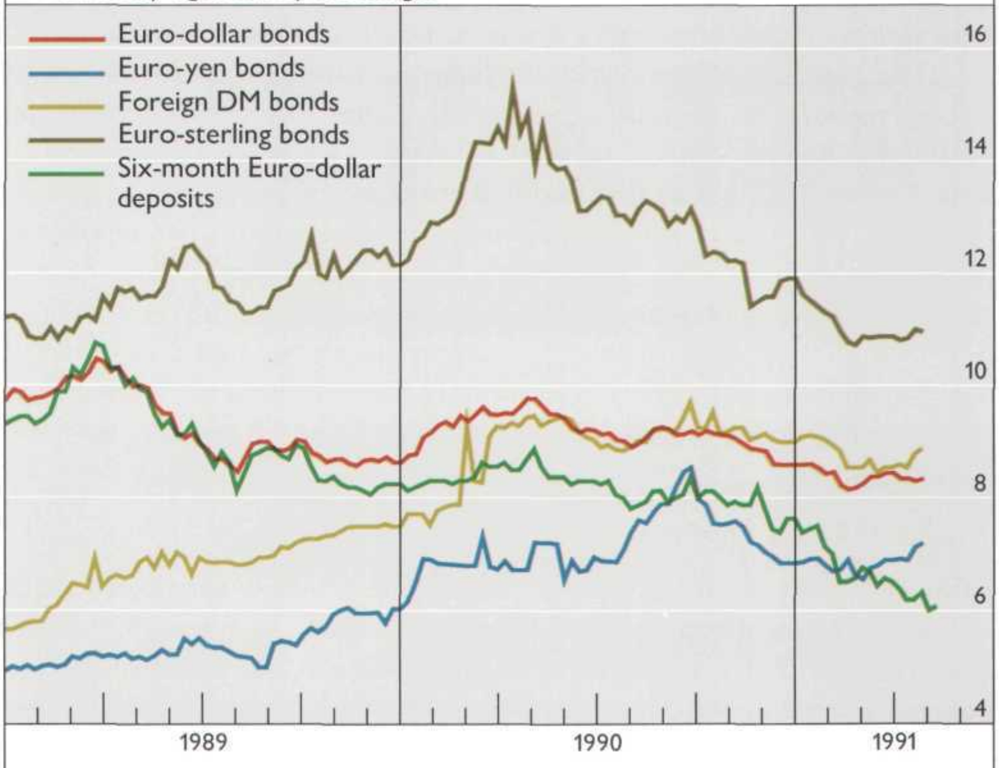
	Years			1990				Stocks at end-1990
	1988	1989	1990	Q I	Q II	Q III	Q IV	
	in billions of US dollars							
Total announced gross new issues[1]	226.3	261.8	241.7	63.3	55.7	62.4	60.3	
Straight fixed rate issues	*160.8*	*149.5*	*166.5*	*42.3*	*42.5*	*35.3*	*46.4*	
Floating rate notes	*23.5*	*27.1*	*42.1*	*9.7*	*10.9*	*14.2*	*7.3*	
Equity-related issues[2]	*42.0*	*85.2*	*33.2*	*11.3*	*2.4*	*13.0*	*6.5*	
Total completed gross new issues	220.7	263.6	239.4	57.3	50.0	63.4	68.7	
minus: Scheduled repayments	42.7	57.4	87.3	17.4	23.1	21.4	25.3	
minus: Early repayments	39.9	32.0	21.1	5.3	6.0	4.3	5.4	
= Total net new issues	138.1	174.3	131.0	34.5	20.8	37.6	38.1	1,472.5
Straight fixed rate issues	*99.0*	*89.0*	*80.7*	*20.1*	*17.7*	*18.3*	*24.6*	*1,008.1*
Floating rate notes	*5.1*	*10.5*	*27.1*	*7.1*	*2.7*	*11.0*	*6.4*	*205.7*
Equity-related issues[2]	*34.1*	*74.8*	*23.2*	*7.2*	*0.4*	*8.4*	*7.1*	*258.7*

[1] Non-dollar bonds are converted into dollars at exchange rates prevailing on announcement dates. [2] Convertible bonds and bonds with equity warrants.

Sources: Bank of England, AIBD and BIS.

Yields of selected international bonds*
and Euro-dollar deposit rates

Wednesday figures, in percentages



* Yields in annual terms for a sample of bonds with an average life of five years.

volume witnessed in 1985, prior to the crisis in the perpetual segment of the market. As far as the currency composition of new issues was concerned, last year was notable for a fall of almost one-third in the volume of dollar-denominated offerings. Activity in most European currency sectors was quite buoyant.

Rising volume of redemptions

The volume of scheduled redemptions continued to rise, reflecting the increasing average age of bonds outstanding in the international market. With interest rates at high levels, however, most borrowers found it unattractive to exercise call options and the volume of early redemptions fell. After allowing for redemptions, the outstanding volume of funds raised in the international market increased by $131 billion, or about 10%. Secondary market turnover was almost unchanged in the dollar sector, but rose sharply in other sectors.

Asset-backed bonds gain favour

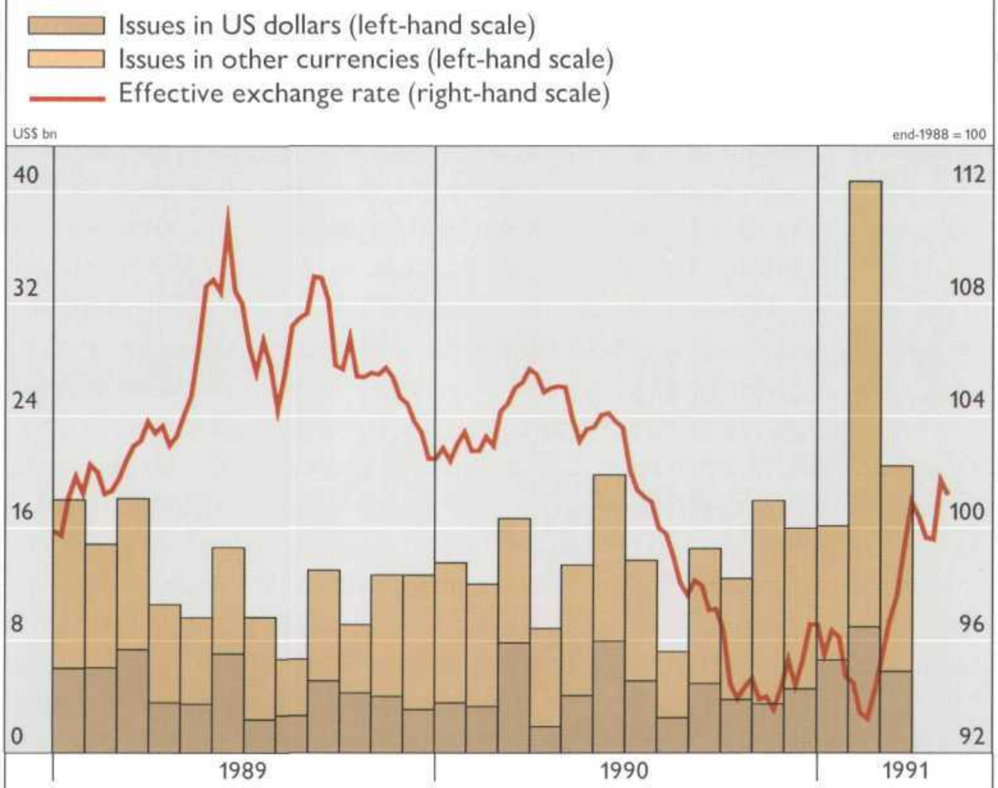
Asset-backed bonds continued to gain popularity in the international market, although their use thus far has been largely confined to US and UK borrowers. In a context of heightened concern about asset quality among investors, these issues offer financial institutions an attractive method of removing assets from their balance sheets, thereby permitting a reduction in capital requirements. Bonds have typically been secured against a pool of non-marketable loans, such as mortgages, credit card loans or automobile receivables. These loan pools are structured to provide the final investor with a substantial margin of insurance against default and in consequence the bonds have been highly rated. The issuance of asset-backed bonds is technically a much more complex matter than a typical offering in the international bond market and in certain countries, such as Japan until recently, legal obstacles have inhibited the adoption of this instrument.

Implications of regulatory changes in the United States

In 1990 two regulatory changes in the United States were approved by the Securities and Exchange Commission which could have a lasting impact on the future development of the international securities markets. The new Regulation S has clarified the conditions under which sales or offers of a security made outside the United States do not come under the SEC registration requirements. Rule 144a exempts "qualified institutional buyers" from the obligation to hold privately placed securities for at least two years. Although the market for paper issued under this ruling is not yet fully developed, it is expected that private placement issues will expand strongly. Both measures should facilitate the sale of Euro-issues in the United States. Moreover, if closer clearing system links are established between the United States and Europe, for example if Euroclear can clear and settle private placements issued in the United States by foreign borrowers under Rule 144a, this should reduce the differences between the prices of securities traded in different countries.

The fixed price re-offer issuing procedure gained importance in the course of the year. Under this practice, which was first introduced in 1989,

Issuing activity in the bond market*
and the US dollar effective exchange rate



* Straight fixed rate issues, on an announcement basis.
Sources for bond issue data: Bank of England and BIS.

Type and currency structure of international bond issues									
	Announced gross new issues				Net new issues				Stocks at end-1990
	1987	1988	1989	1990	1987	1988	1989	1990	
	in billions of US dollars								
Straight fixed rate issues	120.4	160.8	149.5	166.5	68.0	99.0	89.0	80.7	1,008.1
US dollar	*29.4*	*47.3*	*54.6*	*52.9*	*10.2*	*26.7*	*26.1*	*16.1*	*322.7*
Japanese yen	*21.7*	*18.9*	*23.1*	*30.0*	*18.3*	*11.8*	*15.3*	*24.7*	*159.4*
Swiss franc	*16.7*	*18.2*	*5.7*	*15.5*	*2.0*	*0.9*	*−3.9*	*3.5*	*119.8*
Deutsche Mark	*12.9*	*21.2*	*9.4*	*7.3*	*1.5*	*14.0*	*6.2*	*1.3*	*110.7*
Ecu	*7.2*	*10.7*	*11.7*	*15.1*	*7.2*	*9.4*	*7.4*	*9.6*	*68.7*
Pound sterling	*9.2*	*11.7*	*11.3*	*9.5*	*8.2*	*10.4*	*10.2*	*7.6*	*62.8*
Other	*23.3*	*32.8*	*33.7*	*36.2*	*20.7*	*25.8*	*27.7*	*17.8*	*164.0*
Floating rate notes	12.1	23.5	27.1	42.1	1.0	5.1	10.5	27.1	205.7
US dollar	*3.9*	*7.0*	*10.2*	*15.0*	*−6.7*	*−9.2*	*−0.5*	*7.3*	*115.6*
Pound sterling	*2.2*	*10.5*	*8.9*	*10.5*	*2.2*	*9.0*	*7.0*	*6.4*	*42.7*
Other	*6.0*	*5.9*	*8.0*	*16.6*	*5.4*	*5.3*	*4.0*	*13.4*	*47.4*
Equity-related issues	43.4	42.0	85.2	33.2	38.0	34.1	74.8	23.2	258.7
US dollar	*29.2*	*29.0*	*65.1*	*19.6*	*25.8*	*26.2*	*60.4*	*16.0*	*169.2*
Swiss franc	*7.1*	*8.3*	*13.6*	*8.2*	*5.4*	*4.3*	*8.8*	*4.0*	*54.3*
Other	*7.0*	*4.7*	*6.5*	*5.4*	*6.8*	*3.6*	*5.5*	*3.1*	*35.2*

Sources: Bank of England, AIBD and BIS.

underwriters are obliged to trade paper at a fixed price rather than selling the issue to investors at different prices. This has tended to favour intermediaries with extensive placement powers and may result in a concentration of underwriting business among fewer firms.

Acceleration of new issues of straight fixed rate bonds

Straight fixed rate bonds. New issuing activity in the straight fixed rate sector rose from $150 billion in 1989 to $167 billion last year. Activity was particularly buoyant in the final quarter, when long-term interest rates were falling in all the main currency sectors. Substantial increases in new issues were recorded for both international institutions and private sector non-financial entities. By contrast, new issues by banks fell, reflecting a switch into the FRN sector by this group of borrowers. Both the dollar and the ecu sectors were characterised by some very large issues, such as the $2 billion global bond offered by the World Bank in the third quarter.

Net new issues of straight fixed rate international bonds totalled $81 billion last year, of which only $16 billion was accounted for by the dollar sector. There were substantial net new issues of yen, ecu and sterling bonds, amounting to $25, 10 and 8 billion respectively. Moreover, some smaller sectors, notably those of the French franc and Italian lira, expanded rapidly in the course of the year. The abolition of exchange restrictions was the principal explanation for this development.

Setback in the equity-related market

Equity-related issues. Activity in the equity-related sector of the international bond market, which is dominated by Japanese borrowers, was very subdued last year, with the new issue volume contracting from $85 billion in 1989 to $33 billion. Issuance in the first quarter was weak, depressed by the combination of sharp falls in share prices in Japan and the introduction of tighter disclosure requirements for new issues. At the end of March the major Japanese securities houses agreed on a moratorium on new issues – applied to both convertible bonds and bonds with warrants – which remained in effect until early July. Following the outbreak of the Gulf crisis a further bout of weakness in equity prices ensued, and although the moratorium was not reimposed issuing activity was restrained throughout the remainder of the year.

Further recovery of the FRN market

Floating rate notes. Last year witnessed a sharp increase in the issuance of FRNs, from $27 billion in 1989 to $42 billion. Until recently, the FRN sector was confined mainly to dollar and sterling-denominated securities, but now other currencies of denomination are also used widely. In particular, interest rate and exchange rate uncertainties prompted the offering of a substantial volume of DM-denominated FRNs ($8.2 billion). The bulk of dollar FRN issuance occurred in the third quarter and was undertaken by Japanese banks following a decision by the Ministry of Finance to permit the inclusion of subordinated debt in Tier 2 capital.

Nationality of international bond issuers

Issuers		New issues				Stocks			
		1987	1988	1989	1990	1985	1988	1989	1990
		in billions of US dollars							
Japan	A	42.4	50.8	96.7	57.9				
	B	36.5	40.3	83.8	38.5	64.1	183.6	265.3	317.7
United States	A	22.5	17.2	16.9	21.9				
	B	11.4	6.1	−0.3	1.5	102.7	165.5	162.5	170.3
United Kingdom	A	11.1	26.4	24.8	23.2				
	B	9.4	20.1	21.6	16.8	29.8	82.8	98.4	127.8
Canada	A	9.0	12.9	13.3	13.0				
	B	2.1	5.8	4.1	4.2	68.6	97.1	100.6	107.9
France	A	8.4	16.4	13.4	18.1				
	B	3.2	10.0	9.2	10.8	39.0	65.3	74.0	90.8
Other developed	A	60.4	77.1	69.1	68.3				
countries[1]	B	36.6	48.1	42.0	34.4	149.9	328.6	365.5	429.7
Developing	A	2.0	3.8	2.5	7.0				
countries[2]	B	−1.1	−1.0	−0.9	2.7	27.9	31.7	29.4	33.3
Eastern Europe	A	0.6	1.2	1.9	1.7				
	B	0.5	1.2	1.8	1.6	0.7	3.2	5.1	7.3
International	A	19.5	20.5	23.1	30.6				
institutions	B	8.4	7.6	12.9	20.5	89.9	140.4	151.5	187.7
Total	A	175.9	226.3	261.8	241.7				
	B	107.0	138.1	174.3	131.0	572.5	1,098.2	1,252.3	1,472.5

Note: A = announced gross new issues; B = completed new issues, net of repayments.

[1] Other BIS reporting countries plus non-reporting developed countries. [2] OPEC and non-OPEC developing countries.

Sources: Bank of England, AIBD and BIS.

Nationality and sectoral composition of borrowers. Despite the slump in the equity-related sector, Japanese borrowers continued to be the single most important nationality group in the international bond markets in 1990, although the net volume of funds taken up by them fell to $39 billion, less than half the amount raised in 1989. Net recourse to the international bond markets by US residents remained very small, whereas there was a marked expansion of activity by European borrowers. UK residents, who raised $17 billion of net new funds, are still the most prominent European nationality group but French and Italian residents, who borrowed $11 and 9 billion respectively, are rapidly gaining in importance. International institutions also stepped up their recourse to the international bond markets last year, taking $21 billion on a net basis.

Sharp reduction in Japanese borrowing

In the first quarter of 1991 the volume of new issues in the international bond markets amounted to a record $91 billion. Activity was affected by a number of contrasting developments. Initially, uncertainty arising from the Gulf war had caused many new issues to be temporarily postponed. However, expectations of declining interest rates fostered by the recessionary environment made bonds more attractive from a cyclical standpoint. Once the threat of a widening of the conflict had vanished the market witnessed a wave of new issues. A striking development was the very buoyant level of activity in the ecu sector, which was boosted by several large new issues by the Belgian, Italian and UK governments (see page 148).

Strong pick-up of activity in the first quarter of 1991

The markets for derivative financial instruments

Financial futures and exchange-traded options

The number of interest rate and currency futures and options contracts traded on organised exchanges rose from 290 million in 1989 to 320 million. The most pronounced expansion was recorded for options on interest rates and interest rate futures, trading in which increased by 30%, while open positions expanded by over 50%.

The growth of futures and exchange-traded options markets was accompanied by a further shift in the geographical location of trading. The share of the US markets fell further from 69% in 1989 to 65%. The uncertainty concerning the terms of monetary union in Germany and the eventual cost of unification boosted activity in the Bund and three-month Euro-DM contracts traded on the London International Financial Futures Exchange (LIFFE). In spite of the continuing retirement of gilt-edged securities by the UK Government, there was a revival in trading of the long-dated gilts contract after two years of declining trading volume. The anticipation that the entry of sterling into the EMS exchange rate mechanism would bring about a cut in UK interest rates, and expectations that the UK Government would resume its issuance of gilt-edged bonds, appear to have been the prime factors behind this recovery. The contract on short-term sterling interest rates also recorded strong growth. Rising interest rates and their greater volatility played a major role in the respec-

Pronounced expansion of financial futures and options markets in Europe as a result of ...

... interest rate developments ...

tive 220 and 120% increases in trading volume and open interest positions in the three-month Euro-yen contract traded on the Tokyo International Financial Futures Exchange (TIFFE). This expansion also contributed to boosting activity in the analogous contract traded on the Singapore Mercantile Exchange (SIMEX). By contrast, the somewhat lower trading volume in the three-month Euro-dollar contract traded on the Chicago Mercantile Exchange (CME) may have reflected expectations of a weakening of the economy in the United States and of a decline in interest rates.

... and deregulation and innovation

Other factors behind the increasing use of futures and other derivative products in Europe were the opening of new markets, deregulation and innovation in contracts. In late 1990 the newly opened Deutsche Terminbörse began trading two financial futures contracts, one linked to a stock index of thirty prime German equities and one on a notional German government bond. However, so far the latter has not displaced trading volume from a similar contract traded on the LIFFE. In the United Kingdom the clarification in the 1991 Budget of the treatment of mutual funds based on futures contracts is viewed as likely to provide a further boost to trading. Finally, non-US market participants have become more aware of the possibility of managing their interest and foreign exchange risks with these instruments.

Competition between trading centres ...

There was continued competition between markets, in particular between London and Paris and between the United States and exchanges

Derivative financial instruments traded on organised exchanges worldwide

	Annual turnover of contracts					Open interest positions at end-1990
	1986	1987	1988	1989	1990	
	in millions					in billions of US dollars
Futures on short-term interest rate instruments	16.4	29.3	33.7	70.2	75.7	1,226.5
of which: Three-month Euro-dollar[1]	*12.4*	*23.7*	*25.2*	*46.8*	*39.4*	*662.6*
Futures on long-term interest rate instruments	74.6	116.3	122.6	130.6	142.6	183.7
of which: US Treasury bond[2]	*54.6*	*69.4*	*73.8*	*72.6*	*78.1*	*23.0*
Ten-year Japanese government bond[3]	*9.4*	*18.4*	*18.8*	*19.1*	*16.4*	*112.7*
Currency futures	19.9	21.2	22.5	28.2	29.7	14.4
Interest rate options and options on interest rate futures	22.2	29.3	30.5	39.5	51.3	569.4
Currency options and options on currency futures	13.0	18.3	18.2	20.7	18.9	53.1
Total	146.1	214.4	227.6	289.2	318.2	2,047.1
of which: In the United States	*123.0*	*161.8*	*165.7*	*198.8*	*206.4*	*1,166.2*
In Europe	*9.8*	*27.2*	*32.6*	*49.0*	*60.8*	*309.0*
In Japan	*9.4*	*18.3*	*18.8*	*23.6*	*32.7*	*374.0*

[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 Chicago Board of Trade (CBOT), LIFFE, Mid-America Commodity Exchange (MIDAM), New York Futures Exchange (NYFE) and Tokyo Stock Exchange (TSE). [3] Traded on the TSE, LIFFE and CBOT.

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

elsewhere. In the United Kingdom a merger was proposed between the LIFFE and the London Traded Options Market (LTOM). Some contracts were launched to gain market position, and, in the case of the ecu bond contracts traded in London and Paris, in early 1991 the UK and French governments issued deliverable securities in order to attract volume to their respective markets.

... and development of screen-based exchanges

One salient development in 1990 was the agreement reached by the two major futures exchanges, the CME and the Chicago Board of Trade (CBOT) to develop jointly a screen-based system of electronic order entry and trade matching, GLOBEX. The exchanges plan to operate the system after the trading floors are closed. This project is widely seen as an attempt to attract trading activity back to the US markets. Nevertheless, it seems that at some point in the future all trading will be channelled through a screen-based system, which will have profound implications for this sector of financial market activity. In particular, over the long run business could be shifted off the exchange floors. In addition to being cheaper to equip, such screen-based trading would provide greater transparency, a factor which was recently highlighted by the discovery of irregularities in some trading pits.

Interest and currency swaps

The markets for interest rate and currency swaps and related over-the-counter derivative instruments expanded strongly in 1989 and the first half of 1990 (the latest period for which data are available), albeit at a somewhat slower pace than in previous years. At the end of 1989 the outstanding notional principal value of interest rate swaps amounted to $1,500 billion, or 50% more than at the end of the previous year, and a

Main features of the interest rate swap market

	US dollar	Japanese yen	Pound sterling	Deutsche Mark	Other	Total
	in billions of US dollars					
Notional principal value[1] of interest rate swaps outstanding at end-1989	993.7	128.0	100.4	84.6	195.9	1,502.6
by counterparty:						
End-user	*622.6*	*66.9*	*60.4*	*52.0*	*153.6*	*955.5*
Interbank (ISDA member)[2]	*371.1*	*61.1*	*40.0*	*32.6*	*42.3*	*547.1*
Notional principal value[1] of new interest swaps arranged in first half of 1990	294.6	67.5	59.6	48.4	91.4	561.5
by counterparty:						
End-user	*179.9*	*33.8*	*33.8*	*29.7*	*61.1*	*338.3*
Interbank (ISDA member)[2]	*114.7*	*33.7*	*25.8*	*18.7*	*30.3*	*223.2*

[1] Hypothetical underlying amount on which swap payments are based. [2] Adjusted for double-counting of positions reported by ISDA members.

Source: International Swap Dealers Association (ISDA), Inc.

Expansion of non-dollar interest rate swaps

further $560 billion of such swaps was arranged during the first half of 1990. Interest rate swaps denominated in currencies other than the dollar continued to grow in importance; they accounted for 48% of new contracts in the first half of 1990, against only 24% in the first half of 1987, the first period for which statistics on this market were collected. In absolute terms, especially strong growth was recorded for interest rate swaps

Composition of new currency swaps in the first half of 1990

Currencies	Total notional amount[1, 2]	of which		of which	
		against US dollar[2]	against other currencies[2]	end-user	fixed/floating[2]
	in billions of US dollars				
Japanese yen	42.3	20.9	21.4	28.1	18.0
Australian dollar	16.4	5.0	11.4	10.5	2.7
Swiss franc	15.4	7.4	8.0	12.4	7.5
Deutsche Mark	12.2	6.1	6.1	9.1	4.2
Ecu	8.4	4.3	4.1	6.3	5.3
Pound sterling	8.1	3.0	5.1	5.3	3.5
Canadian dollar	7.2	6.1	1.1	6.2	2.7
Sub-total	110.0	52.8	57.2	77.9	43.9
Other	16.9	9.5	7.4	13.0	8.3
minus: Double-counting of non-dollar swaps	*−32.3*	–	*−32.3*	*−22.8*	*−7.4*
Total	94.6	62.3	32.3	68.1	44.8

[1] Hypothetical underlying amount on which swap payments are based. [2] Adjusted for double-counting of positions reported by ISDA members.
Source: ISDA.

denominated in Deutsche Mark, yen, sterling and Swiss francs. The increasing acceptance of swaps by broader groups of end-users outside the United States, the rising level of interest rates on these currencies and their greater volatility were the major factors behind this development. In the dollar sector fears of a US recession and heightened expectations of falling interest rates deterred some counterparties from entering into swaps as fixed rate payers.

Slower growth of the market for currency swaps

The market for currency swaps was somewhat less buoyant than that for interest rate swaps. At the end of 1989 the outstanding notional principal value of currency swaps amounted to $450 billion, or 40% more than at the end of the previous year. However, at $95 billion the volume of new currency swaps arranged in the first half of 1990 was only about the same as in the second half of 1989, with a somewhat larger share being between currencies other than the dollar. The markets for other derivative instruments related to interest rate swaps, namely caps, floors and swaptions, recorded strong growth in the late 1980s, and at the end of 1989 their total notional principal value amounted to $450 billion. During the first half of 1990 a further $145 billion of new contracts was arranged.

The swap markets also evolved in other respects last year. Firstly, owing largely to the expanding use of swaps, different financial markets have become more closely integrated and major arbitrage opportunities are less common than in the past and more short-lived. With the major exception of the ecu bond sector, which benefited from the persistence of specific arbitrage opportunities, the use of swaps in conjunction with new issue activity appears to have declined considerably. Secondly, in previous years the financing of highly leveraged transactions had been arranged at floating rates, with swaps and caps providing the borrowers with the means of hedging against interest rate risks. The decline in leveraged buy-out and other merger-related business in 1990 reduced end-user demand for swaps and changed the composition of market participants.

Changing character of swap business

Participants to swap transactions have become increasingly sensitive to credit risk considerations. The downgrading of the credit-standing of many banks and the failures of DFC, Drexel-Burnham Lambert and British and Commonwealth Merchant Bank have indirectly caused margins to widen for various market participants and reduced the ability of certain institutions to compete in this market. It has also become more difficult to arrange longer-term swaps for institutions of less than prime credit-standing. Moreover, the impending introduction of capital requirements for the credit risk on swaps, under the Basle capital accord, may have affected the volume and character of new business, particularly in the case of currency swaps.

Heightened importance of credit risk factors

The importance of credit risk considerations was highlighted by the ruling in January 1991 by the House of Lords, the highest court of appeal in the United Kingdom, that UK local authorities were not empowered to enter into swaps or related transactions. This decision implied that all existing obligations of the local authorities under such contracts were null and void, and that banks faced very substantial losses. Although many banks had already set aside provisions following the earlier decisions of the lower courts, this caused the share prices of certain banks to fall sharply. At the same time, the decision called into question the validity of other swap transactions with non-corporate counterparties, such as building societies and pension funds.

Legal developments and uncertainties

One way in which market participants have sought to reduce counterparty risk has been to clarify the legal validity of the netting of bilateral swap contracts under procedures set out in the ISDA (International Swap Dealers Association) Master Agreement. This agreement provides for a specific form of netting arrangement between two counterparties, namely netting by close-out, whereby reciprocal payment obligations across products are set off against one another in the event of default by one counterparty. Legislation on the enforceability of such netting of swaps in bankruptcy was approved in 1990 in the United States and provides a clear framework for bankruptcy proceedings for US counterparties to swaps and associated products. At present, for purposes of measuring credit exposures, the Basle capital accord only recognises netting by novation, defined as the legal substitution of a series of bilateral contracts by a new contract for each currency and value date separately. However,

Netting of swap contracts

work is in progress to review this question in the light of the report by the Committee on Interbank Netting Schemes (see Chapter IX).

Commodity swaps and other commodity-related derivative instruments

Rise to prominence of commodity swaps

A key element underpinning the growth of the swap market has been its ability to create new products tailored to the requirements of final users. The sharp increase in oil prices and their greater volatility last year helped to boost commodity swaps as well as exchange-traded contracts linked to commodity prices. Commodity swaps involve the exchange of fixed against floating payments pegged to the price of a commodity, just as the payments in interest rate swaps are linked to fixed and floating interest rates. They can thus be seen as an extension to commodities of the concepts developed in the interest and currency swap markets. Although barter, counter trade and commodity futures contracts share many of the characteristics of these swaps, there are some important differences: the types of hedging and other applications, the longer time horizon which characterises swaps, the variety of products available (caps, collars, etc.), the types of indices employed in the contract and the involvement of banks as counterparties. Indeed, the expansion of trading in commodity swaps related to oil products has been accompanied by strong growth of longer-dated futures contracts. However, even longer-term futures allow a hedge at only one point in time whereas many end-users wish to lock into an average price that can protect a budgeted cash flow. Tailoring to such needs can only be accomplished by an over-the-counter instrument.

Factors contributing to rapid expansion

Three factors have contributed to the very rapid growth of commodity swaps in the past two years. Firstly, in July 1989 the Commodity Futures Trading Commission approved a Safe Harbor provision for US-based market participants under which commodity swaps were deemed not to be futures contracts, i.e. commodity swaps do not have to be standardised or traded over organised exchanges. Secondly, the market benefited from the well-developed infrastructure of the interest and currency swap markets. Finally, as already mentioned, the use of commodity swaps was stimulated by the sharp rise in volatility in commodity markets, in particular since August 1990. Until last summer the total notional amount of the commodity-indexed swap and options market was estimated to be between \$7 and 10 billion; following the invasion of Kuwait it is estimated to have risen to \$40–50 billion.

By commodity type, energy-related contracts have been estimated to account for over 80% of the market. By type of contract, about 75% of the market is in swaps and the remainder in options. Most contracts have an original maturity of under two years and only 10% are estimated to have maturities exceeding four years. The spectrum of end-users seems to be very wide, comprising the various participants in the oil and other commodity markets and transport companies, as well as speculators. Some prominent commodity producers participate as market-makers in addition to commercial and investment banks and insurance companies.

Recent developments in the private ecu market

Growing use of the ecu in all sectors of the international markets

One salient feature of the international financial markets last year was the growing use of the ecu. Completed international bond issues denominated in ecus totalled $18 billion, against $12 billion in 1989, while the outstanding volume of ecu Euro-notes soared from $3.5 to 8.4 billion. At the same time, ecu-denominated bond issues by European governments targeted at domestic markets surged from $10 billion to $15 billion and there were further substantial issues of domestic short-term ecu bills by the Italian and UK Treasuries. Finally, in the derivatives markets, interest rate swaps in ecus increased sharply and ecu futures and options contracts multiplied.

Major shift in banks' net position in ecus

The expansion of gross international banking activity in ecus continued at a rapid pace. At $24 billion (14%), the increase in the total cross-border and local ecu assets of BIS reporting banks was of the same order of magnitude as in the preceding two years, but liabilities in ecus showed an unprecedented growth of $36 billion (23%). As a result, by the end of the year the combined assets and liabilities of reporting banks were virtually in balance for the first time in the history of the market. Whereas in earlier periods excess demand for ecu credits meant that to a large extent the banks had to create the ecus themselves, the ample supply of ecu deposits last year provided arbitrage opportunities for unbundling the composite unit into its constituent currencies. Indeed, some banks moved from a net creditor to a net debtor position in ecus. Net of the double-counting

The private ecu market

	1985	1986	1987	1988	1989	1990	Stocks at end-1990
	in billions of US dollars						
Total bank lending[1]							
Gross	17.2	6.2	11.1	23.4	24.6	23.7	194.6
Net[2]	9.0	5.0	8.0	12.0	10.0	18.0	65.0
International bond issues							
Gross completed	7.3	6.3	8.4	10.9	12.0	17.6	
Net	7.2	5.9	7.5	9.8	6.7	11.2	74.6
Net Euro-note placements						4.9	8.4
Domestic bond issues							
Gross completed	2.0	1.7	2.0	8.4	10.3	15.0	
Net	2.0	1.7	2.0	8.4	8.7	13.9	47.8
Short-term domestic Treasury bills and notes							
Gross	0.0	0.0	2.0	8.3	19.5	20.2	
Net	0.0	0.0	2.0	6.5	3.7	−2.4	11.4
Memorandum item: Official reserve holdings of private ecus[1]	*0.8*	*1.1*	*1.4*	*8.1*	*7.3*	*13.7*	*36.9*

[1] At constant end-of-period exchange rates. [2] Minus double-counting due to redepositing among the reporting banks.

Sources: National authorities, AIBD and Euroclear.

resulting from redepositing between reporting banks, the amount of ecu credit outstanding in the banking market can be estimated to have expanded by $18 billion, or 38%, to a total of $65 billion at the end of last year. While, on the uses side, banks' switching of ecus into the constituent currencies was the most important factor, on the sources side there was a significant broadening of the types and nationalities of depositors, including new trustee funds intermediated by the Swiss banks and official ecu deposits.

Official support behind the development of the market

In the absence of perceived exchange rate risks, and with the dismantling of the remaining foreign exchange restrictions in Europe, the various ecu markets generated considerable interest among borrowers from high interest rate countries and investors from low-yield countries. However, the most decisive factor in the growth of the markets last year was the official support given within the European Community. Firstly, the private ecu market was increasingly used for the placement of official reserves, with deposits and securities holdings in ecus by official monetary authorities increasing by 60% at constant exchange rates to a total of $37 billion by the end of 1990. Secondly, the development of hedging and arbitrage techniques was boosted by the official backing for the introduction of derivative instruments in ecus on organised exchanges. The single most important official impulse to the private ecu market was, however, the unprecedented volume of bonds, bills and notes issued by EC governments themselves and by European supranational bodies.

National and supranational official borrowers together accounted for about one-half of the total $18 billion of new Euro-issues in ecus completed in 1990. At the end of the year their combined share represented nearly 40% of the $75 billion of securities outstanding in the ecu bond market. In addition, $48 billion of ecu bonds and notes had been placed by the governments of France, Italy, Greece and Spain on their own national markets, together with $11 billion of domestic ecu Treasury bills and notes issued by Italy and the United Kingdom. These issues by official bodies were crucial for the overall performance of the private ecu market in three important respects. Firstly, because of the large size (ecu 1 billion or more) of several issues, liquidity in the market was greatly enhanced. Secondly, the broad maturity spectrum covered by the various issues, ranging from one month (in the case of the UK Treasury bill issues) to fifteen years, and more recently to twenty years in the case of the latest Italian issue, meant that a full range of benchmark reference rates was created. Thirdly, these issues, in combination with the introduction of derivative instruments such as the standardised futures contract for long-term bonds on the Paris futures exchange (MATIF), multiplied the opportunities for using the ecu for hedging or speculative purposes, leading to more competitive pricing and a greater volume of primary and secondary market trading.

Changes in the structure of yields on ecu assets

As a result, the demand for ecu-denominated assets expanded far beyond the traditional retail investor base to encompass a wide range of institutional investors from both inside and outside the Community. This strengthening of the demand for ecu assets resulted in turn in actual yields falling below the theoretical synthetic yields. At the same time, the volume of secondary market trading doubled in comparison with its 1989 levels.

Record volume of ecu issues in the first quarter of 1991

Activity gained further momentum in the first three months of 1991, when an unprecedented volume of $17 billion of new bond issues was announced. Sovereign and supranational issuers increased their domination of this sector, accounting for almost four-fifths of the total. There was, in particular, one jumbo issue totalling ecu 1.25 billion, brought to the market by Belgium, which was used to refinance maturing bonds in Deutsche Mark and Swiss francs, and another of ecu 2.5 billion by the United Kingdom explicitly aimed at developing the London ecu market further. In February Italy raised ecu 2.5 billion at twenty years. The launching of the ecu bond contract on the LIFFE in London in early March and the introduction of new over-the-counter futures and options contracts also enhanced the depth and liquidity of the market.

The international debt situation

Some improvement in the position of heavily indebted developing countries

A further modest improvement occurred in the international debt situation last year. Despite the very divergent growth and export performance of the developing countries described earlier in this Report, the troubled debtor countries, in particular the fourteen heavily indebted countries covered by the Baker Plan, achieved some reduction in their debt/export and debt service ratios. Initial experience with officially supported debt and debt service reduction was positive. A few major debtors, however, continued to be confronted with serious difficulties in reforming their economies and in restoring normal relations with their creditors. Moreover, after years of irreproachable payment records, some countries in eastern Europe encountered problems in servicing their external debt in a timely and regular fashion.

The aggregate external indebtedness of the seventy-six countries which have experienced debt servicing difficulties in the past four years rose by $32 billion, or 4% in current dollar terms. This increase was principally the result of exchange rate effects. As in the preceding two years, commercial banks' claims on troubled debtor countries declined, and by the end of the year they held only 40% of total external claims on these countries, compared with 55% in 1983. Although many banks continued to avail themselves of any opportunity to reduce their exposures, there is circumstantial evidence of a reassessment of strategies by some lenders in the latter part of the year. Secondary market prices of some countries' debts rose substantially and banks became somewhat less averse to new money options in officially supported debt relief programmes.

Further accumulation of interest arrears

Last year saw a further accumulation of interest arrears in countries with debt service problems. They rose to roughly 5% of the external debt at the end of 1990, the highest ratio recorded so far. The worsening of this problem was largely due to substantial increases in arrears in a handful of countries, most notably Brazil and Argentina. However, because about a dozen countries succeeded in clearing their overdue obligations, often in the context of more general debt restructuring programmes, the net expansion of arrears, at $8 billion, was only half that of 1989.

Debt restructurings under the Brady Initiative

A number of debtor countries, including Mexico, the Philippines, Costa Rica, Venezuela and Uruguay, worked out debt restructuring agreements with their bank creditors within the framework of the Brady Initiative last year. These agreements typically involved a combination of outright debt reduction, debt service relief and the provision of new money by creditor banks. The extent of the discounting in individual country packages generally reflected secondary market prices, and inducements for banks to participate were provided in the form of collateralisation of principal and rolling interest guarantees on restructured debts. Financing for the enhancements came from multilateral institutions such as the IMF and World Bank, from the governments of the major industrial countries and from debtor countries' own reserves. One notable feature in several agreements was a clause providing for increased debt service payments in the event that the debtor's economic circumstances, in particular its terms of trade, improved substantially. On the other hand, creditors did not undertake to provide additional concessions or funds if conditions deteriorated unexpectedly.

High degree of flexibility in case-by-case applications

Within this general framework individual debt restructuring agreements reached under the Brady Initiative varied according to the circumstances of the debtors and the policies of the banks. In agreements reached in late 1989 and early 1990 with Mexico, Costa Rica and the Philippines the banks showed a marked preference for debt and debt service reduction. Indeed, in the Costa Rican case the provision of new money was not even included in the menu of options. By contrast, the banks displayed some willingness to provide new money when concluding agreements with Venezuela and Uruguay later in the year. The Venezuelan package also contained a larger range of options, in order to encourage a high degree of participation by banks with differing views about the need for debt relief and divergent business strategies in the developing world.

The quantitative dimensions

By the spring of this year, restructurings under the Brady Initiative had covered nearly $80 billion in medium and long-term commercial bank debt and had led to outright debt reductions totalling about $12 billion, interest cost reductions equivalent to $11 billion and new money infusions of over $3 billion. To obtain these benefits, the countries involved had to use $3.5 billion of their own reserves and to borrow an additional $7.6 billion to provide enhancements.

The extent of debt relief achieved by such operations, whether seen in terms of cash flow or in relation to countries' total stock of external debt, is fairly modest. Nonetheless, thanks to successful structural adjustment programmes, some debtor countries now show signs of being able to attract private capital. Such inflows have not taken the form of balance-of-payments financing by commercial banks but have principally resulted from increased equity investment and the repatriation of flight capital.

Faced with the need to build up their capital and, in some cases, to accept losses on their domestic claims, banks have in general been very

External debt developments in selected countries

	Stocks					Changes, excluding exchange rate effects	
	1983	1987	1988	1989	1990	1989	1990
	in billions of US dollars						
Brazil							
Total debt	98.1	123.6	115.6	111.3	113.8		
of which: to banks	*71.3*	*81.0*	*76.0*	*70.8*	*65.2*	*−5.5*	*− 7.1*
Claims on banks	11.4	13.5	16.3	16.1	17.5	−0.2	1.2
Mexico							
Total debt	93.0	109.4	100.8	95.6	96.0		
of which: to banks	*72.1*	*75.8*	*71.5*	*70.1*	*55.0*	*−1.2*	*−15.4*
Claims on banks	18.0	30.1	24.4	22.7	26.3	−1.6	3.4
Argentina							
Total debt	45.9	58.4	58.7	64.7	60.5		
of which: to banks	*27.4*	*35.3*	*37.6*	*32.3*	*29.8*	*−5.4*	*− 3.5*
Claims on banks	8.7	10.2	12.3	14.1	14.9	1.8	0.6
Soviet Union							
Total debt	26.9	39.2	43.0	54.0	60.0		
of which: to banks	*16.2*	*33.3*	*36.9*	*44.8*	*42.1*	*7.5*	*− 6.2*
Claims on banks	10.9	14.1	15.3	14.7	8.7	−0.7	− 6.5
Poland							
Total debt	26.3	42.6	42.1	43.3	46.5		
of which: to banks	*11.3*	*12.3*	*10.6*	*10.3*	*11.3*	*−0.6*	*0.0*
Claims on banks	1.2	3.0	3.6	3.9	7.8	0.2	3.5
Venezuela							
Total debt	38.3	35.3	35.5	33.1	36.2		
of which: to banks	*28.3*	*25.0*	*25.6*	*24.1*	*17.6*	*−1.6*	*− 7.1*
Claims on banks	17.1	16.2	15.8	16.3	20.8	0.5	4.4

Note: The term "banks" refers only to those covered by the BIS reporting system. Total debt data for 1990 are preliminary. For the Soviet Union and Poland, convertible currency debt only.
Sources: BIS, IMF and World Bank.

Only limited spontaneous new lending ...

reluctant to expand their exposures to developing countries. New loans have essentially been restricted to corporate entities in Chile, Mexico, Uruguay and Venezuela, although Chile also obtained $320 million through a Euro-bond syndication. Financing has largely been project-related and frequently collateralised against the accounts receivable or overseas deposits of the borrowing corporations. Such arrangements, aimed at minimising counterparty and transfer risk, reflect the caution banks exercise when providing commercial credits to borrowers in countries with a recent history of debt problems.

... but sizable reflows of flight capital and inflows of equity finance ...

Compared with the limited amounts raised through bank or bond financing, reflows of flight capital and inflows of equity finance have been sizable in some Latin American countries. Equity investment has occurred indirectly through the placement of developing countries' shares in foreign equity markets or through country funds, both of which give investors a degree of liquidity not associated with direct purchases in the markets of the developing countries. The most important channel through which foreigners have built up equity holdings in Latin America, however, has been through debt/equity swaps.

... associated with debt conversions

In 1990 Latin American countries carried out about $12 billion worth of such conversions, including $3.5 billion by Mexico, $1 billion by Chile and $0.7 billion by Venezuela. The largest reduction in debt through the exchange of debt for equity, however, was achieved by Argentina, a country whose hitherto unsuccessful reform efforts and weak macroeconomic performance have so far prevented it from concluding an agreement under the Brady Initiative. The $7 billion reduction in its debt was related to the privatisation of state-owned enterprises and, therefore, exerted little upward pressure on the domestic money supply. In some other countries the scope for debt/equity swaps has been limited by concern about the monetary consequences of such operations.

Protracted bank negotiations with Argentina ...

Argentina's debt/equity conversion was important not only because it led to a sizable reduction in the country's indebtedness to banks, but also because the granting of the bank waivers needed for the conversion denoted an improvement in Argentina's previously strained relations with its creditors. This more constructive atmosphere was fostered by Argentina's resumption of modest but regular interest payments to banks after more than two years of complete suspension. Even with these payments, however, Argentina's interest arrears continued to mount and totalled around $7.5 billion at the end of 1990.

... and Brazil

The question of how to deal with interest arrears has been a major issue in negotiations between Brazil and its creditors on the restructuring of about $50 billion in bank claims. This spring, however, Brazil and its bank advisory committee reached a preliminary agreement on the treatment of over $8 billion in interest arrears accumulated since the country suspended payments in July 1989. The draft agreement involves the conversion into bonds of about three-quarters of the overdue interest, with the remainder to be paid by Brazil in the course of this year.

Growing importance of official debt relief

Since 1988 there has been a gradual extension of the number and categories of countries receiving officially supported debt relief. The poorest countries of Sub-Saharan Africa were the first to benefit from official initiatives leading to debt reduction. Then, in 1989, it was decided that official funds could be used on a case-by-case basis to support operations reducing the burden of debts owed to banks by heavily indebted middle-income countries implementing comprehensive reform programmes.

At the Houston Summit in July 1990 leaders of the major industrial countries encouraged the Paris Club of official creditors to consider additional options for dealing with the debt burdens of the lower middle-income countries. One of the principal candidates for relief under this initiative was Poland. Unlike the heavily indebted middle-income countries covered by the Baker and Brady plans, Poland owes over two-thirds of its $46.5 billion of external debt to the public sector. In March 1991 the Paris Club agreed in principle that the country's bilateral debt to official creditors should be reduced by one-half in net present value terms. The reduction is to take place in two stages, with 30% being written off in

1991–94 and another 20% at a later stage, provided Poland meets the economic objectives set out in its IMF-supported programme of structural adjustment and stabilisation. Interest payments will also be reduced by 80% for three years.

Increasing debt service problems in eastern Europe

Although Poland is the only country in eastern Europe with chronic debt problems, some other countries in the region have begun to encounter difficulties. Bulgaria announced a moratorium on the servicing of its bank debt in March 1990, which led banks to reconsider their exposure to other eastern European countries, even those that have remained current on their servicing obligations. In April 1991 the Paris Club agreed to reschedule the $1.8 billion of Bulgaria's debts to foreign official creditors. Moreover, the Soviet Union, long considered one of the most reputable of sovereign borrowers, was overdue on over $5 billion in western trade credits for much of the year.

Egypt also benefited from debt reduction initiatives in the period under review. The United States agreed to wipe out $7 billion in debt obligations in recognition of Egypt's contribution to the Gulf war.

Continuing distress in Sub-Saharan Africa

The countries of Sub-Saharan Africa continued to struggle with their external debts, which are largely owed to official creditors. Encumbered with high rates of population growth, low rates of investment and a narrow production and export base, these countries were unable to meet more than 40% of their scheduled debt service obligations. A number of rescheduling agreements were concluded, some on highly concessional terms, and the governments of the industrial countries forgave nearly $5 billion in official development assistance loans. The net present value of the concessions granted under the Toronto agreement on official bilateral credits came to only $0.8 billion during the first nine months of the year. Notwithstanding the considerable assistance they have received to date, these countries still face formidable debt servicing problems, and at the Commonwealth Conference in Trinidad in September 1990 it was proposed that further relief be provided on their official debt.

Assessment of debt reduction programmes

Three years of experience with officially supported debt relief for a very diverse group of countries suggests that it can play a useful role in helping countries to rehabilitate their economies through comprehensive programmes of structural reform and macro-economic stabilisation. Moreover, some of the earlier concerns about the dangers of debt relief have been allayed. The linkage of debt and debt service reduction with sound economic policies has alleviated the fear that concessions would come to be granted to an ever-growing circle of countries while failing to have a lasting impact on their economies. Another concern, namely that creditors would not be treated equitably, has been addressed by providing a large number of options, keying them to secondary market discounts and incorporating clauses allowing creditors to partake in unexpected windfall gains.

Finally, the concern that the existence of debt reduction programmes would undermine other countries' incentives to service their debt does not seem to have been borne out. Debtors have observed that banks are very cautious when extending credits to countries with a past record of debt service difficulties, even those whose debt has been cut substantially with the help of officially sponsored debt relief. In fact, the sine qua non for the resumption of spontaneous inflows of private funds is not officially supported debt reduction, but the implementation of a successful programme of fundamental adjustment that achieves a lasting improvement in a country's economic prospects.

VII. Monetary developments and policy

Highlights

Last year monetary policy in Japan and Germany continued to be aimed at countering a build-up of inflationary pressures, while in the United States policy was eased in response to the onset of recession. Sharp declines in short-term interest rates were permitted in some other countries where relatively restrictive policies designed to resist inflationary pressures had previously been in place.

A marked orientation of policy towards domestic objectives in the major countries was reflected in the importance attached to monetary and credit aggregates. This was particularly evident in the strong US policy response to signs of a "credit crunch" which threatened to aggravate the recession. In other countries where a tightening of credit supply conditions and declines in asset prices occurred, they were viewed as consequences of earlier speculative excesses and anti-inflationary monetary policies.

Notwithstanding the convergence of inflation and interest rates achieved within the European Community in recent years, divergences in economic prospects have raised new questions about the functioning of the quasi-monetary union already practised within the EMS exchange rate mechanism (ERM). In some EC countries the process of convergence has far to go. However, negotiations on further steps towards a European monetary union entered a new phase with the convening of two intergovernmental conferences in December. There is widespread agreement that any new arrangements should institutionalise the priority to be given to price stability and incorporate a high degree of independence for monetary policy decision-making. However, views differ widely about how to move further towards economic and monetary union and how fast to proceed. The nature of any political consensus which can be achieved with respect to concrete changes remains to be seen.

The conduct of monetary policy during the past year

Contrasting interest rate policies in the largest economies

Diverging monetary policy responses to international disturbances

The differences between monetary policies that had been evident since the spring of 1989 as economic developments in the largest industrial countries diverged became more pronounced last year. In the early months of 1990 Federal Reserve and Bundesbank policies remained unchanged, while the Bank of Japan continued to encourage a gradual rise in call-money rates. Central bank responses to international disturbances were also strongly conditioned by differing judgements as to their likely impact on the domestic economy and on the achievement of domestic objectives. In particular, while it was generally agreed that the first-round effect of oil price increases on economic activity and the price level might have to be accommodated, the primary concern in the United States seems to have been the potential impact on output and that in Japan and Germany the influence on inflation expectations. Policy-makers also seem to have taken quite different views about the potential impact of the hostilities in the Gulf on business and consumer confidence. While short-term interest rates in Japan and Germany were permitted to rise further, a sharp easing of monetary policy took place in the United States.

Central banks in all three countries paid close attention to the bond markets' assessments of the likely impact of policy on inflation. Declines in government bond yields in late 1990 in the United States and in early 1991 in Germany were interpreted in part as indicating confidence that inflation would remain under control. The sharp decline in bond yields in Japan in late 1990, largely as a result of a shift on the part of Japanese institutional investors to the home market, may have reached a point at which it began to reduce the effectiveness of interest rate policy in controlling inflation.

No attempt was made to modify monetary policy to counter the depreciation of the US dollar vis-à-vis the yen and the Deutsche Mark last year, which was regarded as consistent both with sustaining the international adjustment process and with the divergent monetary policy objectives with respect to effective demand. The rebound in the US dollar after the end of hostilities in the Gulf was resisted with exchange market intervention and a slight adjustment of short-term interest rates in Germany in April.

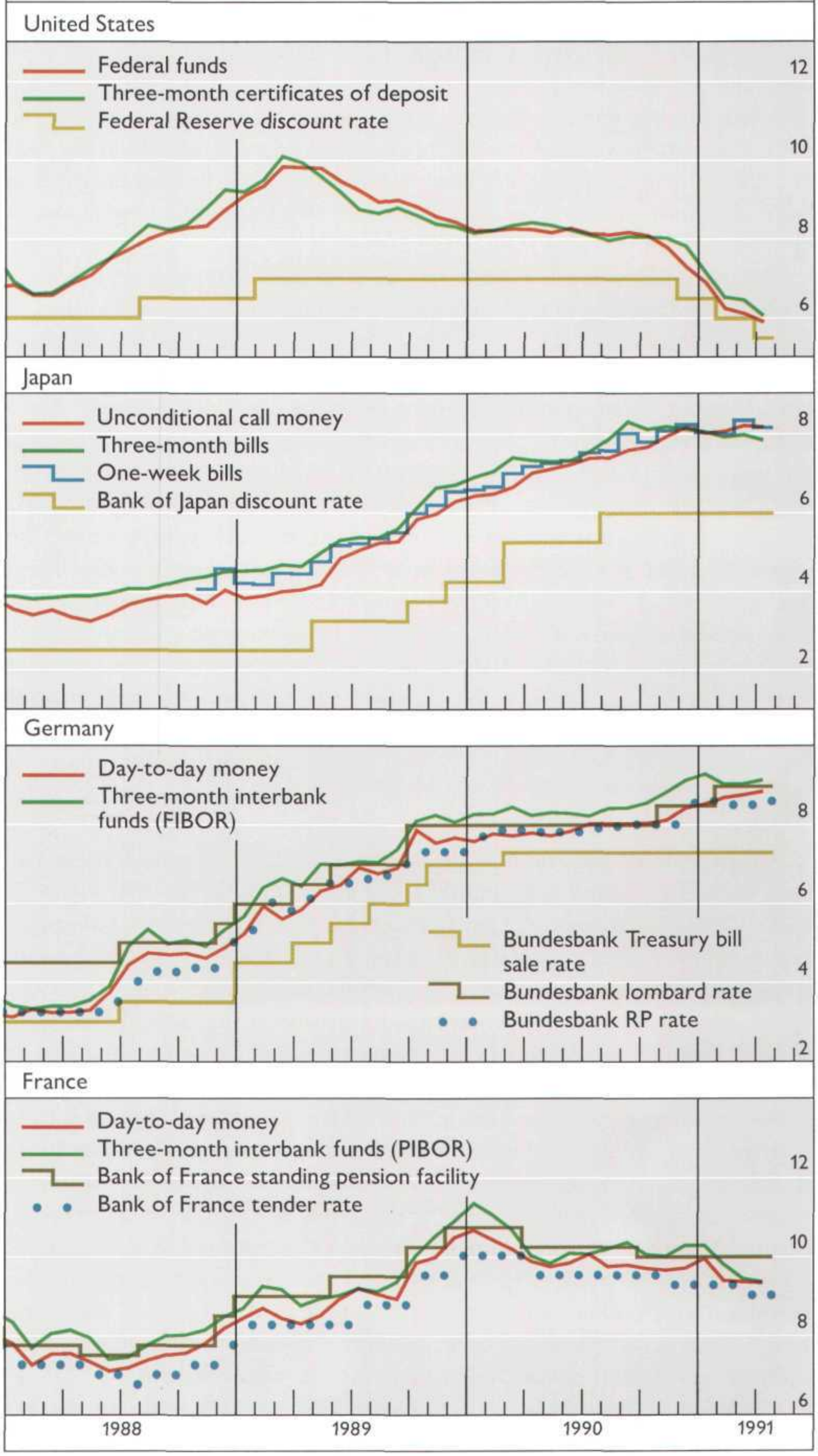
North America

Easing of monetary policy in the United States ...

Although signs of weakness in the economy and of financial fragility had been evident for some time, until the late autumn of 1990 monetary policy in the United States was kept on a course designed to help sustain a modest expansion of economic activity consistent with a gradual moderation of underlying inflationary pressures. In contrast to its response in previous cycles, the Federal Reserve encouraged a decline in the federal funds rate in 1989, well before the long cyclical upswing in business activity reached its peak. However, the rate remained broadly unchanged in early 1990 when, notwithstanding regional and sectoral problems, economic activity proved fairly resilient. In July the Federal Reserve eased money market conditions slightly in response to increasing concern about a tightening of supply conditions in the credit markets. In the wake of the rise in oil prices in August, business and consumer confidence weakened and economic prospects deteriorated. A further easing in money market conditions was permitted in October, following the adoption by Congress of the multi-year federal deficit reduction package which the Federal Reserve viewed as likely to move fiscal policy significantly towards restraint.

A much steeper decline in short-term interest rates followed as from November. The federal funds rate, which had fallen only from around 8¼%

Official and money market interest rates



in January 1990 to 7¾% in November, was brought down to around 5¾% by early May 1991. The Federal Reserve discount rate was lowered from 7 to 5½% in three stages between December 1990 and April 1991. While this was clearly a response to an unexpectedly sharp contraction in economic activity and a greater-than-anticipated tightening of bank and capital market credit conditions, the easing was also consistent with the slow rates of monetary expansion.

... and Canada

In Canada exchange market reactions to a modest easing of policy in early 1990, before evidence of a weakening of economic activity became widely available, made a sharp rise in money market rates necessary to defend the Canadian dollar. The economy moved into recession in the summer, but the Bank of Canada sought to prevent an excessively rapid decline in short-term interest rates that could place downward pressure on the exchange rate. Nonetheless, between mid-1990 and early 1991, with unemployment rising sharply, money market interest rates in Canada fell by much more than comparable US interest rates.

Japan

Tightening in Japan

Against the background of earlier, partly speculative rises in the prices of land and other assets and a progressive tightening of conditions in the goods, services and labour markets last year, the Bank of Japan encouraged a gradual firming in call-money rates throughout 1990 and raised its discount rate in March and August. The pace of economic expansion was considered too fast in view of the risk that a wage/price spiral might develop. The rise in land prices came to a halt in the course of the year and the existing level of interest rates and credit restraint appeared to be gradually bringing the growth of the economy down to a sustainable rate. The call-money rate was not raised further after January 1991.

Western Europe

Increases in the Bundesbank's lombard rate

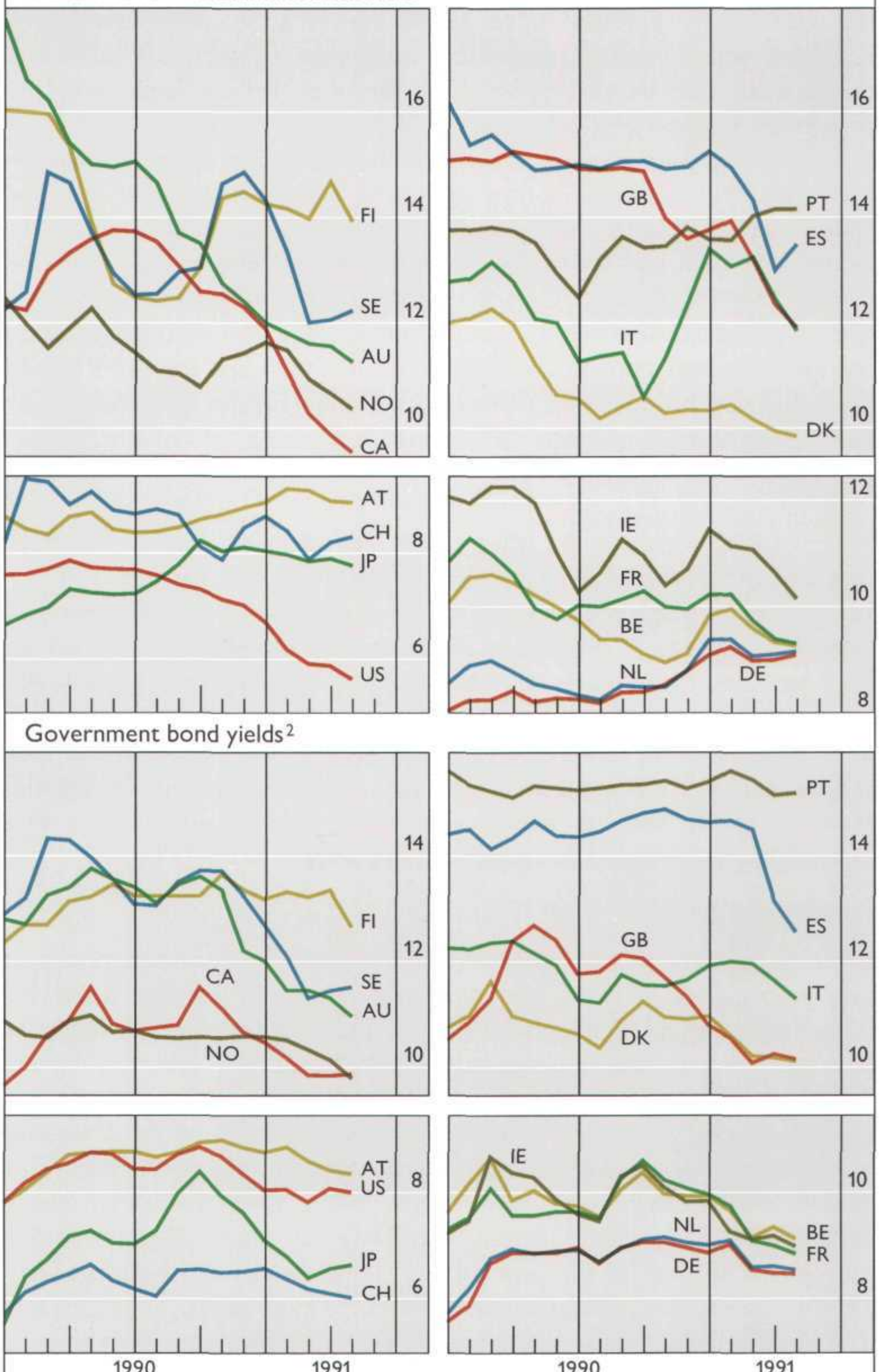
After being tightened in 1989, monetary policy in Germany remained largely unchanged in 1990. The adjustment in eastern Germany following the introduction of the Deutsche Mark in July was hindered by rapid rises in wages, despite low productivity levels. In western Germany strong demand pressures proved compatible with quite moderate rates of consumer price increase, owing partly to the strength of the Deutsche Mark and a sharp rise in imports. However, by the end of the year price stability was endangered by large wage claims, huge prospective public authority deficits and accelerating monetary expansion. Money market rates edged up close to the lombard rate. In November 1990 and February 1991 the Bundesbank raised its lombard rate in two stages.

Lowering of the Bank of France's tender rate

Increased confidence in the authorities' exchange rate commitment provided scope for some easing of monetary policy in France in response to the slowdown in the economy. The interest rate applied in the Bank of France's tender operations was lowered in several stages in April 1990, in November – on the day preceding the increase in the Bundesbank's lombard rate – and in March 1991.

Interest rates and bond yields

Three-month interbank interest rates[1]



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

[1] For the United States, Canada and Sweden, Treasury instruments. [2] For Spain, public sector bonds; for Denmark, all quoted bonds.

Developments in other EC countries ...

In Austria and the Netherlands short-term interest rate levels were kept closely aligned with those in Germany. In the other ERM countries observing standard (or narrower) exchange rate fluctuation bands, money market rates were brought down further in relation to comparable rates in Germany between January and November 1990, notwithstanding temporary upward pressures on the differentials stemming from the rise in oil prices in the summer. In late 1990 and early 1991 short-term interest rates in most of these countries increased by more than German rates. The rise was largest in Italy, where wage developments were causing concern. However, in the spring of 1991 money market rates in Belgium, Denmark, Ireland and Italy could be lowered. Confidence in the exchange rate oriented monetary policies was reflected in further declines in long-term interest rates in France, Belgium, Denmark and Ireland between the spring of 1990 and the spring of 1991. In Italy bond yields partly reflected a relatively high rate of inflation but, in a context of large capital inflows, remained lower in real terms than yields in Germany.

A policy of monetary restraint was kept in place in the United Kingdom in 1990, even as the economy moved into recession, to counter sustained inflationary pressures and to permit an improvement in the external current-account position. The entry of sterling into the ERM in October was accompanied by a lowering of short-term interest rates. Further reductions in money market rates were encouraged in February and early March 1991, when the weakness of sterling in its ERM band in relation to a strong Spanish peseta acted as a constraint. Money market rates declined again in April after sterling had risen in the ERM band. Bond yields fell substantially in anticipation of ERM entry and in the months following it.

In Spain and Portugal high interest rate policies designed to cope with demand pressures were kept in place in 1990. With the peseta rebounding towards the top of its broad fluctuation band in early 1991, the Bank of Spain helped to relieve strains in the ERM by lowering its ten-day intervention rate slightly in two stages in February and March. In December special investment arrangements were introduced in Portugal to absorb bank liquidity, which had become structurally excessive. Greek monetary policy was tightened in April and July 1990 and interest rates were kept high, in both nominal and real terms, in an effort to control liquidity creation by the public and private sectors.

... in Norway, Sweden ...

In Norway the official overnight lending rate was lowered in August but money market rates moved higher immediately after the pegging of the krone to the ecu in October. In Sweden, against a background of rising unemployment and an external current-account deficit, market speculation about the prospect of a change in the exchange rate regime brought the Swedish krona under renewed downward pressure in the autumn. Short-term interest rates were raised sharply in October but, with exchange market confidence restored, returned to their late-1989 levels by early 1991 when the Swedish krona was pegged to the ecu.

A recovery of the Swiss franc following a period of weakness in 1989 permitted money market rates in Switzerland to fall below corresponding German rates in the autumn. Although the Swiss franc remained an independently floating currency, the National Bank recognised that its ability to lower interest rates further in order to counteract economic recession was constrained by the risk of a loss of confidence in the exchange market, as a sharp fall in the exchange rate would have aggravated inflation.

... and Switzerland

The role of developments in the money stock, credit markets and asset prices in monetary policy

Developments in the money stock and monetary policy

Running counter to a widespread tendency in recent years for monetary authorities to pay less attention to short-run movements in monetary aggregates, developments in the money stock played a particularly important role in the conduct and presentation of monetary policy in the United States and Germany last year.

Although the Federal Reserve had continued to target M_2, it was widely assumed to have de-emphasised the aggregate's intermediate target role, partly because of uncertainties associated with the dynamic behaviour of the demand for M_2 balances. However, the Federal Reserve concluded that a decline in M_2 growth as from September 1990 should be interpreted as indicating that economic activity was slowing more sharply than had been anticipated. Year-on-year rates of M_2 growth recorded in late 1990 were comparable only with those recorded under conditions of severe monetary restraint in the 1960s and far below what might have been expected in a context of declining interest rates. Slow M_2 growth was also consistent with other evidence of a further tightening of bank credit supply conditions which was thought likely to delay a recovery in economic activity. In relation to market interest rates the terms offered on deposits included in M_2 became unattractive, as a result of a reduced willingness and capacity of banks and savings institutions to expand their balance sheets. At the same time there was a tendency on the part of depositors to shift M_2 holdings into Treasury securities and other non-deposit instruments, reflecting a "flight into quality" in a context of well-publicised closures of savings institutions, deposit insurance fund losses and credit problems at commercial banks. The run-down in savings institution assets and the slowdown in bank credit expansion had a pronounced effect on the growth of the "managed liabilities" component of M_3. Increased placements with mutual funds and a strong rise in currency in circulation more than accounted for the growth in this aggregate in 1990.

Slower monetary expansion as an indicator of credit conditions in the United States

Monetary targeting continued to provide a medium-term orientation for monetary policy in Germany last year notwithstanding the uncertainties associated with German unification. Until the end of 1990 the Bundesbank's objective was expressed in terms of the M_3 aggregate in western Germany, given the difficulty of interpreting monetary data for the former GDR. The 15% increase in the total broad money stock which resulted

Monetary targeting and German unification

Monetary and credit aggregates: objectives and rates of expansion

Countries and aggregates[1]		Objective[2] for		Monetary or credit expansion			
				Target period[3]	Change over four quarters[4]		
		1990[5]	1991[5]	1990[5]	1989 QI	1990 QI	1991 QI
				in percentages			
United States	M_2	3–7	2½–6½	3.9	4.2	5.7	3.2
	M_3	2½–6½	1–5	1.8	5.5	3.3	2.1
	TDND	5–9	4½–8½	6.9	9.0	7.4	6.4
Japan	M_2+CDs	ca. 11	ca. 4	10.0	10.2	11.6	5.9
Germany	M_3[6]	4–6	4–6	5.5	6.9	4.3	–
France	M_2	3½–5½	–	–0.7	3.8	3.2	0.1[7]
	M_3[7]	–	5–7	7.8	7.9	9.5	7.5
United Kingdom	M0	1–5	0–4	2.7	6.8	5.7	2.9
	M_4	–	–	9.9	18.0	18.9	10.5
Italy	M_2	6–9	5–8	9.6	9.8	10.3	9.1
	CPS	12	10	15.4	17.5	17.2	12.8
Denmark	DMC	–	4–7	–	n.a.	n.a.	n.a.
Spain	ALP	6½–9½	7–11	11.3	12.5	9.3	13.2
Portugal	L–	ca. 12	ca.12	11.6	17.4	8.6	12.9
Greece	M_3	19–21	14–16	14.6	23.1	22.0	n.a.
Switzerland	CBM	2	1	–2.6	–8.8	–3.4	0.1
Canada	M_2	–	–	–	12.3	13.4	8.4

[1] TDND = total domestic debt of non-financial sectors; M0 = wide monetary base; CPS = credit to the non-state sector; DMC = domestic money creation in kroner via the banks; ALP = liquid assets held by the public – including asset transfer certificates; L– = total liquidity held by non-financial residents; CBM = central bank money stock. [2] For TDND in the United States, monitoring range only; for M_2 + CDs in Japan, projection only; for L– in Portugal, guideline only. [3] Calculated on the same basis as the objective. [4] Based on quarterly averages. [5] Periods running from the fourth quarter to the fourth quarter for the United States, Japan (except 1991, second quarter to second quarter), Germany, France, Denmark and (for 1990) Switzerland. From December to December for Italy, Spain, Portugal and Greece. For the United Kingdom, twelve-month periods ending in March of the following year. The figure shown for Switzerland for 1991 is a long-run norm only. [6] For 1989 and 1990, western Germany; for 1991, including eastern Germany. [7] New concept.

Sources: National data.

from the introduction of the Deutsche Mark in eastern Germany in July seemed large in relation to the 10% increase in nominal GNP for the enlarged Deutsche Mark area. However, money balances in eastern Germany were subsequently reduced through portfolio shifts into the wider range of non-monetary financial assets available. Although considerable uncertainty was involved in estimating growth potential and prospective developments in velocity for eastern Germany, a money stock objective was set for the whole country for 1991. It allows for an unchanged normative price increase of 2%. Monetary expansion remained on target in 1990 but a marked acceleration late in the year strengthened the case for a policy adjustment in early 1991.

Developments in the monetary aggregates in Japan ...

The Bank of Japan pointed to high rates of increase in M_2 + CDs as a consideration in its decisions to raise the official discount rate last year. The subsequent slowdown in the growth of this aggregate in the course of the year partly reflected the restrictive monetary policy stance. However, in recent years developments in M_2 + CDs have been influenced by shifts in asset portfolios facilitated by the liberalisation of interest rates on time deposits. A once-for-all shift of household placements from postal savings deposits, a component of M_3, into deregulated deposit components of M_2 + CDs seems to have contributed to the temporary surge in the latter aggregate's four-quarter growth rates, mirrored in the Bank of Japan's projections, to around 11–13% in the second and third quarters of 1990.

... France ...

In France the fall in M_2 growth below the lower limit of the target range last year was mainly attributable to special factors. These included the growth of money market funds together with a shift in these funds' portfolios towards commercial paper and Treasury bills, issues of French franc certificates of deposit abroad by the banks to circumvent reserve requirements and a shift in the composition of household savings towards a special type of retirement saving plan introduced at the beginning of the year. The Bank of France responded by lowering reserve requirements on time and savings deposits and redefining the aggregates. The 1991 target applies to a new broad M_3 concept which embraces the liabilities of short-term mutual funds. Because M_3 includes assets yielding market interest rates, it is less interest-sensitive than the old M_2 and may be more indicative of developments in nominal GDP. The 1991 target for M_3 is thought to be consistent with that for M_2 in 1990. A new set of aggregates for illiquid household saving placements (P1, P2 and P3) has been compiled to complement the monetary aggregates and to facilitate surveillance of the relationship between the monetary aggregates and total domestic debt.

... the United Kingdom, Italy and Spain

The deceleration in the growth of M0 and M_4 in the United Kingdom reflected the weakening of consumer spending and private sector demand for credit. In Italy M_2 growth in 1990 was slightly above the upper limit of the target average. The lower target range for 1991 reflects the desire to bring inflation closer to rates prevailing in other ERM countries. If the growth of ALP (liquid assets held by the public) in Spain is adjusted for disinvestment in previously tax-privileged local government notes, it appears to have been within the target range last year. However, ceilings on bank credit stimulated a sharp increase in the issuance of commercial paper, and as a result a separate objective for the expansion of ALP plus commercial paper has been set for 1991. In Denmark an objective for net domestic money creation in kroner via the banks was announced for the first time. The National Bank considers that its room for manoeuvre is sufficient to permit domestic interest rate policy to be used to influence credit expansion. Though no monetary objective was in place last year, the Netherlands Bank renegotiated with the banks an agreement providing for the use of quantitative controls should it become necessary to control domestic liquidity creation by the banks.

Monetary aggregates in EC policy co-ordination

Targets for monetary and credit expansion have assumed a role in the implementation of policy co-ordination in the European Community. For the present, at least, financial innovation and international capital mobility are generally not thought to preclude the use of national monetary aggregates as information variables and for helping to gauge the overall consistency of policies. High projected rates of monetary and credit expansion and difficulties in meeting monetary objectives are clearly most characteristic of countries with high inflation rates.

Medium-term objective in Switzerland

Although the Swiss National Bank attributed undershooting of its monetary objective in 1990 more to the restrictive stance of monetary policy than to financial innovation it refrained from setting a target for 1991. It announced that it viewed a 1% rate of expansion of the central bank money stock as consistent with price stability in the medium term and intended to bring the growth of this aggregate – negative in 1990 – more into line with the medium-term objective. However, controlling inflation in the short run called for interest rate policies geared to avoiding a sharp depreciation of the Swiss franc. Given the exchange rate constraint it seemed unlikely that the norm for central bank money would be met within a period as short as a year.

Publication of inflation targets in Canada

In Canada the rates of expansion of M_2 and M_2+, though still boosted by shifts of funds out of government savings bonds, moderated last year in response to the slowing of total spending in the economy. In an effort to influence price expectations by clarifying the ultimate objectives of monetary policy, in February 1991 the Bank of Canada and the Minister of Finance announced an explicit target path for reducing inflation. Target bands with mid-points of 3, 2½ and 2% were set for the twelve-month increase in the consumer price index (excluding the volatile food and energy component) for the end of 1992, the middle of 1994 and the end of 1995 respectively. This compares with a 6.8% rate of inflation in January 1991, following the introduction of a general sales tax.

Developments in credit markets and monetary policy

The debate about a "credit crunch" in the United States and the efforts of the Federal Reserve to counteract its effect on the economy by lowering interest rates have focused attention on the interpretation of developments in credit markets and their interaction with monetary policy.

Credit conditions in the United States

In the United States the growth of deposit institutions' claims on the private sector slowed progressively last year and became negative in late 1990 and early 1991. While a contraction in credit demand and a tightening of credit supply conditions is characteristic of recession periods, "credit crunches" in the past had been due mainly to the inability of deposit institutions to compete for funds when monetary restraint drove market interest rates above the Regulation Q interest rate ceilings for time and savings deposits. The last of the remaining ceilings were abolished in 1986. Last year, by contrast, failures of savings institutions and the reduced capacity of banks to expand their risky assets were clearly a significant influence. Declines in asset values eroded bank capital, depressed bank share prices and raised the risk premia banks were obliged to pay in the deposit and bond markets (see Chapter V). Although a reaction to excessive lending to particular sectors was long overdue, concern that creditworthy borrowers were also being affected gradually arose. In May 1990 the Chairman of the Federal Reserve Board, the Chairman of the Federal Deposit Insurance

Growth in bank credit to the private sector[1]								
Countries	Peak 1972–73	Trough 1974–75	Peak 1978–80	Trough 1982–84	1987	1988	1989	1990
	December to December, in percentages							
United States	17.6	4.8	15.4	3.1	10.2	9.6	4.0	−0.6
Japan	25.7	12.0	10.1	8.7	11.2	10.9	11.6	9.2
Germany[2]	16.0	5.2	12.1	5.4	3.4	5.4	7.3	7.6
France	24.6	11.0	14.5	7.4[3]	12.8	11.8	10.9	11.0
United Kingdom	30.8	5.3	19.2[4]	16.5	19.0	24.8	21.2	13.9
Italy	19.4	9.9	22.9	9.6	8.7	17.0	20.8	16.6
Canada	24.7	15.7	21.4	−4.7	13.0	13.0	13.3	8.2
Spain	25.8	22.1	17.3	4.3	15.3	17.6	17.6	10.1
Netherlands	27.8	12.2	22.1	2.8	2.9	8.6	6.6	6.3
Belgium	15.5	13.0	15.4	2.8	8.6	13.3	16.6	8.7[5]
Switzerland	11.1	4.3	12.2	3.7	10.2	12.8	15.2	8.8
Australia	35.1[6]	10.5[6]	17.0[6]	10.9[6]	20.0	24.0	15.6	7.2
Sweden	11.7	11.0	11.7	7.8	9.6	18.6	9.4	3.6
Denmark[7]	15.3	2.4	10.6	10.6	10.3	−3.2	10.0	11.5
Finland	..	..	18.7	16.1	17.2	29.1	14.8	10.2
Norway	..	..	..	13.3	16.8	7.6	5.5	3.0
Portugal	32.7	11.2	27.0	19.8	3.6	7.1	5.4	31.8

[1] Including credit from savings institutions and the central bank. [2] Western Germany. [3] 1986. [4] 1982. [5] Twelve months to September. [6] Twelve months to June. [7] Excluding mortgage loans.
Sources: National data and BIS estimates.

Corporation and the Comptroller of the Currency took the unusual step of meeting bank representatives to make it clear that supervisory policy was not intended to prevent new lending. A major consideration in the subsequent easing of interest rate policy was the unusually tight credit supply conditions which threatened to deepen and prolong the recession. In December reserve requirements on non-personal time deposits were reduced to zero so as to ease burdens on bank profits and competitive positions.

Evidence of bank credit restraint

The Federal Reserve's periodic senior loan officer opinion surveys on bank lending practices suggest a progressive tightening of lending standards and of price and non-price terms – such as collateral requirements and loan size – on loan covenants and credit lines for non-merger-related business loans. Greater stringency was also reported for home mortgage loans in October and for consumer loans in January 1991, areas in which a rapid expansion of bank lending had been compensating for a contraction of the activities of savings institutions.

The commercial and multiple unit housing construction industry, heavily dependent on credit from banks and savings institutions, was clearly hardest hit by credit restraint. Lending by US-chartered banks for construction and land development declined at an annual rate of over 20% in the fourth quarter of 1990. Spending on office and other commercial building accounts for only about 1% of GNP. However, because existing commercial properties constitute a large share of the stock of assets financed by banks, sharp falls in their value could imply substantial loan losses.

Expansion in the markets for mortgage-backed securities and securitised consumer loans enabled household credit demand to continue to be met, but only businesses with high credit ratings were able to switch to the commercial paper market or other forms of short-term borrowing. The rise in spreads over rates on Treasury securities paid by prime borrowers in the bond and commercial paper markets seems to have been moderate by the standards of previous recessions, but downgradings of non-financial companies surged and high-risk premia in the corporate bond market increased. The growth of total debt of the non-financial private sector, which had recorded a huge expansion since 1983, far outpacing GNP, slowed progressively in 1990. The rise for the year, at 5.3%, was lower than in any twelve-month period in the past twenty-five years.

Credit supply conditions elsewhere

Generalised credit restraint on the part of lenders did not become a major monetary policy concern in other countries last year. Efforts by banks to improve their capital positions do not seem to have had a major impact on lending to domestic non-banks in 1990, even in countries where banks experienced pressure on their profitability. A selective tightening of bank credit terms in Canada, Australia and the United Kingdom for some types of construction lending mainly reflected a response to overbuilding. In some countries problems experienced by non-bank financial institutions may have impeded the supply of credit to some borrowers of less than the highest credit-standing. However, a slow response of bank lending charges to market interest rates could largely be viewed as a normal cyclical development. Pressures on banks' profit positions and a slowdown in their lending were specifically taken into account in the progressive lowering of cash reserve requirements in Finland. In Sweden cash reserve requirements for banks and finance companies were eased in two stages in December 1990 and March 1991. Loan losses contributed significantly to the slowdown in the growth of bank lending in Norway last year. Central banks in a number of countries, including the United Kingdom, Japan, Australia and Norway, have suggested that bank capital positions may call for a cautious approach to lending on the part of some banks in coming years.

Weakening of the demand for credit

A marked slowdown in the growth of deposit institutions' claims on the private sector was observed in many countries in 1990, particularly towards the end of the year, and in early 1991 when the demand for credit slackened in response to a contemporaneous, unexpectedly sharp weakening of the economy at the time of the Gulf war. The slowdown in credit expansion was quite moderate in Japan, the Netherlands and Italy. It was especially pronounced in a group of countries including the United Kingdom, Sweden, Australia, Finland and, to a lesser extent, Canada which have experienced a credit boom in recent years in a context of deregulation and financial innovation. In these countries a decline in the demand for corporate merger-related, housing and consumer credit following a strong rise in corporate leverage and/or household debt service ratios in the late 1980s could be regarded as a correction of unsustainable trends. Credit to the enterprise sector continued to expand vigorously in Germany and France.

Growth in bank lending to the private sector for particular purposes[1]

Countries	Business loans[2]			Housing loans[3]			Personal loans[4]		
	1983–88 average	1989	1990	1983–88 average	1989	1990	1983–88 average	1989	1990
	December to December, in percentages								
United States	8.7	6.1	1.1	15.2	13.3	10.0	10.7	5.9	0.9
Japan	8.1	8.2	5.3	20.7	27.7	3.4	13.6	21.8	12.6
Germany	4.8	8.5	9.0	5.4	5.3	4.6	6.5	9.0	9.2
France	8.3	14.2	12.5[5]	9.2	8.2	9.8[5]	27.6	15.4	9.1[5]
United Kingdom	19.3	30.9	9.3	14.8	17.0	12.8	18.4	15.3	8.2
Italy	18.2	22.3	15.3	–	–	–	18.2	24.0	26.8
Canada	3.1	11.1	3.9	18.0	18.4	14.3	12.2	10.7	5.4
Sweden	17.7	34.5	14.3	–	–	–	16.8	6.1	2.8

[1] For France, credit system; for other countries, banks only. [2] For the United States, commercial and industrial loans. [3] For the United States and Japan, real estate loans; for France, including credit for property development. [4] For Japan, Italy and Sweden, including housing loans. [5] Twelve months to September.

Sources: National data and BIS estimates.

The slowdown in credit expansion was viewed in most cases as a response to policies of monetary restraint designed to counteract overall demand pressures or continuing high rates of inflation. Short-term interest rates were very high in both nominal and real terms throughout much of 1990 in many of the countries where rates of credit growth declined substantially. Quantitative restrictions on bank lending to the private sector were in place until the end of 1990 in Spain and Portugal, where some moderation in the growth of domestic credit occurred after mid-year. In Japan window guidance was a factor in the slow growth of bank credit. A marked slowdown in banks' real estate lending reflected a request to banks by the authorities that they should limit the rate of growth of property lending to that of total loans.

In most countries the rise in domestic credit to the private sector, though slowing in 1990, remained substantial in relation to nominal GNP growth and to the increase recorded in previous periods of recession. In many cases, the latter comparison has to be interpreted in the light of comparatively low rates of inflation and improvements in the self-financing capacity of enterprises in recent years. Moreover, in countries where interest rates were relatively high, there was a further expansion last year in borrowing abroad or other types of credit not reflected in the indicators shown in the table: foreign currency credit taken up abroad in Norway and Portugal, foreign currency credit refinanced abroad by domestic banks in Sweden and commercial paper in Spain. Borrowing abroad was discouraged by a non-interest-bearing deposit requirement introduced in 1990 in Portugal, while in Spain a previously introduced requirement remained in effect until March 1991.

Asset prices and monetary policy

The concern that has arisen in some countries regarding credit restraint

Monetary policy implications of asset price movements

and financial fragility associated with falls in asset prices following huge rises during the 1980s raises the broader question of what monetary authorities can or should do to influence developments in asset prices. Policy has at times been constrained or changed course in response to movements in asset prices which seemed likely to affect economic activity, a notable instance being that of the stock market break in 1987. In some countries, such as Japan, the sheer magnitude of the increase in the value of real and financial assets during the 1980s seems to have given asset prices a more important role in the transmission mechanism. To some extent movements in asset prices have also been viewed as an indicator of future developments in inflation or in economic activity.

The wealth effect in the transmission mechanism

Monetary policy in many countries has long taken account of various effects of asset price movements on savings, investment and resource allocation. The wealth effect on consumption, in particular, has traditionally been viewed as playing a significant role in the monetary policy transmission mechanism. Its importance in practice depends on how asset prices react to monetary policy, the sensitivity of household expenditure to wealth, and the size of households' asset holdings. The wealth effect is likely to be larger if the availability of credit backed by the equity value of the assets enables households to realise capital gains without selling their assets, as has been the case with residential property in the United States, the United Kingdom and Japan in recent years.

Household net wealth, expressed as a ratio of GNP, grew very rapidly in the second half of the 1980s in some countries, partly as a result of valuation gains on household assets – in particular residential property in Japan and the United Kingdom and equity holdings in France. In the United States the net wealth ratio rose very little during the 1980s, an increase in assets in relation to GNP having been partly offset by the rise in financial liabilities. In Japan the ratio of household wealth to GNP rose from 3.9 in

Household wealth in relation to GNP/GDP

Items and countries	1979	1984	1985	1987	1989	1979–84	1984–89
	ratio of wealth to GNP/GDP					percentage changes in the ratios, at annual rates	
Total assets, net*							
United States	3.10	3.09	3.17	3.24	3.32	−0.1	1.4
Japan	3.38	3.85	3.87	5.11	5.75	2.6	8.3
United Kingdom	3.03	3.14	3.22	3.61	4.16	0.6	5.8
Financial assets, net							
United States	1.70	1.80	1.88	1.87	1.96	1.1	1.7
Japan	0.88	1.08	1.12	1.35	1.67	4.4	9.1
United Kingdom	0.85	1.16	1.20	1.30	1.43	6.2	4.3
Germany	0.88	1.04	1.09	1.10	1.13	3.4	1.7
France	0.61	0.64	0.70	0.79	1.02	1.0	9.8
Italy	0.80	0.95	1.05	1.18	1.24	3.5	5.3

* Real and financial assets net of financial liabilities.

Sources: National data.

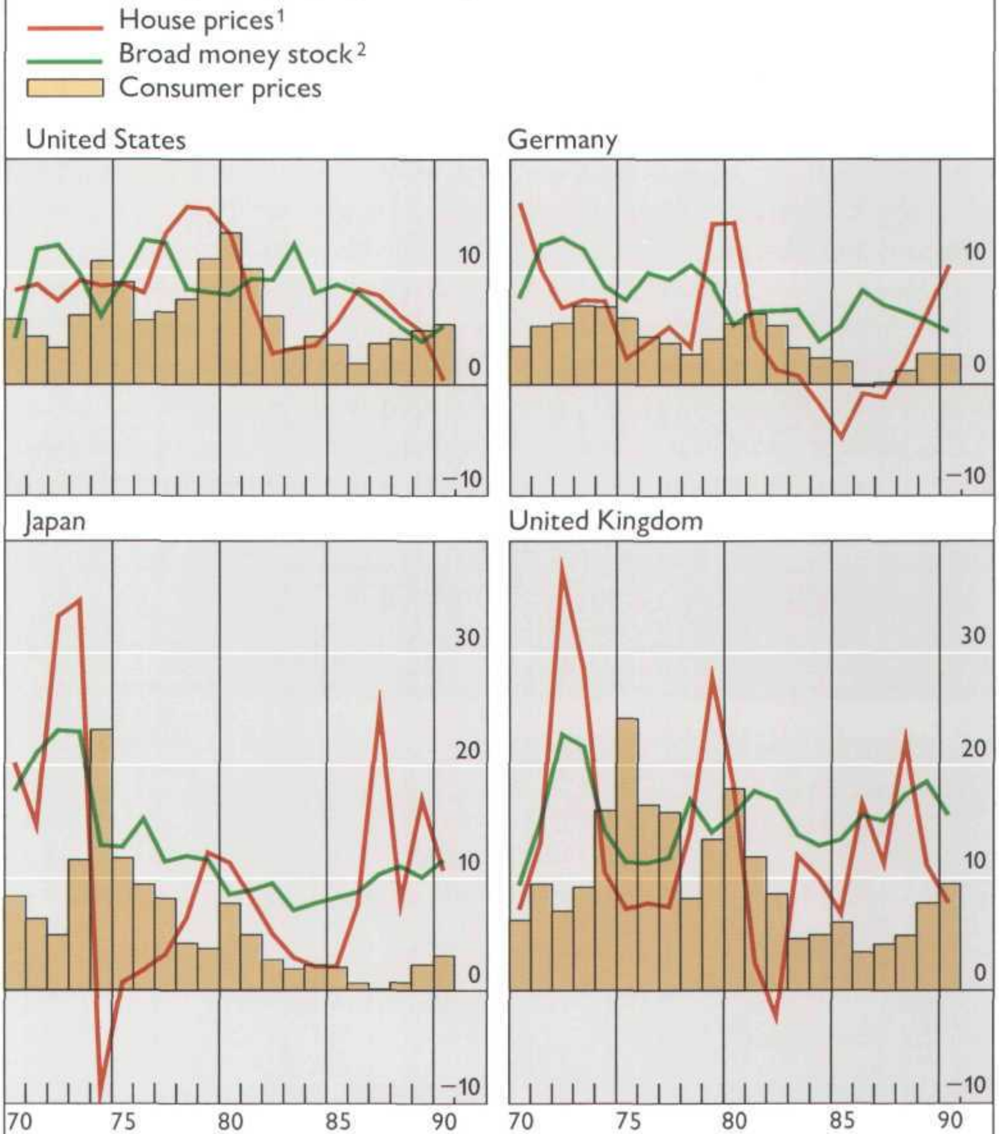
1985 to 5.8 in 1989, which suggests average annual capital gains equivalent to 50% of GNP over the period. Although capital gains on land can be viewed in part as redistributive, the surge in consumption in Japan as from the mid-1980s and the tightening of Japanese monetary policy since 1989 can be better understood in the light of the huge increase in household wealth.

Influence of share prices

Changes in share prices influence investment through their direct bearing on the cost to non-financial companies of raising new share capital. Recently, however, the focus of attention has shifted to an indirect effect, attributable to the impact of increases in the cost of raising new capital on banks' capital positions, and hence their willingness to lend. The sharp fall in

Property prices, the money stock and inflation

Annual average changes, in percentages



[1] For Japan, residential land prices; for Germany, prior to 1978, housing construction costs.
[2] For the United States, M_2; for Japan, M_2+CDs; for Germany, M_3; for the United Kingdom, M_4.
Sources: National data.

Japanese share prices last year reduced accrued capital gains on banks' equity portfolios – an element of Tier 2 capital under the Basle accord – and weakened the markets for shares and derivatives. However, the decline in share prices can be viewed as complementing the Bank of Japan's efforts to achieve credit restraint.

Asset prices as indicators of inflation

To the extent that asset prices respond faster to monetary policy than the prices of goods and services they may serve as a leading indicator of changes in the general price level. However, asset prices also respond to other factors and their volatile movements are often difficult to interpret. In many countries a sharp rise in residential property prices in the 1970s was clearly associated with excessive monetary ease which was followed by an upsurge in inflation. This is well illustrated in the graph in the case of the United States, Japan and the United Kingdom. However, such a relationship cannot readily be identified in the real estate booms of the 1980s. In the United States and Japan the recent appreciation of land prices was geographically concentrated, which suggests that specific factors may have been more important than general monetary conditions. In Germany the overall rise in land prices since about 1982 has been quite moderate. On the other hand, in a number of other countries, including the United Kingdom, rises in house prices clearly seem to have been related to easy monetary and credit conditions and to have heralded an acceleration in inflation.

Asset prices as a constraint on monetary policy

Sharp falls in real estate prices and the related deterioration in the quality of some banks' loan portfolios were an important element in the US "credit crunch". However, such falls did not become a significant influence on monetary policy elsewhere last year. In many countries the banks entered the recession with fairly strong capital positions, thanks in some cases to efforts made by the authorities in recent years to encourage an improvement in this area (see Chapter V). Even in countries where efforts to improve capital positions could affect bank lending in the future (see page 165), the longer-term effect should be to ease a potential constraint on the conduct of monetary policy.

The adaptation of instruments and operating procedures to a changing environment

In following their divergent policy courses the monetary authorities in the United States, Japan and Germany paid close attention to market reactions. In particular, they made changes in official discount and lombard rates only after movements in market rates and advance warning of policy intent seemed to have prepared the markets to expect them. In the United States and Germany the relatively flexible rates on central bank market operations moved very close to the official rates, complicating the implementation of money market policy.

Operational difficulties in the conduct of monetary policy ...

In the United States the borrowed reserves targeting procedure adopted in 1982 has gradually given way to the setting of operating objectives for the federal funds rate, typically changed by ¼ percentage point at a time. In 1990 discount window borrowing from the Federal Reserve fell to unusually low levels. The reluctance of deposit institutions to use short-term adjustment credit for fear of being perceived as having fundamental problems made the discount window a less effective safety-valve for relieving short-term reserve pressures. This became clearer following the reduction in reserve requirements in December. As reserve balances declined to a seasonal low in January and February 1991 the federal funds rate displayed unusual volatility. Reserve balances evidently fell to such low levels that many deposit institutions had difficulty in managing them so as to meet day-to-day clearing needs.

... in the United States ...

... and Germany

In Germany last year management of the supply of bank reserves was complicated by a recurrent tendency for expectational influences to drive short-term money market rates up to or beyond the level of the Bundesbank's lombard rate. Recourse by the banks to lombard credit was unusually large after the introduction of the Deutsche Mark in eastern Germany. The Bundesbank subsequently sought to restore the emergency character of the facility by raising the lombard rate in November. However, after a seasonal rise, rates bid in Bundesbank tenders rose above the lombard rate in January 1991 in a context of difficulties in predicting bank reserve needs. The upward pressure on rates was due to excess reserve holding by eastern German banks, unusual volatility in public authority deposits with the Bundesbank and the unexpected upsurge in the money stock in late 1990. More normal market rate behaviour was restored after the increase in the lombard rate in February 1991.

New instruments in Japan

Under flexible money market procedures introduced in November 1988 the Bank of Japan allowed call-money rates to rise in relation to the discount rate last year in response to market expectations of developments in the economy. The Bank of Japan continued to diversify its money market instruments, acquiring Treasury bills from the market under repurchase agreements in a special tender procedure as from January 1990. In December it announced that it would accept a wider range of paper, including long-term securities and foreign currency bills, as collateral in money market operations.

Convergence of procedures in EC countries

Significant structural changes in central bank instruments in European countries tended to promote a convergence of operating procedures. In Italy some averaging of required reserve holdings was permitted in October. This resulted in a substantial decline in the day-to-day volatility of very short-term money market interest rates and permitted a reduction in the frequency of official money market operations. In France, where reserve averaging provisions have been in effect for many years, the authorities made it clear when lowering the ratios that they did not intend to abandon the use of the reserve requirement as an instrument of monetary policy.

In Belgium the replacement of the system of issuing Treasury bills on tap by one of regular auctions in January 1991 ended the reliance of monetary policy on a single, highly visible instrument, the setting by the central bank of interest rates on short-term Treasury bills. It permitted the National Bank to regulate bank reserve positions by periodic securities tenders and day-to-day market operations comparable with the procedures used in Germany, France and the Netherlands. In future, direct lending by the National Bank to the Government will be limited by a ceiling to a small amount needed to facilitate the Treasury's day-to-day cash management. The Treasury's foreign currency indebtedness will only be increased in agreement with the National Bank and to an extent consistent with monetary policy requirements. A new statute for the Bank of Portugal approved in October prohibited it from financing the state in any form other than the traditional current account and the underwriting of Treasury bills on terms agreed by the Bank.

Hard-currency policies and European monetary integration

Further moves to "harden" monetary policy

Adoption of stricter exchange rate objectives in European countries

In several European countries which have been using the exchange rate as an intermediate objective of monetary policy, the target came to be interpreted more strictly last year. The long-awaited decision of the United Kingdom to join the ERM with a wide fluctuation band (+/– 6%) followed a similar step by Spain in 1989. In Belgium, the authorities announced that the Belgian franc would in future remain closely linked to the strongest ERM currencies, notably the Deutsche Mark, in the event of an exchange rate realignment. In addition, interest rate policies would normally be geared to keeping the margin of fluctuation for the Belgian franc/Deutsche Mark exchange rate narrower than that permitted within the standard ERM band – as the Netherlands Bank had done for some years in the case of the guilder/Deutsche Mark rate. This is expected to lead, over time, to a further narrowing of average differentials between interest rates in Belgium and Germany.

Outside the ERM Norway and Sweden fixed central rates for their currencies in terms of the ecu as an anchor for monetary policy. Portugal continued its policy of not fully compensating for inflation differentials by adjustments in the escudo exchange rate. In October the overall trade-weighted index previously used as a reference in setting the official peg was replaced by an index of ERM currencies. The exchange rate was permitted to move within a predetermined band around the trend target in response to supply and demand pressures. Subsequently, in a context of continuing inflows of funds, the escudo appreciated slightly.

The exchange rate as an instrument of adjustment

Risk of strains in the ERM

As EC countries moved towards tighter exchange rate links and were preparing for full monetary union new strains began to emerge. Inflation differentials began to widen in a few cases and divergent developments in economic activity led to renewed questioning of the advantages of rigidly fixed exchange rates. In particular, the impact of German unification on economic activity and the related large budget deficit, combined with monetary restraint, gave rise to the risk that other ERM countries might have to contend with upward interest rate pressures. The implication seemed to be that, in the absence of exchange rate adjustments, other countries' unemployment rates might tend to rise unless they achieved lower rates of wage inflation than Germany. The increase in the German public authorities' borrowing requirement showed how budgetary disturbances in one country could impinge on other countries in the absence of exchange rate adjustments, even when monetary policy succeeded in maintaining a moderate rate of inflation.

The case against realignment

The decline in the German external current-account surplus last year helped to sustain economic activity in Germany's main European trading partners, a number of which had achieved a high degree of inflation convergence with Germany under monetary policies based on a stable currency relationship with the Deutsche Mark. The authorities in these countries were firmly convinced that the credibility of their policies, built up over a long period, would be jeopardised by a devaluation of their currencies vis-à-vis the Deutsche Mark. In the smaller, more open economies in particular, any beneficial effect on the competitive position was bound to be short-lived. The risk that a loss of confidence would be reflected in a substantial rise in domestic interest rates in relation to rates in Germany was also a strong argument against considering a currency realignment.

In another group of countries where less progress has been made towards inflation convergence, some weakening of domestic demand pressures last year was welcome. For some time efforts to achieve domestic monetary restraint had been hampered by inflows of capital attracted by relatively high nominal interest rates. In this situation the problem had been that the exchange rate constraint hindered an increase in real interest rates which seemed desirable on domestic grounds. To the extent that some easing of domestic monetary conditions seemed appropriate last year an existing dilemma was relieved. In a few countries the weakening of economic activity became a cause for concern, but the struggle against inflation, and the exchange rate standard underpinning it, still had clear priority.

Potential adjustment problems in some countries

Nevertheless, in a number of cases a growing external deficit clearly testifies to an erosion of the economy's competitive position. Further rises in unemployment, should they occur, would highlight the difficulties which may be encountered in carrying out appropriate economic adjustments when exchange rates are rigidly fixed.

Plans for and progress towards European monetary union

As agreed at the meetings of the European Council in 1989, the first stage of a process aimed at establishing European economic and monetary union came into effect in July 1990 following the complete liberalisation of capital movements in eight of the twelve EC countries. At the same time the Committee of Governors of the EC central banks strengthened its procedures for promoting the co-ordination of monetary policies.

Increased monetary policy co-ordination

It will in future exchange views in advance on the thrust of national monetary objectives for each year and subsequently undertake an ex post analysis of monetary developments in relation to the policy targets. The European

Council meeting in June convoked two inter-governmental conferences to prepare amendments to the Treaty of Rome which would permit further progress towards economic and monetary union and political union.

At a subsequent Council meeting in October all the EC countries except the United Kingdom affirmed the view that work towards monetary union should envisage a single currency and the creation of an independent institution comprising national central banks and a central body with full responsibility for monetary policy. They expressed agreement that a second preparatory stage could begin on 1st January 1994 provided that the single market programme had been completed, that further progress towards real and monetary convergence had been achieved and that amendments to the Treaty of Rome had been ratified. These amendments would provide for the independence of the national member units of the new monetary institution. They would preclude the monetary financing of budget deficits and the assumption by the Community of any responsibility for the debt of individual countries. Stage two envisages the establishment of an institution to strengthen the co-ordination of monetary policies, to develop the instruments and procedures needed for the future conduct of a single monetary policy and to oversee the development of the ecu. While the UK Government was willing to move beyond stage one with the creation of a new monetary institution and a common currency, it advocated a different approach and argued that decisions on the substance of the move should precede decisions on its timing.

Agreement on mandate and structure of new monetary institution

A high degree of consensus has been reached among central banks – and apparently also among EC governments – as to the structure of a new supranational institution which could ultimately exercise monetary policy decision-making powers. A draft statute for a European System of Central Banks and a European Central Bank has been adopted by the Committee of Governors and submitted to the inter-governmental conference considering economic and monetary union. The draft reflects the conviction that price stability should be the primary objective of a new institution, that this institution should be independent of political instructions from the EC Commission and national governments, that its central body should be given full responsibility for monetary policy, and that central bank financing of budget deficits should be prohibited by law.

"Hard" ecu proposal

As set out in its own draft treaty for a monetary union, the UK Government's proposals envisage the establishment of an institution along the lines of the proposed European System of Central Banks as a fund which would independently manage a new parallel currency – a "hard" ecu, which could never be devalued in terms of national EC currencies. The meaning of a provision that ecus could only be issued in place of, and not in addition to, national currencies has been questioned. There has been much debate about the likely effectiveness in strengthening existing constraints on national monetary policies of permitting the fund to sell national currencies it had acquired in "excessive" quantities to the issuing central banks. A more fundamental concern is whether the fund would in practice attach more importance to exchange rate stabilisation than to price stability. Another is whether the fund could resist political pressure to follow a compromise course, particularly if, as envisaged in an alternative version of the UK proposals, increased independence for the national central bank members of the fund were not to be required. The proposals have not succeeded in allaying central bank concerns expressed in the "Delors Committee" report that an additional currency which did not constitute a unit of account in any country would make the implementation of effective national policies and their co-ordination more difficult. The suggestion that market mechanisms alone could result in a hard ecu crowding out national currencies tends to obscure the fact that difficult political decisions and a surrender of monetary sovereignty cannot be avoided if monetary union is to be achieved.

Major issues to be resolved

Documents submitted to the inter-governmental conference reveal significant differences of view among countries. One relates to the extent to which limitations on public sector deficits and indebtedness, as distinct from mere surveillance, should be enshrined in treaty provisions and the means that should be available for imposing budgetary discipline in individual countries. Another issue is whether exchange rate policy vis-à-vis third countries will be consistent with a stability-oriented monetary policy if the treaty provisions merely give the European central bank a consultative role in this area. Some countries urge adherence to a strict time schedule and consider the creation of the new monetary institution at the beginning of stage two necessary to promote domestic adjustment in individual countries and to sustain the momentum of progress towards monetary union. Others are concerned about the risk of a blurring of monetary policy responsibilities in any transition process. They have proposed that a strengthened Committee of Governors should perform the institutional functions envisaged for stage two, with a European central bank being established only when fulfilment of the conditions needed to ensure price stability permits transition to stage three.

Need for further convergence

To reach a satisfactory compromise on the treaty amendments providing for economic and monetary union it will be necessary to clarify the content of economic union, and to accept the need for strict minimum conditions in order to ensure that the agreed objectives of a monetary union are achieved and that adjustment costs in individual countries are limited. Although there are powerful political arguments against a two or multiple-speed process, it must be recognised that there are good economic reasons for individual countries to contemplate joining only when their economies have converged sufficiently with those of the core EC member countries and a broad social consensus has been reached at home.

VIII. The international monetary system

Highlights

During the period under review the foreign exchange markets continued to be characterised by abrupt shifts in market sentiment and wide exchange rate fluctuations not always fully in line with the underlying fundamentals. Despite pronounced instability in the interim, however, the bilateral exchange rates of the US dollar against the Deutsche Mark and the Japanese yen showed on balance little change between the beginning of 1990 and the spring of this year – notwithstanding a major movement of interest differentials against the dollar.

Official intervention sought to limit the amplitude of the exchange rate fluctuations, but with an implicit downward bias against the dollar. There were repeated rounds of co-ordinated official dollar sales when the dollar was showing pronounced strength in the spring of 1990 and – initially at a much lower dollar level – again in March and April 1991. By contrast, co-ordinated support for the dollar was implemented only once, after its exchange rate had fallen to historically low levels in early February 1991. The prolonged decline of the dollar during the summer and early autumn of last year was not opposed by outright official intervention.

The fact that, despite the very adverse movement of interest rate differentials, the dollar continued at times to show unusual strength was undoubtedly due to its low absolute level in purchasing power terms. Nevertheless, considering that the improvement in the US current account has benefited from cyclical influences and that a major shift may have occurred in the pattern of international capital flows, recent levels of the dollar can hardly be regarded as unrealistically low.

Despite occasional tensions, exchange rate relationships between the main EMS currencies continued to represent an island of relative stability. In fact, Italy and Belgium effectively hardened their exchange rate commitments, and in October sterling was taken into the exchange rate mechanism (ERM). For much of the period of its decline the weakening dollar did not trigger any major tensions within the ERM. However, towards the end of 1990 the high level of German interest rates began to give rise to some conflict between exchange rate commitments and the domestic policy requirements of countries whose economies were slowing. These pressures were subsequently relieved by the sudden weakening of the Deutsche Mark against the dollar.

In the gold market the continuing buoyancy of market supplies held the price in check throughout the period under review. Day-to-day price volatility increased somewhat, but the lacklustre performance of gold in the face of war and questions about the health of the global banking system underscores the downgrading that has taken place in its role as an investment medium.

The growth of international liquidity slightly exceeded the expansion of international trade last year. With the key-currency countries refraining from supporting the dollar for much of the year, reserve accruals were concentrated among members of the ERM, certain smaller industrial countries and a number of developing countries. On the other hand, eastern European countries drew heavily on their international liquidity holdings.

Exchange markets

Developments in the US dollar market

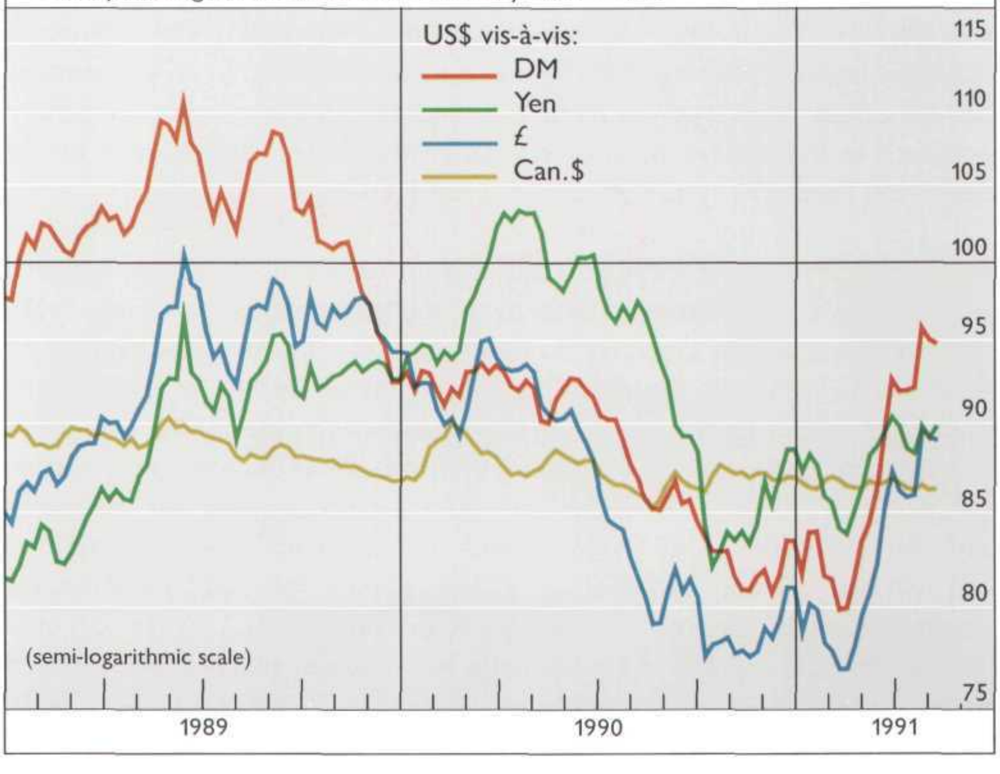
The main features of the exchange markets during the period under review were a renewed turn-round and substantial further downward shift in the international value of the dollar, followed, as from mid-February of this year, by an unusually steep rebound which reversed much of the earlier decline.

Early strength of the dollar, particularly against the yen ...

In early 1990 the dollar showed considerable strength particularly against the yen, touching a peak of Yen 160 early in April, at which point it was some 10% higher against that currency than it had been at the beginning of the year and at its highest level since the end of 1986. This rise took

Bilateral exchange rates of the US dollar against selected currencies

Weekly averages, third week of February 1987 = 100



place against a background of large-scale intervention to try to counter it, especially on the part of the Japanese authorities, who also raised the official discount rate again in the second half of March. On 7th April the Group of Seven pointed to the undesirable consequences of the yen's decline and reaffirmed their commitment to economic policy co-ordination, "including co-operation in exchange markets". Following this there were signs that the political strains within the Japanese Government were diminishing and the domestic Japanese financial markets recouped some of their earlier losses. In addition, market sentiment about Germany shifted to the view that the authorities would be successful in containing the possible inflationary implications of the forthcoming economic and monetary union, and the Deutsche Mark began to benefit accordingly. All this, together with a modest amount of co-ordinated intervention, effectively marked the end, for the time being, of the dollar's repeated tendency to rise. And when, in early May, evidence appeared of a weakening US economy, and with it increased prospects for a further movement of interest differentials, the dollar began to ease, and at the end of the month fell below Yen 150.

... gives way to a decline as the US economy shows signs of weakening

Even so, a sustained decline in the dollar did not get under way until late June, when the outlook for the US economy and monetary policy became the subject of a more fundamental reassessment. In particular, with the President's statement that tax increases might form part of a budget deficit reduction package, the prospects for an agreement on such a package improved. While this suggested that US interest rates might decline, domestic boom conditions in Germany and Japan seemed to point towards higher interest rates there.

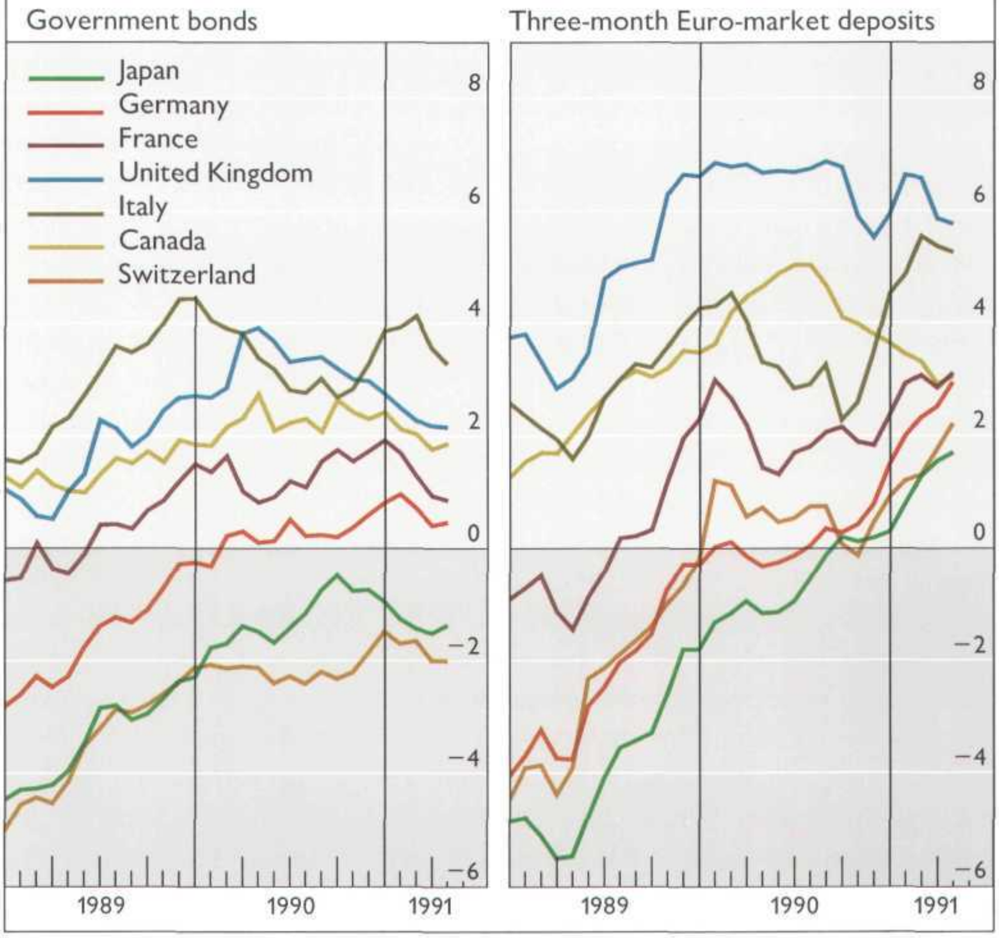
The Iraqi invasion of Kuwait on 2nd August produced only the briefest of dollar rallies on safe-haven considerations. Indeed, against the Deutsche Mark it lasted precisely one day, though the yen was weak for rather longer on account of fears connected with Japan's dependence on imported oil. Nevertheless, with further evidence of a weakening US economy, and key interest differentials moving further against it, it was not long before the dollar was declining more generally again, and particularly against the yen it continued to lose ground well into September. Towards the end of that month the Group of Seven Finance Ministers and central bank Governors recalled their earlier concern about the weakness of the yen expressed at the Houston Summit, and noted that the Japanese currency had since appreciated. They concluded that "exchange rates were now broadly in line with continued adjustment of external imbalances". Nevertheless, immediately after this announcement the dollar fell again, and against all the major currencies.

Prospect of further deterioration of interest differentials contributes to renewed dollar decline

Early in October it began repeatedly to breach earlier historical lows against the Deutsche Mark after the Chairman of the Federal Reserve Board had publicly linked the possibility of lower US interest rates to an appropriate agreement on the budget. Such an agreement was reached towards the end of October and the markets drew the obvious conclusion, especially as it became clear that the authorities saw no pressing need to intervene against an orderly dollar

Nominal interest rate differentials in selected countries

Vis-à-vis US interest rates, in percentage points



decline. When on 19th November a poor set of trade figures was announced, combined with some slowing of inflation and a perception of further monetary policy easing, the dollar fell to a new low under DM 1.47, while the yen's appreciation from its early-April low against the dollar reached nearly 26%.

Only temporary pause in the slide of the dollar

Thereafter, exchange rates steadied: the prospects for a peaceful outcome to the Gulf crisis looked more uncertain; there were suggestions that the Group of Seven might meet to discuss the low level of the dollar; and, finally, market sentiment about the European currencies, notably the Deutsche Mark, was affected by the sudden resignation of the Soviet Foreign Minister on 20th December. Against this background, the Federal Reserve was able to respond to domestic economic weakness, and the discount rate was lowered from 7 to 6½% on 19th December. In mid-January the commencement of hostilities in the Gulf triggered a renewed slide in the dollar which in early February took it to the final new low against the Deutsche Mark recorded during the period under review – DM 1.45, representing a decline of over 15% from its March 1990 level.

The Group of Seven statement issued on 21st January did not in the event address the weakness of the dollar as such. Ten days later the Bundesbank raised official German interest rates, and the following day the

Co-ordinated support for the dollar ...

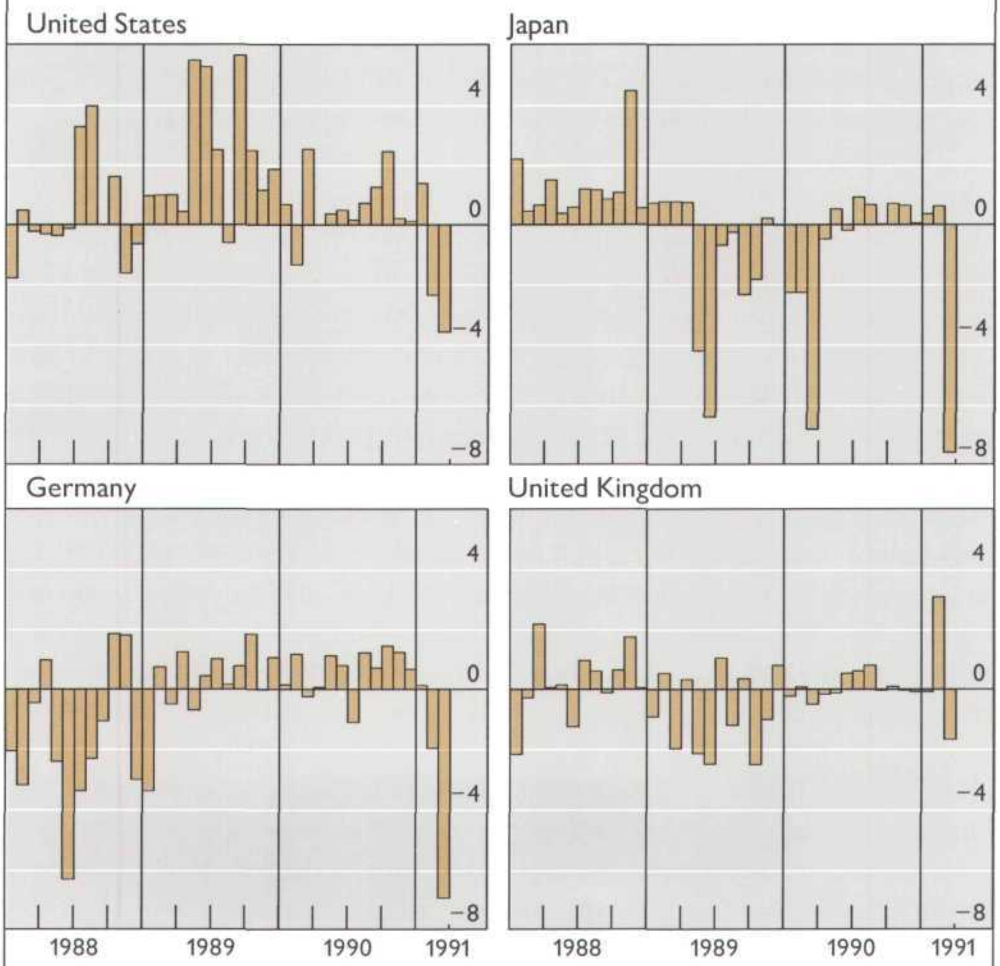
US discount rate was lowered once more, to 6%. Again, domestic concerns had seemed more pressing than any potential problems resulting from exchange rate movements. Even so, this did not prevent the authorities, this time under US leadership, from intervening in the markets. This was the first such combined operation for nearly a year, and was also noteworthy in that the Japanese authorities abstained from action, thereby apparently signalling that they were not unhappy with the higher level of the yen.

... followed soon afterwards by a strong rebound ...

The principal aim of this co-ordinated dollar support was to provide a floor for the dollar and to try to dispel the view that official "benign neglect" was the order of the day – a view which had been erroneously based on the Group of Seven communiqué and ensuing changes in official interest rates. Although the scale of intervention was not very large the markets seem to have accepted this message. Indeed, after the middle of February the US currency began to rise again sharply and by the end of the first week of March it had recovered by about 7% against both the yen and the Deutsche Mark. On Monday, 11th March the appreciation of the dollar

Movements in foreign exchange reserves in selected countries*

In billions of US dollars



* The movements reflect not only outright exchange market intervention but also interest receipts and other forms of foreign exchange income and expenditure, as well as exchange valuation effects.

threatened to become disorderly, and thus, less than one month after the concerted support purchases, co-ordinated intervention was initiated once more, but this time – under the Bundesbank's leadership – to curb the dollar's newly regained strength. The prospect, and then the fact, of a successful conclusion to the Gulf war were no doubt important factors in this sudden revival of the dollar's fortunes. In addition, expectations began to grow that the worst of the recession might be over. There was also speculation that the conversion of some allied financial aid into dollars would be bullish for the US currency. At the same time the deepening economic crisis in the eastern part of Germany, and its possible political ramifications, began to cast a shadow over the Deutsche Mark, as did fears about the implications of the deteriorating situation in the Soviet Union. Signs that Japanese economic growth was losing some of its momentum also raised the possibility of a change in interest rate differentials in favour of the United States.

... and co-ordinated intervention to curb the dollar's renewed strength

Despite these various explanations, the extent of the sudden turnround of the dollar and its renewed vigour, particularly vis-à-vis the Deutsche Mark, confounded both many market participants and official observers. Repeated co-ordinated attempts to curb its rise turned out to be considerably less successful than the earlier effort to revive it. Notwithstanding persistent rounds of concerted intervention and a further worsening of interest rate differentials, the dollar continued to rise steeply, with an occasional pause, until at the end of April it touched DM 1.77 – an appreciation of 22% from its low of only eleven weeks earlier.

Nevertheless, the dollar continues to rise

Compared with the other major currencies, the *Canadian dollar* traded within a fairly narrow range against the US dollar in 1990. Following an abrupt decline in January as the market was temporarily unsettled by a relatively small reduction in official interest rates, the currency recovered during the next few months as short-term interest rate differentials vis-à-vis the United States were permitted to widen substantially. In May and June the Canadian dollar again came under downward pressure in response to growing uncertainty concerning the outcome of the Meech Lake constitutional discussions. Despite the failure to achieve a constitutional agreement, however, the Canadian currency rebounded to reach a twelve-year high against the US currency in August as oil prices rose sharply following the outbreak of the Gulf crisis. Thereafter, the Canadian dollar weakened slightly and then steadied, notwithstanding a substantial decline in short-term interest rates relative to those in the United States and sharp fluctuations in oil prices.

The Canadian dollar shows resilience in the face of constitutional uncertainties

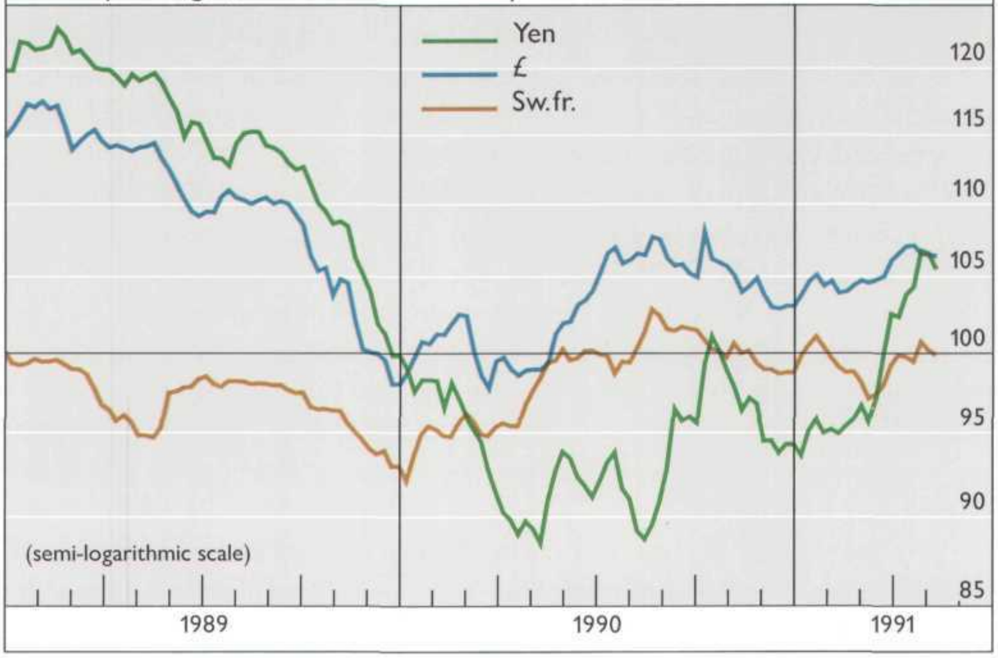
Developments in cross rates

During the early part of the period under review the *Japanese yen* continued its decline against the Deutsche Mark, a decline which had begun in 1989. In February of that year the yen's cross rate had reached a peak well over 20% above its level at the time of the 1987 Louvre Accord. Already by the beginning of 1990, the whole of this remarkable rise had been reversed, and by early May the yen had fallen 12% below its Louvre

The yen weakens further before beginning a fitful recovery

Bilateral exchange rates of selected currencies against the Deutsche Mark

Weekly averages, third week of February 1987 = 100



level, in spite of earlier massive official support against the dollar. At times the yen's subsequent recovery vis-à-vis the dollar appreciably exceeded that of the Deutsche Mark as Japanese interest rates started to rise even against German rates and as the Deutsche Mark was affected by domestic uncertainties. In fact, at one point in early October, after Japanese long-term rates had nearly touched US levels and there was large-scale repatriation of capital related to funding requirements in the wake of the earlier stock market decline, the yen had more than recouped its losses against the Deutsche Mark since the beginning of 1990, and stood some 16% above its early-May low against that currency.

Subsequently, with Japanese long-term interest rates easing sharply against both US and German rates, the yen dropped by about 9% against the Deutsche Mark, but began to edge up again after the turn of the year. It showed some further modest appreciation in February when the Japanese authorities hinted at their desire for a relatively firm yen by not intervening heavily in the operation to support the dollar. In March and April, by contrast, the Japanese authorities participated fully in the co-ordinated capping operation against the dollar and, despite the limited initial success of that operation, the yen moved up by more than 10% against the Deutsche Mark.

There were two main features of developments concerning the *pound sterling* in the period since early 1990. The first was some renewed, if intermittent, strength shown by the currency after weakness in the spring related to political uncertainties; and the second was its entry into the EMS exchange rate mechanism in early October.

Like the yen, the pound had also declined against the Deutsche Mark throughout most of 1989, though the reasons – rising inflationary pressures and a rapidly growing external current-account deficit – were different. At the beginning of 1990 the pressures eased somewhat as the Government made clear its commitment to fighting inflation and as the trade figures improved for a time. In March, however, social and political tensions surrounding the new community charge (poll tax) and adverse reaction to the budget triggered renewed pressure on sterling which took it to record lows not much above DM 2.70.

Sterling weak in the spring ...

Sterling's main recovery began in May, with the help of certain technical factors and better-than-expected local election results for the governing Conservative Party. Later, speculation about its entry into the ERM – which was to recur periodically over the following months – served to boost the pound. A jump in inflation helped underpin the assumption that sterling interest rates would remain high for some time. In July sterling reached a temporary peak of almost DM 3.00, and the oil price effects of the invasion of Kuwait served to take the currency even higher during the second half of August.

... but strengthens in mid-year ...

At the end of August and during September the pound slipped back somewhat amid speculation that ERM entry would be delayed. However, on 8th October the pound was suddenly taken into the ERM at a central rate of DM 2.95 and with a wide fluctuation margin of +/–6%. Despite a simultaneous reduction of 1% in sterling interest rates, the initial reaction of the markets was to mark the pound sharply higher at over DM 3.00. Such high levels were not, however, maintained for long, and the currency also suffered from the political uncertainty in the United Kingdom which culminated in the resignation of the Prime Minister on 22nd November. Despite the ending of this uncertainty the pound remained relatively weak for the rest of the year, falling as low as DM 2.86 in December. Even so, the general decline in international interest rates in early 1991 permitted the UK authorities also to reduce interest rates in several steps without creating undue tension, all the while affirming a strong commitment to the discipline of the ERM as an important bulwark against inflation. Towards the end of March, as the dollar continued its rebound and the Deutsche Mark declined within the ERM, sterling also recovered, and again moved above DM 2.95, its central rate against the Mark.

... before ERM entry in October

The unusual weakness of the *Swiss franc* which began in 1989 reached its maximum right at the beginning of 1990. At this point it had fallen by 8% against the Deutsche Mark in twelve months and stood at its lowest quotation against that currency since early 1981. The story of the Swiss franc in the period under review is largely one of recovery from that low point, but at the expense of high domestic interest rates – at least by Swiss historical standards. The recovery came in three main stages. The first followed the aggressive policy stance of the Swiss National Bank which had resulted in an unprecedented positive Swiss short-term interest differential vis-à-vis the Deutsche Mark. A second phase began at the end of April as the favourable interest differential again reached a relatively high level, and the third in August, when traditional safe-haven

The Swiss franc recovers from unusual weakness factors played a role in pushing the Swiss currency temporarily to its highest point of the period – 81.5 centimes to the Deutsche Mark. However, German interest rates were starting to rise again around this time and during January and February 1991 Swiss rates fell. Thus, by early March of this year the franc had fallen back to around 87 centimes against the Deutsche Mark before a generalised weakness of the latter currency resulted in some recovery.

Major exchange rate relationships in longer-term perspective

The dollar undervalued?

The further pronounced slide in the external value of the dollar in the second half of last year reinforced earlier claims that the currency had become significantly undervalued. The counterpart was thought to lie in the overvaluation of the Japanese yen and – less certainly given the new and special circumstances in Germany – the Deutsche Mark. Such conclusions were based on calculations of purchasing power parities derived, for example, from cross-country surveys of producer prices for the same or similar items. What is more, the sudden recovery of the dollar after the middle of February of this year reversed no more than a part of the over and undervaluations so calculated.

Different methods of evaluating appropriate exchange rate levels

Purchasing power parity calculations have, however, long been acknowledged to be only partial indicators of appropriate exchange rate relationships. In particular, they do not take into account the necessary role of exchange rates in the international adjustment process. Thus other measures which purport to assess the appropriateness of exchange rates compare the level of some price-adjusted exchange rate index with that obtaining in a reference period when both external and internal equilibrium seemed to prevail in the economies in question. However, while such judgements could never be wholly objective, they have in recent years become more difficult to make, in particular as a result of the increasing globalisation of financial markets. International equilibrium no longer necessarily means small or even negligible current-account imbalances. Perhaps the most that can now be said is that international equilibrium should imply a situation in which no country is incurring external debt at a rate which would at some point lead to debt servicing difficulties. This is obviously a much vaguer concept, and is of course one justification for thinking in terms of ranges, as opposed to point estimates, for the level of the exchange rate consistent with appropriate levels of competitiveness.

This problem aside, real exchange rate calculations suggest a rather different picture from that given by purchasing power parity calculations. The reference period chosen in the graph on page 185 is February 1987 – the time of the Louvre Accord. This was the point at which, while not wishing to be precise, the authorities judged that the greater part of the necessary decline in the dollar had occurred. Over the previous two years the dollar's real effective rate had fallen by one-third, the yen's rate had risen by nearly one-half and that of the Deutsche Mark by one-fifth. In addition, the dollar and the Deutsche Mark were then back at approximately the real effective levels at which they had stood at the end of the

1970s when international equilibrium had roughly seemed to prevail. The yen, however, was 20% higher.

In any event, the dollar did not remain at its real Louvre level and by the end of 1987 had moved down a further 13%, fluctuating thereafter between 10 and 16% below its February 1987 level until last year, when a further decline of 12% occurred between the second and fourth quarters, despite the fact that the US current-account deficit had fallen further, especially as a proportion of GNP. As the graph shows, an important element in the counterpart to the dollar's decline last year was a contrary upward movement in the real effective rate of the Japanese yen, which brought it back up close to its Louvre level. Partly because of a very different trade pattern, the Deutsche Mark's real effective rate did not rise significantly last year, nor indeed has it diverged greatly from its Louvre level during the whole period since early 1987. Given the large and rapid fall in Germany's current-account surplus, this is not on the face of it inappropriate, particularly as this development had much to do with the effects of unification which make it difficult to assess precisely any simple cyclical influences on the balance of payments. In the Japanese case cyclical influences were at work, especially vis-à-vis the United States, and, given the renewed tendency of the Japanese current-account surplus to rise, the question remains as to whether, far from being overvalued as the purchasing power parity calculations suggested, the yen might not be near its appropriate longer-run value, or even possibly still below it.

Major real exchange rate movements since the Louvre Accord

The graph shows very clearly that the bulk of the dollar's further real decline since the Louvre Accord found its most important counterparts not in opposite movements in the yen and the Deutsche Mark, but rather in currencies such as the Canadian dollar – which has a large weighting in the US index – and sterling. Indeed, by early this year the Canadian dollar's real effective exchange rate stood 40% above its Louvre level, as a relatively firm and stable nominal exchange rate had been accompanied by continuously diverging wage cost developments. In Canada, as well as in the United Kingdom, especially after sterling's entry into the ERM, the counter-inflationary implications of firm nominal exchange rates have played a role in policy thinking. However, unless such exchange rate orientations result at some point in modified wage cost behaviour, the consequences for competitiveness will sooner or later make the situation unsustainable.

Real appreciation of Canadian dollar and sterling suggests a need for improved cost performance

Moreover, as regards the alleged undervaluation of the dollar, at least before its recent rise, it should be noted that the usefulness of any kind of real exchange rate calculation as an indicator of appropriate exchange rate levels is limited for several reasons. For one thing, it cannot take into account qualitative and structural factors which may have a strong influence on a country's international trade performance. These include, in particular, design, reliability, maintenance and other ancillary services offered along with the goods sold, and the degree of openness of foreign markets to the country's exports. Dynamic growth performance associated with especially high productivity gains and innovations in the export sector may also justify movements in real exchange rate relationships.

Other factors affect appropriate exchange rate levels

Real effective exchange rates of selected currencies*

Monthly averages, February 1987 = 100

* Adjusted on the basis of movements in relative unit labour costs.

Shifting stocks of assets and liabilities

A second point is that, after a prolonged period of major external imbalance, outstanding stocks of international assets and liabilities will have shifted sharply. International capital income flows are therefore very likely to have changed in a secular manner. Specifically, in the present case the longer-run US capital income position is bound to have worsened and will thus require, ceteris paribus, a stronger performance in other current-account items for any given overall result. This might well imply a need for greater US competitiveness.

Possible need for temporary dollar undervaluation

A third important consideration is that when a country's current-account balance has been consistently in large deficit a substantial undervaluation of its exchange rate (relative to its appropriate longer-term level) may be needed for some time in order to bring about the necessary adjustment in economic structures and trade flows. When, in a country like the United States, a very large portion of the items entering into the trade balance are not very responsive to price incentives, such as agricultural exports and oil and other raw material imports, and when the availability of a huge domestic market for most industries diverts interest from exporting, the degree of temporary undervaluation necessary to bring about a substantial improvement in the trade balance within a reasonable time might be quite substantial. The fact that the US trade balance, despite a propitious cyclical constellation, has so far responded only hesitantly to several years of marked depreciation would seem to support this view.

An altogether different consideration is to what extent a further material reduction in the US trade deficit should be considered desirable. In previous years the US trade deficit owed much to the US budget deficit in conjunction with the very low level of US private savings. It was, however, easily financeable internationally and may have helped to boost world economic activity in the face of the large German and Japanese savings surpluses, the progressive easing of restraints on international capital flows which brought with it a wave of portfolio diversification in favour of investments in the United States, and the inability of large parts of the developing world to attract adequate amounts of foreign capital. Several of these factors have now changed or may be about to change. The US budget deficit reduction programme is likely to shrink or even eliminate the US budget deficit over the next few years. The developments in the eastern part of Germany are about to absorb virtually the whole of that country's formerly large savings surplus. At the same time a number of eastern European countries are in need of large amounts of foreign capital, although – as in the case of most developing countries – this is likely to be forthcoming only with official western support. Moreover, as a result of the Gulf war, some of the former large exporters of capital in that region are likely to have become net importers of foreign capital for some time.

How much more trade adjustment is needed?

Finally, with the share of US exposure in international portfolios having increased markedly over recent years, and the process of liberalisation of international capital flows having been more or less completed in the major industrial countries, it is quite conceivable that the process of portfolio diversification in favour of US assets may now slow down. At the same time, the evolution of the so-called "larger economic space" in Europe and the growing importance of the economies around the Pacific rim may encourage some portfolio diversification by US residents in favour of international investments. It may therefore be doubted whether – exchange rate considerations apart – the trend of net international capital flows will continue to favour the United States as strongly as during the past decade.

Portfolio diversification in favour of the dollar may be slowing down

In short, taking these various considerations and developments into account, a further reduction of the US trade deficit could well be appropriate. The present level of the dollar, particularly after its more recent upward correction, may therefore be considered altogether realistic, even if it is still somewhat below the appropriate levels suggested by purchasing power parity comparisons.

Developments within the EMS exchange rate mechanism

The period under review was a significant one for the continuing development of the EMS and for its role in facilitating the convergence of member countries' economic performance. This was seen not only in the further progress made in reducing some key inflation differentials, but also in a further decline in interest differentials vis-à-vis Germany. Thus, when cyclical divergences within the European Community increased – particularly as the German economy continued to expand rapidly – the resulting tensions between domestic needs and ERM exchange rate commitments were less than they might otherwise have been. Progress in the EMS was also evident in the commitments which various governments felt able to

Continuing convergence

make. At the very beginning of the period, in early January 1990, the French authorities demonstrated their confidence in the existing set of ERM parities by abolishing all remaining foreign exchange controls. In May Italy felt able to do the same, as did the Spanish authorities in April of this year. In June 1990 the Belgian authorities announced their intention of tying the Belgian franc more closely to the Deutsche Mark, in effect reducing the margin of fluctuation allowed to the Belgian currency within the narrow band – though by an unspecified amount. The UK authorities surprised the markets by taking sterling into the ERM in early October, initially with a wide fluctuation margin of +/–6%. Finally, also in October, the Portuguese authorities modified the crawling-peg arrangements for the escudo, linking the currency to an index of ERM currencies instead of the previous overall trade-weighted index, and allowing the exchange rate to respond more flexibly to market conditions. Outside the EMS, the Norwegian authorities announced in October their intention of tying the krone to the ecu with a +/–2¼% fluctuation margin. On 17th May this year, the Swedish authorities also announced their decision to peg the value of the Swedish krona to the ecu with a margin of fluctuation of only +/–1½%.

Further strengthening and broadening of exchange rate arrangements in the ERM

Four phases:

Developments within the ERM during the period under review can be conveniently seen as falling into four fairly distinct phases. The first, which lasted until August, saw the introduction of the Italian lira into the narrow band of the ERM in early January last year. Together with the obviously firm intention of the French authorities not to alter the parity of the French franc, this ushered in a period of relative calm following earlier speculation concerning a more general realignment of ERM parities. From this stemmed the most characteristic feature of the first phase, namely the return of nominal interest rate differentials as the dominant factor determining the pattern of international capital flows. As a result, the lira quickly moved up to become the strongest currency in the narrow band, and after the liberalisation of capital inflows into Spain the peseta also rose strongly, eventually touching the upper limit of the wide band. The resulting pressure for a reduction in interest rates was not always judged appropriate given the relatively high rates of inflation in Italy and Spain, and considerable intervention was undertaken at times, especially by the Italian authorities. Interest differentials were, however, also reduced to some degree during this period. Even so, the Deutsche Mark moved down from the upper reaches of the narrow band between January and April and on the outbreak of the Gulf crisis even touched its lower limit in the narrow band. Following the French authorities' attempts to reduce official interest rates, the French franc was at times at its lower limit against the lira during this first phase.

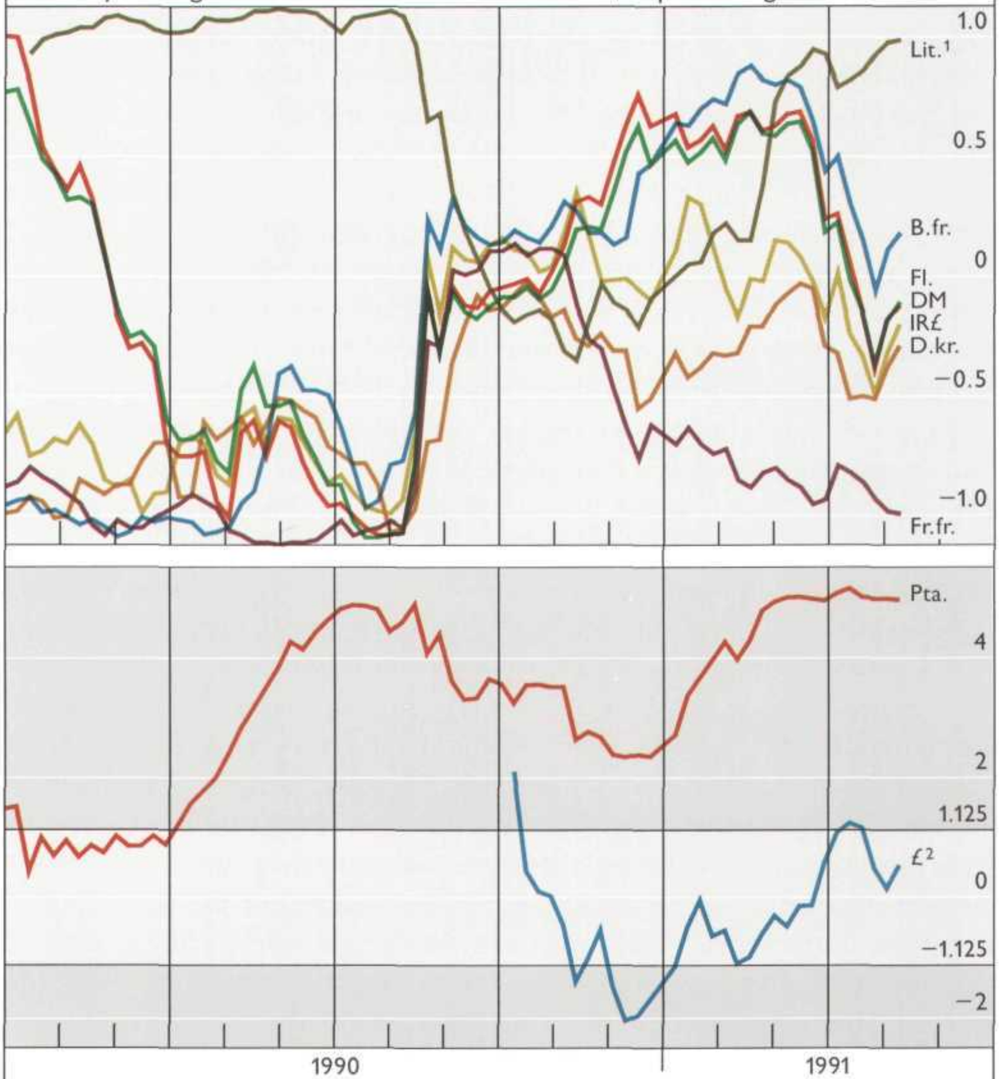
dominance of nominal interest differentials

It took the eruption of the Gulf crisis at the beginning of August to force a more general reassessment of the exchange rate risks inherent in the high-interest currencies. This second phase of developments in the ERM was characterised by a sharp movement of member currencies towards their central rates, a constellation which prevailed more or less unchanged

the Gulf crisis induces some caution

Positions of member currencies in the ERM bands

Weekly averages of deviations from central rates, in percentages



¹ The lira's central rate was adjusted downwards by 3.7% on 8th January 1990, and its permitted margin of fluctuation was reduced from +/−6 to +/−2.25%. ² Sterling entered the ERM on 8th October 1990 with a maximum permitted margin of fluctuation of +/−6%.

until the end of October. The continued weakening of the dollar during this phase failed, in the uncertain international circumstances, to provoke traditional intra-ERM tensions via a strengthening of the Deutsche Mark within the system. Indeed, the French franc, benefiting in August from the announcement of favourable French inflation data, moved up to reach a three-year peak against the Deutsche Mark, and the French authorities were able to build up their foreign exchange reserves.

German monetary tightening gives rise to some tension

However, with short-term German interest rates moving up again sharply in November and December, a third phase of ERM developments began, during which the Deutsche Mark did strengthen, and the French franc weakened, thus widening the spread of currencies around their central rates again. Indeed, as from late October the franc followed a fairly continuous downward trend and was consistently the lowest currency in the narrow band. Although neither currency reached its limit, intramarginal intervention took place as part of the general international attempt to curb the Deutsche Mark's strength against the dollar. The resignation of the Soviet Foreign Minister on 20th December affected confidence in the Deutsche Mark, however, and it ceded the top position in the band to the Belgian franc early this year. The rise in German official interest rates at the beginning of February did not cause any major pressures as it was accompanied by a decline in German long-term rates and, outside the ERM, by co-ordinated Deutsche Mark sales to stem the dollar's weakness. In addition, although still in the lowest position in the narrow band, the French franc drew some support from the earlier, and maintained, reduction in the French inflation differential vis-à-vis Germany.

In early March 1991 the lira once more emerged as the strongest currency in the narrow band, an event which, together with the sharp rebound of the dollar, effectively marked the start of the final phase of ERM developments in the period under review. Like the first phase, this last one was also characterised by the emergence of nominal interest differentials as an important determinant of currency pressures, which in March took the peseta to its upper limit against the French franc. The strong rebound of the dollar, anxieties surrounding developments in eastern Germany and the sharp deterioration in the German current-account balance served to push the Deutsche Mark back down to the centre of the narrow band and thus remove all fear of a major realignment of central rates. Sterling also showed renewed strength at this time on the basis of nominal interest rate considerations, and the authorities took the opportunity on several occasions to nudge the general level of UK interest rates downwards. However, for Spain in particular, there was again some conflict between the pressure to reduce interest rates and the need to fight domestic inflation. On the other hand, the weakness of demand in the French economy made higher interest rates an inappropriate response to exchange market pressures, and during March recourse was had once more to intervention. Indeed, with a more general easing of European interest rates, it proved possible for French rates to be reduced somewhat as well despite the pressures in the exchange markets.

dollar strength and renewed dominance of nominal interest rate differentials

Gold production and the gold market

Gold price weakness despite pronounced economic and political uncertainties

Perhaps the most remarkable feature of the precious metals market in the period under review was the failure of the price of gold to react significantly to the Gulf conflict, political turmoil in the Soviet Union and recurrent questions about the robustness of the international banking system. Although day-to-day quotations displayed somewhat greater volatility than in recent years and reacted temporarily to dramatic events, the sort of unremitting upward pressure on the price so evident in previous episodes of strife in the Middle East and spectacular increases in energy prices was completely absent. Quotations at the end of 1990 were even slightly lower than at the beginning of the year. This suggests that gold has lost some of its attraction as a safe haven, at least as long as a range of low-risk financial assets yielding fairly high real interest rates is readily available. The continuing expansion of the supply of gold and the growing tendency of producers and other holders to bring gold to the market when quotations display some strength may also have contributed to the listlessness of the gold price.

Continuing strong supplies ...

Last year supplies of gold to the market continued at the high level of over 2,200 tonnes already reached in 1989. There was a further expansion in market sales by the Soviet Union and China, as well as a recovery in net new gold loans. On the other hand, in contrast to the previous year, outright disposals of gold by official holders were not an important source of net additional supply.

Western mine output increased for the eleventh year in succession, by about 50 tonnes to 1,735 tonnes. This further growth in the face of continuing price weakness was largely a consequence of long lags in mining exploration and production. The high prices prevailing in the early 1980s, as well as the development of techniques for extracting gold profitably from

Estimated market sources and uses of gold

Items	1986	1987	1988	1989	1990
	in metric tonnes				
Production	1,300	1,385	1,555	1,685	1,735
Other suppliers*	400	300	260	300	350
Estimated changes in official gold stocks through market transactions (− = increase)	−10	95	−175	175	35
Net new gold loans	–	70	150	50	100
Total (= estimated non-monetary absorption)	1,690	1,850	1,790	2,210	2,220

* Soviet Union, China, North Korea and eastern European countries.

... from mines in North America and Australia ...

low grades of ore, spurred companies to open mines in North America, Australia and several other regions. Last year production in the United States rose by almost 11% to 295 tonnes, or nearly ten times more than in 1980. In Australia output jumped by 18% to 241 tonnes, in part because of a desire to extract as much gold as possible before the imposition of corporate taxes on gold mining companies from 1st January 1991. Against this strong expansion of mine output elsewhere, the further decline of South Africa's production to 605 tonnes stands out starkly. At the average prices prevailing in 1990, a notable portion of its mining industry was reportedly unprofitable.

... and from eastern countries

Although it appears that the Soviet Union is being overtaken by the United States as the world's second-largest gold producer, it still supplies significant amounts to the world market, and gold accounts for roughly three-quarters of its non-oil export earnings. In addition, China has increased its gold output substantially in recent years. Reliable information on the aggregate amount of gold supplied to the market by these countries is not available, and estimation is rendered more difficult by temporary swap operations and the use of gold as collateral for borrowings, two types

World gold production[1]								
Countries	1953	1970	1980	1986	1987	1988	1989	1990
	in metric tonnes							
South Africa	371	1,000	675	640	607	621	608	605
Share of world gold production	*49.1*	*78.6*	*70.2*	*49.3*	*43.8*	*39.9*	*36.1*	*34.9*
United States	61	54	31	118	155	201	266	295
Australia	33	20	17	75	111	157	204	241
Canada	126	75	52	106	117	135	160	165
Brazil	4	9	35	67	85	102	101	78
Philippines	15	19	22	39	40	39	38	37
Papua New Guinea	0	1	14	36	34	37	34	34
Colombia	14	7	17	27	33	33	32	33
Chile	4	2	9	22	21	25	27	32
Ghana	23	22	11	12	12	12	15	17
Zimbabwe	16	15	11	15	15	15	16	17
Peru	4	3	5	11	11	10	13	15
Venezuela	1	1	1	15	16	20	17	14
Indonesia	0	0	2	8	12	12	11	13
Japan	7	8	7	14	14	14	11	12
Other countries[1]	76	37	53	94	104	122	130	126
World total	755	1,273	962	1,299	1,387	1,555	1,683	1,734
Memorandum items:	annual averages, in US dollars per ounce							
Market price of gold								
in current US dollars	*35.00*	*35.94*	*614.63*	*368.03*	*446.53*	*436.82*	*381.05*	*383.65*
in constant US dollars[2]	*35.00*	*24.78*	*199.63*	*89.87*	*105.19*	*98.87*	*82.27*	*78.59*

[1] Excluding the Soviet Union, other eastern European countries, China and North Korea. [2] Deflated by the US consumer price index (1953 = 100).
Sources: Consolidated Gold Fields PLC (London) and Gold Fields Mineral Services Ltd. (London).

of operation reportedly employed by the Soviet Union on a considerable scale last year. These transactions enabled the country to benefit from its gold reserves without disrupting the spot market through outright sales. Altogether it can be estimated that these countries supplied 350 tonnes through outright market sales in 1990, the largest amount since 1986.

Minor changes in aggregate official stocks ...

In marked contrast to the preceding year, when official holders disposed of 175 tonnes of gold, there was only a small change in aggregate official holdings in 1990, with some net disposals by individual countries being offset by the build-up of holdings of international institutions. Canada continued its strategy of reducing official gold stocks and sold 42 tonnes. Hungary and Czechoslovakia made substantial drawings on their gold reserves for balance-of-payments reasons, with Hungary reducing its holdings by 37 tonnes, or 80%, and Czechoslovakia disposing of 34 tonnes, representing a 30% decline. On the other hand, Brazil added 50 tonnes (54%) to its stocks, while South Africa took 31 tonnes (33%) into its reserves.

... but increased gold lending

Gold lending activity picked up markedly last year, even though the risks in such business were underlined by the default of Drexel Burnham

Lambert, a financial conglomerate with large gold borrowings. Interest rates on gold loans temporarily reached record levels of over 3%, presumably in response to the perceived increase in risk caused by this default and because of greater pessimism regarding the future development of the gold price. Altogether, the net new amount of gold coming onto the market through gold loans without reducing reported official gold stocks may be put at around 100 tonnes.

Jewellery demand remains strong despite the onset of recession

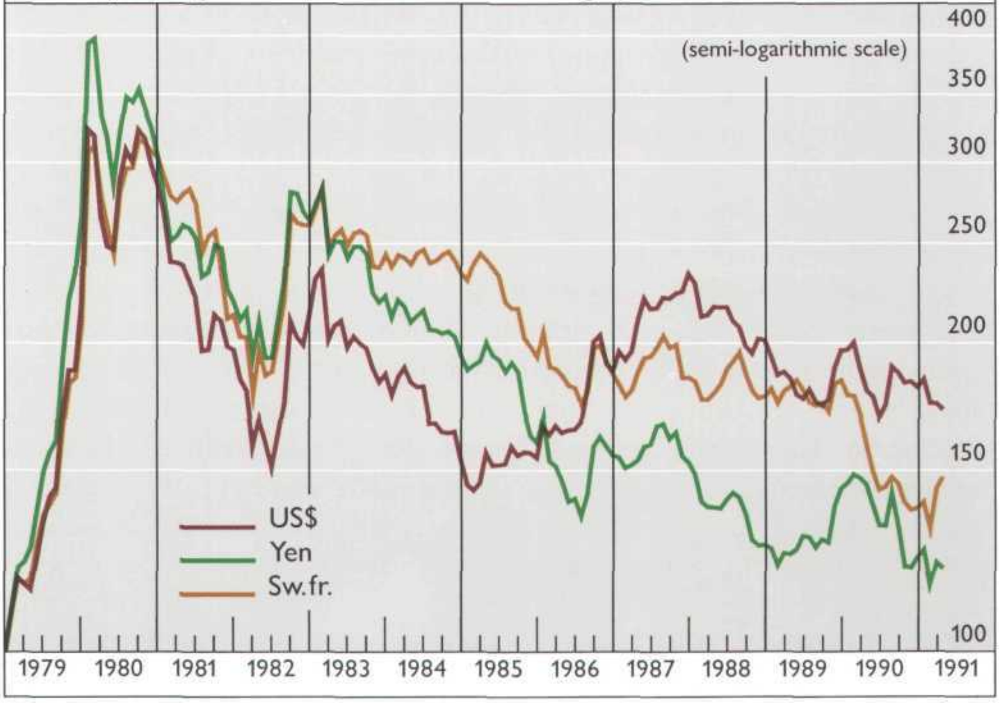
Demand for gold was dampened by the incipient recession in several major countries. Nonetheless, despite substantial purchases in earlier years and the prospect of lower consumer demand, jewellery manufacturers continued to buy when prices dropped sharply. In the Near East purchases were stimulated by the expansion of officially sponsored gold trading in Turkey. In India the relaxation of restrictions on gold imports enabled latent demand to express itself. In the Far East a slight increase in Japan's imports was more than offset by a decline in those of Taiwan. Japan's acquisitions (excluding coin) expanded to over 300 tonnes, up from 284 in 1989. Between 60 and 70 tonnes of this represented purchases by the Government for the minting of a commemorative coin. On the other hand, Taiwan's imports fell back to 104 tonnes, from 160 tonnes in 1989 and 355 tonnes in 1988.

Downward trend of the gold price accompanied by sharp fluctuations

While in dollar terms the gold price showed on balance only a moderate decline over the period under review, it was still subject to fairly strong fluctuations. Buoyed by sturdy demand in the Far East, some institutional buying interest in Europe and reduced forward sales by mines, the price of gold was quite firm in the first few months of 1990, reaching a

Market prices of gold in selected currencies

Monthly averages of the London market "fixing" price, December 1978 = 100



peak of over $420 in early February. However, on 23rd March reported heavy selling by Middle Eastern holders led to the largest one-day decline in the price of gold since July 1984 and presaged further weakness in the months ahead. Quotations subsequently ranged between $355 and $380 up to mid-June but then temporarily plunged below $350 in the wake of a further bout of reported heavy Middle Eastern selling. Major producers indicated that they had provided support to the market at that point and this may have prevented a more dramatic decline, but gold nonetheless reached a four-year low in dollar terms and an eleven-year low in terms of the Swiss franc and the yen. The price then climbed back to $380 on the day of Iraq's invasion of Kuwait, which led to a sharp but transitory jump to over $415. Despite the climate of uncertainty, the temporary surge in oil prices and the threat of an acceleration in inflation, the price of gold subsequently trended downwards in a volatile market until the beginning of the winter. The prospect of war in the Gulf then pushed gold prices up, and by the eve of the commencement of hostilities quotations had risen above $400. However, over the next two weeks they fell back below $370 in response to signs that the conflict would be brief, and remained in the $350–370 range up to mid-May.

International liquidity

Global reserves expand slightly faster than world trade

Total official international non-gold reserves valued in current US dollars grew by 15% in 1990, or slightly faster than global trade, to stand at $916 billion. However, a substantial part of the $123 billion increase resulted from exchange rate effects. The Deutsche Mark, Japanese yen and certain other currencies used as exchange reserves appreciated markedly against the US dollar, thus raising the current dollar value of official assets held in these currencies. Even when these valuation effects are excluded, the 11% volume increase still overstates the expansion of global liquidity since no account is taken of the decline in the real value of the dollar. Expressed in terms of a currency basket, the SDR, total official non-gold reserves rose by only 6.7%, compared with almost 9% in 1989.

Official gold holdings, valued in US dollars, dropped by nearly 3% between the end of 1989 and the end of 1990. As physical gold stocks were virtually unchanged, the decline was almost entirely due to the fall in the market price of gold between these two dates.

Slower reserve growth in the United States ...

The pattern of official reserve growth last year was characterised by four main features. Firstly, owing to the weakness of the dollar during most of the year, US official assets, which had soared by nearly $27 billion in 1989, showed an increase of only $9 billion. Apart from some foreign exchange purchases in the early months of 1990, when the dollar displayed excessive strength especially vis-à-vis the yen, this increase resulted mainly from exchange rate effects and interest accruals.

... a further outright decline in Japan and ...

Secondly, despite the pronounced downward trend of the dollar from the spring onwards, the two other principal reserve currency countries, Germany and Japan, refrained from outright dollar purchases last year. Japan actually intervened heavily in support of the yen in the first quarter,

Changes in global reserves

Areas and periods	Gold		Foreign exchange	IMF reserve positions	SDRs	Official ecus	Total non-gold reserves
	in millions of ounces	in billions of US dollars at current prices[1]					
Group of Ten countries							
1988	−1.9	−56.9	19.5	−2.9	0.4	−15.3	1.7
1989	−4.4	− 8.5	25.8	−0.9	−0.5	− 1.1	23.3
1990	−1.4	− 7.8	51.4	2.8	1.9	− 0.7	55.4
Amounts outstanding[2]	727.5	284.5	347.6	25.0	22.6	52.9	448.1
Other developed countries							
1988	−4.2	− 7.8	11.1	0.2	−0.1	2.7	13.9
1989	0.5	− 0.5	6.7	0.3	0.1	0.2	7.3
1990	0.7	− 0.5	30.9	−0.1	–	1.3	32.1
Amounts outstanding[2]	77.2	30.2	134.1	3.5	2.6	9.8	150.0
Eastern European countries[3]							
1988	0.1	− 0.6	3.4	–	–	–	3.4
1989	0.5	0.1	2.2	–	0.1	–	2.3
1990	−2.3	− 1.0	−5.0	–	−0.1	–	− 5.1
Amounts outstanding[2]	7.4	2.9	22.4	–	–	–	22.4
Newly industrialised economies[4]							
1988	5.8	1.8	7.8	–	–	–	7.8
1989	0.1	− 0.1	5.2	0.2	–	–	5.4
1990	–	− 0.1	6.1	0.1	–	–	6.2
Amounts outstanding[2]	13.9	5.4	114.5	0.4	0.1	–	115.0
Developing countries							
1988	0.8	− 8.6	−9.1	−3.9	−1.9	–	−14.9
1989	−2.0	− 1.8	11.1	−4.2	0.1	–	7.0
1990	0.8	− 0.9	36.5	−2.5	0.2	–	34.2
Amounts outstanding[2]	114.3	44.7	171.4	4.9	3.7	–	180.0
of which:							
Major debtor countries[5]							
1988	*1.0*	*− 2.1*	*−5.7*	*−0.7*	*−1.0*	–	*− 7.4*
1989	*−1.9*	*− 1.1*	*3.4*	–	*−0.1*	–	*3.3*
1990	*2.0*	*0.5*	*15.1*	–	*0.3*	–	*15.4*
Amounts outstanding[2]	*33.7*	*13.2*	*46.6*	*0.1*	*0.9*	–	*47.6*
Middle Eastern oil exporters[6]							
1988	*0.1*	*− 1.7*	*−3.8*	*−2.9*	*−0.3*	–	*− 7.0*
1989	–	*− 0.2*	*1.8*	*−4.1*	*0.3*	–	*− 2.0*
1990	*−0.1*	*− 0.3*	*−1.4*	*−1.9*	*−0.3*	–	*− 3.6*
Amounts outstanding[2]	*22.7*	*8.9*	*35.4*	*3.8*	*1.3*	–	*40.5*
Total							
1988	0.6	−72.1	32.7	−6.6	−1.6	−12.6	11.9
1989	−5.3	−10.8	51.0	−4.6	−0.2	− 0.9	45.3
1990	−2.2	−10.3	119.9	0.3	2.0	0.6	122.8
Amounts outstanding[2]	940.3	367.7	790.0	33.8	29.0	62.7	915.5

[1] Gold reserves valued at market prices. [2] At end-1990. [3] Bulgaria, Czechoslovakia, Hungary, Poland, Romania, the Soviet Union and Yugoslavia; data for Bulgaria and the Soviet Union relate only to deposits with BIS reporting banks. [4] Singapore, South Korea and Taiwan. [5] Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, the Philippines, Uruguay and Venezuela. [6] Iran, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

and, despite some rebuilding of its dollar balances later in the year – largely through interest accruals – had by the year's end $5.5 billion less in reserve assets than twelve months earlier. This followed upon an even larger reserve loss of nearly $13 billion in 1989. German official reserves rose by $7 billion, as – in view of the exchange market situation – interest accruals and other official dollar receipts were largely taken into reserves.

... only a modest increase in Germany

A third feature was the large accumulation of reserves, both by ERM participants and by other European countries with firm exchange rate commitments, notably those which had recently abandoned exchange controls. Within the ERM, Italy added nearly $16 billion (34%) to its reserves, the largest absolute expansion in any country. These massive reserve gains were due to large-scale foreign exchange purchases aimed at resisting upward pressure on the lira exerted by substantial capital inflows following the elimination of all remaining exchange controls in the spring. Similarly, during the temporary phases of French franc strength vis-à-vis the Deutsche Mark the French authorities availed themselves of the opportunity to increase their official reserve holdings by $12 billion, or almost 50%. Spain, benefiting from substantial long-term capital inflows which more than offset its $16 billion current-account deficit, also had to purchase foreign currency in the exchange market in order to contain upward pressure on the peseta and its official assets rose by almost $10 billion (23%). Denmark added $4 billion to its reserves, an increase of 66%.

Substantial accumulation of reserves by other developed countries ...

Outside the ERM, Sweden built up its reserves by $8 billion, or almost 90%. This substantial expansion occurred despite a further deterioration in its current account and can be attributed to massive capital inflows in response to a clear interest differential in favour of the krona. A similar constellation of forces could be observed in Finland, where reserves rose by $4.5 billion, or 88%.

... and its causes

The strong growth in the international liquidity of the industrial countries whose currencies are not used to any major extent for official reserve holding purposes was in fact part of a longer-term trend. Most of these countries seek to avoid large swings in their exchange rates since such fluctuations may severely distort price signals, fuel inflation and engender uncertainties which may hinder new investment. Moreover, the dismantling of exchange controls has increased the scope for sudden large capital flows. Accordingly, these countries have tended to accumulate reserves at a faster pace than the countries of issue of the major currencies. In fact, the share of the "other developed countries" in total exchange reserves rose from 11% in 1980 to 17% last year.

Outside Europe the official non-gold reserves of the newly industrialised economies on the western rim of the Pacific increased in the aggregate by $6.2 billion to $115 billion last year. A $7.4 billion (36%) jump in Singapore's official assets, resulting from large capital inflows and a $2 billion current-account surplus, more than accounted for the entire expansion. In the case of Taiwan, capital outflows more than offset the $11 billion current-account surplus, and its official reserves dropped by $0.8 billion, or 1%.

Changes in individual countries' official non-gold reserves[1]				
Countries	Changes			Amounts outstanding at end-1990
	1988	1989	1990	
	in billions of US dollars			
Developed countries	15.6	30.6	87.5	598.1
United States	2.0	26.8	8.7	72.3
Other Group of Ten countries	− 0.3	− 3.5	46.7	375.8
Japan	15.8	−12.8	−5.5	78.5
Germany	−20.3	2.4	6.8	67.5
Italy	4.5	12.1	15.9	62.7
France	− 7.6	− 0.7	12.1	36.7
United Kingdom	2.4	− 9.3	1.1	35.9
Switzerland	− 3.3	1.0	3.9	29.2
Sweden	0.3	1.1	8.4	18.0
Canada	8.1	0.7	1.8	17.8
Netherlands	0.1	0.5	0.9	17.4
Belgium	− 0.3	1.5	1.3	12.1
Other developed countries	13.9	7.3	32.1	150.0
of which: Spain	*6.4*	*4.4*	*9.7*	*51.1*
Portugal	*1.8*	*4.9*	*4.5*	*14.4*
Denmark	*0.7*	*− 4.4*	*4.2*	*10.6*
Finland	–	*− 1.3*	*4.5*	*9.6*
Eastern European countries[2]	3.4	2.3	−5.1	22.4
of which: Soviet Union	*1.2*	*− 0.7*	*−6.0*	*8.7*
Poland	*0.6*	*0.3*	*2.2*	*4.5*
Newly industrialised economies[2]	7.8	5.4	6.2	115.0
of which: Singapore	*1.8*	*3.3*	*7.4*	*27.7*
Developing countries	−14.9	7.0	34.2	180.0
of which: China	*2.2*	*− 0.6*	*11.6*	*29.6*
Thailand	*2.1*	*3.4*	*3.8*	*13.3*
Saudi Arabia	*− 2.1*	*− 3.8*	*−5.1*	*11.7*
Malaysia	*− 0.9*	*1.3*	*2.7*	*10.5*
Mexico	*− 7.2*	*1.1*	*3.5*	*9.9*
Venezuela	*− 2.9*	*1.0*	*4.2*	*8.3*
Indonesia	*− 0.5*	*0.4*	*2.0*	*7.5*
Libya	*− 1.5*	–	*1.5*	*5.8*
Argentina	*1.7*	*− 1.9*	*3.2*	*4.7*
Nigeria	*− 0.5*	*1.1*	*2.1*	*3.9*
Morocco	*0.1*	*− 0.1*	*1.6*	*2.1*
India	*− 1.6*	*− 1.0*	*−2.3*	*1.5*
Total	11.9	45.3	122.8	915.5

[1] Including official ecu positions. [2] See previous table for group definitions.

A fourth and rather encouraging feature was that in sharp contrast to the past few years when their official reserves grew much more slowly than those of other country groups, the developing countries succeeded in building up their international liquidity by a notable amount. The 23%, or $34 billion, nominal expansion was well in excess of global reserve growth in 1990. There were, however, substantial differences across countries.

Strong reserve growth in some developing countries ...

... notably in China ...

The divergence between the world's two most populous countries, China and India, is particularly striking. Tight macro-economic policies and severe restrictions on imports enabled China to record a substantial trade surplus and to add nearly $12 billion to its official holdings, an increase of 65%. By contrast, India's current-account deficit widened, largely because of higher oil prices and reduced workers' remittances from the Gulf region. Unable to attract sufficient capital inflows, the country saw its official non-gold reserves drop by 60% to only $1.5 billion, equivalent to just over two weeks of imports.

... and in several oil-exporting countries ...

High energy prices allowed several oil-exporting countries to add large amounts to their official reserves. Venezuela and Nigeria doubled their holdings, while Indonesia and Malaysia increased theirs by over a third. The accumulation of international reserves by Venezuela and Nigeria was in fact one of the main reasons for the strong overall expansion in the heavily indebted countries' official reserve holdings, which grew by roughly 50%. Mexico also benefited from higher oil prices, but direct and portfolio investment as well as reflows of flight capital were further reasons for the expansion of 55% in the country's reserves. A number of oil-importing countries were also able to build up their official reserve assets last year. Thailand added almost $4 billion to its holdings as a result of strong inflows of private capital which more than offset the current-account deficit. Thanks to a massive devaluation and the maintenance of import restrictions, Argentina sharply raised its trade surplus and more than tripled its external reserves to $4.7 billion.

... except in the Middle East

As a consequence of the Gulf conflict, several Middle Eastern countries had to draw down their official reserves by substantial amounts in 1990, with the aggregate holdings of the Middle Eastern oil exporters dropping by 8% to $41 billion. Saudi Arabia experienced a $5 billion, or 30%, reduction in its non-gold reserves.

Eastern European countries draw heavily on their reserves

Similarly, the countries of eastern Europe ran down their international reserves in 1990. The decline of almost one-fifth was a reflection of a desperate need for external funds to finance imports and increasing difficulties in attracting private capital inflows. The Soviet Union saw its deposits with BIS reporting banks plummet by just over 40% to $8.7 billion. Romania and Czechoslovakia reduced their official non-gold reserves by about $1 billion each, representing decreases of 62 and 49% respectively. In addition, Czechoslovakia, like Hungary, drew heavily on its official gold holdings. On the other hand, Poland, which recorded a substantial convertible currency trade-account surplus while continuing to build up interest arrears to its creditors, nearly doubled its non-gold reserves to $4.5 billion.

There was a further shift in the asset composition of international reserves last year, with foreign exchange assets growing faster than the other components. Reserves held in this form jumped by 18% to $790 billion, bringing the share of foreign exchange in total international reserves (excluding gold) to 86%, higher than at any time in the preceding decade. Exchange rate effects accounted for a substantial part of the current dollar increase. At constant exchange rates, foreign exchange holdings rose by $87 billion, or 12%.

After declining for two years in succession, overall reserve positions in the International Monetary Fund stabilised in current dollar terms. However, expressed in SDRs they dropped by nearly 7%, reflecting a further net repayment of credits by countries which had drawn on Fund resources in the years following the outbreak of the debt crisis. Among the developing countries, the main declines in reserve positions were recorded by India (SDR 0.5 billion) and Saudi Arabia (SDR 1.6 billion). The overall reserve position of the industrial countries rose by only SDR 0.4 billion, as an SDR 1.5 billion increase in the Japanese reserve position was largely offset by decreases in those of other countries. At the end of the year reserve positions in the Fund accounted for less than 4% of total global non-gold reserves.

Further decrease in IMF positions

This small share of IMF reserve positions in total official holdings belies the importance of the Fund's role in alleviating shortages of international liquidity. Firstly, all countries, including the most impoverished, experience an increase in their reserve positions in the Fund when quotas are raised following one of the periodic reviews. In other circumstances accruals of reserve positions go mainly to countries with ample liquidity, but these positions arise as the IMF disburses credits to countries encountering balance-of-payments difficulties. Moreover, because the Fund's decision to grant credit is widely seen as an endorsement of a country's overall macro-economic and structural adjustment strategy, IMF credits often trigger private capital inflows or open the way for the alleviation of debt burdens. For this reason the Fund's impact on the liquidity of countries facing shortages of international reserves as well as its influence on macro-economic and structural adjustment strategies are quite considerable.

Pivotal role of the Fund in channelling capital to countries in need

In fact a large number of developing and eastern European countries negotiated agreements with the Fund in 1990 and early 1991. By the end of March of this year more than $18 billion had been committed by the IMF to support its members in their adjustment efforts, of which $9 billion represented undrawn balances. Some of the Fund-supported programmes were conceived in the context of the Brady plan for debt and debt service reduction, while others were intended to enable countries to deal with some of the problems created by Iraq's invasion of Kuwait. The Fund and the World Bank have also begun to play an active role in promoting the process of transition in the countries of eastern Europe and in fostering their integration into the global trading system. Since these countries will need to bolster their reserves in order to be able to make their currencies convertible and to relax and eventually abolish the restrictions on trade currently in force, many of the multilateral programmes being put in place by the Bretton Woods institutions envisage an increase in their international reserves.

In order to enable the IMF to continue to assist countries in meeting their liquidity needs, the Fund's Board of Governors agreed in June last year that members' quotas should be raised by 50%. Before this quota

Ninth IMF quota increase

increase can take effect, it must be ratified by a weighted majority of members. In addition, in order to improve the ability of the IMF to contend with the build-up of arrears, its Articles of Agreement are being amended so that a member's voting rights may be suspended if that member fails to fulfil its obligations.

Global holdings of SDRs expanded by $2 billion, or 7%, last year, but this was entirely due to exchange rate effects. In terms of the SDR itself they were essentially unchanged. Similarly, holdings of official ecus rose by $0.6 billion, or 1%, also as the result of valuation effects. Expressed in ecus, the amount outstanding fell by nearly 9%.

Further decline in the share of the dollar in official reserves

There are three features of the pattern of investment of official reserves in 1990 that are worthy of note. The first was the strong increase in non-dollar assets, which accounted for over half of official foreign exchange accruals. This was not so much because of the build-up of reserves by the United States, which by definition holds its foreign assets in non-dollar forms, but more because European authorities sought to keep fluctuations in intra-European exchange rates within narrow bounds. Accordingly they acquired claims denominated predominantly in ERM member currencies, notably the Deutsche Mark, but increasingly also private ecus, the market for which has become much deeper and more efficient in recent years (see Chapter VI). The share of the dollar in the $790 billion of total foreign exchange reserve holdings declined from 59 to 55%. The shares of the Deutsche Mark and the yen increased by about 1.5 percentage points each to 21 and 10% respectively. Official holdings of private ecus soared by 80% to nearly $37 billion, bringing their share of global exchange reserve holdings up from 3 to nearly 5%.

US current-account balance and estimated changes in foreign exchange reserves (excluding valuation effects[1])

Items	1986	1987	1988	1989	1990
	in billions of US dollars				
US current-account balance	145.4	162.3	128.9	110.0	99.3
Changes in US non-gold reserves	− 0.3	−10.3	4.6	27.0	2.3
of which:					
Foreign exchange reserves	*1.0*	*− 8.6*	*5.7*	*26.9*	*2.8*
Changes in foreign exchange reserves of countries other than the United States	27.4	150.9	43.9	26.7	84.2
Identified official dollar assets held in the United States	35.1	54.8	40.1	−4.4	29.4
Dollar reserves held with banks outside the United States[2]	− 0.6	16.9	−10.2	5.6	7.1
Unallocated dollar reserves	14.4	26.4	−16.9	3.1	2.0
Non-dollar reserves[3]	−21.5	52.8	30.9	22.4	45.7

[1] Changes computed at constant (end-of-period) exchange rates. [2] Deposits by official monetary institutions with Euro-banks reporting to the BIS. Includes all deposits with these banks by China, Bulgaria and the Soviet Union. [3] Estimates from IMF and BIS sources.

A second feature was the extent to which official holders invested their reserve accruals directly in the United States. Because official assets are sometimes first placed with banks and securities houses abroad before they eventually reach the United States, US balance-of-payments data are not always able to reveal the full extent to which the country's current account has been financed by the investment of official assets in US dollars. However, last year more than three-quarters of the nearly $40 billion increase in official dollar assets was invested directly in the United States, whereas in 1989 identified dollar holdings there had declined somewhat.

Increased tendency to hold dollars in the United States

The final noteworthy feature was official holders' preference for longer-term assets when investing in the United States. In 1990 foreign official institutions placed $24 billion in marketable US Treasury bonds and notes but only $1.5 billion in Treasury bills and certificates. Since foreign private investors reduced their holdings of long-term US government debt last year, the official sector more than accounted for the entire expansion of foreign holdings of US government bonds and notes.

First-quarter decline in exchange reserves of Group of Ten countries

During the first quarter of 1991 the non-gold reserves of the Group of Ten countries declined by $28 billion in current dollar terms. The great bulk of this reduction was due to exchange rate effects resulting from the appreciation of the US dollar. Excluding these valuation effects, the decrease in non-gold reserves came to less than $4 billion, with aggregate official holdings of foreign exchange falling by $7 billion. Although the authorities intervened on both sides of the market (see pages 179–180), on balance they sold dollars as they sought to stem the rapid rise in the value of the US currency from mid-February onwards. Germany, whose currency depreciated by 13% vis-à-vis the dollar during the first three months of this year, experienced a $6.5 billion decline in its official foreign exchange holdings in constant exchange rate terms. Similarly, Japan, whose currency eased by about 4% against the dollar over this same period, drew down its exchange reserves by $6.3 billion. On the other hand, the United States recorded only a marginal expansion in the volume of its exchange reserves. For several European countries events within the ERM were the key determinant of reserve developments. The lira moved towards the top of the narrow band, and the Italian authorities increased their holdings of foreign exchange by over $4 billion. The UK authorities added $3.6 billion to their exchange reserves, mainly reflecting the proceeds of their first ecu bond issue. On the other hand, the French franc was at the bottom of the narrow band for much of the period, and the authorities drew down some of the foreign exchange reserves they had accumulated in the previous year.

IX. Activities of the Bank

1. Development of co-operation between central banks and international organisations

During the past year the Bank has continued to play its traditional role in fostering international monetary co-operation.

The Bank participated as an observer both in the work of the Interim Committee of the Board of Governors of the International Monetary Fund on the International Monetary System and at meetings of the Finance Ministers and central bank Governors of the Group of Ten countries and of their Deputies. Furthermore, the Bank continued to perform the functions entrusted to it in August 1964 by the Ministers and Governors of the Group of Ten of collecting and distributing to all the participants in the Group and to Working Party No. 3 of the Organisation for Economic Co-operation and Development statistical data concerning the financing of external surpluses and deficits of the Group of Ten countries.

In addition to the regular meetings in Basle of the Governors of the central banks of the Group of Ten countries, the Bank has continued to organise periodic meetings of central bank officials on a variety of subjects. It has also, as in the past, provided the Secretariat for various committees and groups of experts.

The Euro-currency Standing Committee continued to monitor international banking and capital market developments. In particular, it discussed the implications for international financial markets of developments in certain asset markets and the role of international bank lending in the process of transition in eastern European countries. Moreover, a working party set up by the Committee reviewed central bank policy concerns raised by the evolution of financial market structures. The Bank also continued to assemble, survey and publish statistical data on developments in international banking and capital markets.

The Basle Committee on Banking Supervision remained an important forum for co-operation in the prudential supervision of international banks. It continued to monitor the implementation of the accord on international convergence of capital measurement and capital standards endorsed by the Group of Ten central bank Governors in July 1988, and in February 1991 it issued a consultative document proposing a refined definition of the general provisions and general loan loss reserves eligible for inclusion in the capital base. Further work was undertaken on the development of a supervisory framework for the measurement of market risks; insofar as position risk in traded securities was concerned, this work was carried out jointly with the regulators of non-bank securities dealers. In January 1991 guidelines on the measurement and control of large credit exposures were circulated to banking supervisors worldwide. In October 1990 the Sixth International Conference of Banking Supervisors was held in Frankfurt, where participants endorsed the work in progress in these and other areas. The Committee also held joint meetings with representatives of securities and insurance industry regulators in the Group of Ten countries at which it was agreed to develop principles for the supervision of financial conglomerates. These meetings also approved proposals designed to remove constraints on the exchange of information for prudential purposes.

Following a decision taken in July 1990 by the Governors of the central banks of the Group of Ten countries, the Bank established a procedure for co-ordinating the technical assistance provided to the central banks of eastern European countries. This procedure comprises, in particular, a regular exchange of information of interest to all these institutions and to the international organisations providing technical assistance, as well as meetings of the central bank officials concerned. This new task has led the Bank to set up a specific service with overall responsibility for relations with the central banks of eastern European countries and international organisations.

The ad hoc Committee on Interbank Netting Schemes, composed of senior officials from the central banks of the Group of Ten countries under the chairmanship of the General Manager of the BIS, completed its work in the course of the year. The Committee's report was published by the Bank in November. In a communiqué issued at the same time the Group of Ten central bank Governors stated that they were agreed that, because of their potential impact on interbank payment systems, cross-border and multi-currency netting schemes merited careful examination. Such schemes were, provided they met certain conditions, capable of improving the efficiency and stability of those systems by reducing market participants' settlement costs and their credit and liquidity exposures. The most important such conditions were that the netting should have legal validity, in particular in the event of a netting participant's default, and that multilateral netting schemes should have adequate risk management and loss absorption procedures. In this regard the Governors endorsed the minimum standards for the design and operation of interbank netting schemes set out in the report. They also agreed on the need for co-operative central bank oversight of netting systems which directly link the credit and liquidity exposures of banks in different countries, along the lines of the oversight exercised with respect to domestic payment systems, and adopted the principles for such co-operative oversight contained in the report.

The Governors agreed that the report should be transmitted to the Basle Committee on Banking Supervision with the recommendation that the Group of Ten supervisors should take into account, in the exercise of their responsibilities with respect to individual institutions, both the minimum standards and the principles for co-operative central bank oversight. They also asked the Committee to give further consideration, in the light of the report, to the treatment of netting under the 1988 Basle accord on international convergence of capital measurement and capital standards.

The report of the Committee on Interbank Netting Schemes was also transmitted to the Committee on Payment and Settlement Systems, which was established by the Group of Ten central bank Governors as successor to the Group of Experts on Payment Systems. The new Committee was asked to continue to review the measures that central banks might take – either individually or on a co-operative basis – to improve efficiency and reduce risks in the settlement of cross-border and multi-currency transactions. The Committee on Payment and Settlement Systems will continue to monitor developments in payment, netting and settlement arrangements at its regular meetings. It met in Basle in December to discuss, inter alia, settlement systems in securities markets. It noted that a number of arrangements being developed employ delivery against payment as the method of settlement and agreed that further study of their effects on credit and liquidity risks could be of value to the international financial community.

The Group of Computer Experts focused its attention on two areas in particular. Firstly, the Group examined how its work could best be organised to keep closely in step with developments in information systems at the central banks and within the individual national financial communities. As a result of this analysis telecommunications was chosen as the chief subject of the Group's work over the next two to three years; a start has already been made on a study of the networks and systems which provide the technical infrastructure for the main payment systems in the Group of Ten countries. Secondly, the Computer Experts continued to pay close attention to security issues with the assistance of the working party which had been set up for that purpose. The special security requirements arising from the rapid growth in the use of personal computers at financial institutions were the subject of an in-depth study, resulting in a booklet entitled "Monograph on Personal Computer Security" which was published under the aegis of the BIS in December 1990.

The Group of Experts on Monetary and Economic Data Bank Questions continued to examine ways of strengthening the Data Bank Services of the BIS, which have been developed in collaboration with, and to meet the needs of, the central banks in the Group of Ten countries. Significant progress has been made in upgrading telecommunication links with the BIS. This has provided increased reliability for daily transmissions of data via batch-processing techniques and for user-friendly access to the Data Bank via interactive techniques. Steps have also been taken towards broadening the coverage of macro-economic series on countries outside the Group of Ten through bilateral arrangements for data exchange between the BIS and central banks in these countries.

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 parties continued to meet in Basle. The mandate of the Committee of Governors was extended by a Decision of the Council of the European Communities adopted on 12th March 1990 with a view to the greater role to be played by the Committee in the context of stage one of economic and monetary union (EMU), which began on 1st July 1990. To this end, the Committee of Governors has reorganised its structure and working procedures and enlarged its permanent Secretariat with a small research unit. In addition, the Committee is assisted by the Committee of Alternates, three permanent sub-committees (the Foreign Exchange Policy Sub-Committee, the Monetary Policy Sub-Committee and the Banking Supervisory Sub-Committee) and ad hoc working parties for special purposes.

Since the commencement of stage one the work of the Committee of Governors has centred on two major tasks. Firstly, efforts have been intensified to promote close co-ordination of monetary policies with the aim of achieving convergence at a low level of inflation and with due regard for a desirable degree of exchange rate stability within the European Monetary System. For this purpose, the Committee has embarked on the development of a common framework for monitoring monetary conditions within the Community, involving the use of objective indicators and broadly compatible monetary aggregates. Secondly, in response to the request made by the European Council at its meeting in Madrid on 26th and 27th June 1989 that, together with the other competent bodies of the Community, it should prepare the groundwork for the Inter-governmental Conference on EMU, the Committee drew up a draft Statute of the European System of Central Banks and of the European Central Bank. The Inter-governmental Conference, which was convened in December 1990, will prepare the amendments to the Treaty of Rome which are necessary for the Community to move beyond the first stage of EMU.

Following the decision of the Norwegian authorities to peg the krone to the ecu, the Committee of Governors also formulated the terms and conditions of extended bilateral co-operation between the Bank of Norway and the Community central banks. With effect from 1st January 1991 the Community central banks and the Bank of Norway concluded non-reciprocal swap agreements giving the Bank of Norway access to short-term funds for intervention purposes up to the equivalent of a total of ecu 2 billion.

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.

(a) Agent for the European Monetary Co-operation Fund (EMCF)

The Bank continued to perform the functions of Agent for the EMCF which it has been executing since 1st June 1973.* These functions, on the

* For a description of the structure and functions of the Fund, see the fifty-fourth Annual Report, pages 162–164.

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.

During the period from 1st April 1990 to 31st March 1991 interventions carried out by EMS central banks in other EMS member countries' currencies did not give rise to any financing or settlement operations through the intermediary of the EMCF.

The volume of ecus issued by the EMCF 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 fell from approximately ecu 49.4 billion at 1st April 1990 to around ecu 46.6 billion at 31st March 1991. This contraction of ecu 2.8 billion over the year was due primarily to the fall in the price of gold expressed in ecus and the decline in the exchange rate of the US dollar vis-à-vis the ecu, the effect of which was partially offset by an appreciable increase in some EC central banks' contributions of US dollar reserves.

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,* particulars of which were given in the fifty-sixth and fifty-seventh Annual Reports on pages 171 and 183 respectively, during the period under review the Agent continued to receive from the borrowers, namely France and Greece, and to distribute to the creditors vis-à-vis the Community the sums due in respect of interest, commission and expenses on loans outstanding.

The Agent also carried out the financial transactions connected with the following operations relating to Community loans granted to these two countries:

– at the maturity date of 27th July 1990, the repayment by France of the loans corresponding to the issues of US$ 350,000,000 of notes 1988–90 at 8% per annum and ecu 40,000,000 of notes 1983–90 at 11¼% per annum (the second tranche of the loan of ecu 150,000,000 of notes 1983–93); and, at the maturity dates of 29th January and 20th February 1991 respectively, the repayment by Greece of the loans corresponding to the issues of ecu 100,000,000 of notes 1988–91 at 7⅜% per annum (the first tranche of the loan of ecu 350,000,000 of notes 1988–93) and US$ 150,000,000 of notes 1986–91 at 8⅝% per annum;

– by virtue of the Decision of the Council of the European Communities of 25th February 1991 and under the terms of the above-mentioned Regulation (EEC) No. 1969/88, the Community granted to the Hellenic Republic a new loan in three tranches for a total amount of ecu 2,200 million, or its equivalent in other currencies. The first tranche of ecu 1,000 million was

* 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.

made available to Greece in March 1991 and involved the following three loans: a DM 535,800,000 floating rate loan 1991–96, an ecu 240,000,000 floating rate loan 1991–96 and an ecu 500,000,000 loan 1991–98 at 9¼% per annum. The second and third tranches of ecu 600 million each should be made available to Greece in 1992 and in 1993.

The following table shows, as at 31st March 1991, the total of outstanding Community lending operations.

Outstanding Community loans as at 31st March 1991

Borrowing countries	US dollars	Deutsche Mark	Swiss francs	Yen	Ecus
	in millions				
France					30
Greece	250	1,366	227	25,000	1,340
Total	250	1,366	227	25,000	1,370

(b) Agent for the private ecu clearing and settlement system

Since October 1986 the Bank has also 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 27th December 1990.* Member banks of the EBA may be granted the status of clearing bank on the basis of criteria drawn up by that body. On 31st March 1991 there were forty-five clearing banks.

3. Financial assistance to central banks

As in previous years, the BIS was again called upon to arrange and participate in bridging finance in favour of a number of central banks.

(a) On 20th June 1990 a bridging facility for a total of US$ 280 million was arranged in favour of the National Bank of Hungary. US$ 260 million was provided by the BIS and US$ 20 million by the US monetary authorities. The BIS share was backed by eleven member central banks. The loan, which matured on 14th September 1990, prefinanced disbursements by the International Monetary Fund, the World Bank and the Export-Import Bank of Japan. A first drawing of US$ 100 million was made on 21st June 1990 and the balance was drawn in the course of July 1990. The National Bank of Hungary repaid the loan in several tranches, the last payment being made on 13th September 1990.

(b) Also on 20th June 1990 a bridging loan of US$ 178 million was granted to the Bank of Guyana for three months. Of the total amount, US$ 133.5

* For a description of the structure and operation of the clearing system, see the fifty-sixth Annual Report, page 172.

million was made available to the Bank of Guyana by the BIS with the backing of eight member central banks; a further US$ 31.75 million was provided by the US monetary authorities; and the balance of US$ 12.75 million was granted by the KfW (Kreditanstalt für Wiederaufbau) of the Federal Republic of Germany. The loan was repaid progressively by 20th September 1990 out of the proceeds of drawings made by Guyana under arrangements with the International Monetary Fund, as well as with the World Bank and the Caribbean Development Bank.

(c) A further credit facility of US$ 300 million was granted to the National Bank of Romania on 7th March 1991. This very short-term arrangement expired on 29th March 1991. The BIS contribution amounted to US$ 260 million and was backed in full by thirteen member central banks; US$ 40 million was provided by the US monetary authorities.

Having obtained financing from the International Monetary Fund under the Compensatory and Contingency Financing Facility, the National Bank of Romania repaid the whole of the loan in the second half of March 1991.

4. Operations of the Banking Department

The Balance Sheet of the Bank and the Profit and Loss Account at 31st March 1991, certified by the auditors, are reproduced at the end of this Report; they are expressed in gold francs.*

On 31st March 1991 the balance-sheet total stood at

	GF 45,719,139,929
whereas on 31st March 1990 it had amounted to	GF 41,291,112,116
There was thus an increase of	GF 4,428,027,813

or 10.7%.

This rise, which followed the decrease of 2.2% recorded at the end of the preceding financial year, was mainly due to an increase in resources in currencies; the appreciation, in gold franc terms, of most currencies other than the US dollar accounted for only a small part of the movement. Resources in gold declined slightly.

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
1987	29,944	+ 3,386	+ 13
1988	38,151	+ 8,207	+ 27
1989	42,234	+ 4,083	+ 11
1990	41,291	− 943	− 2
1991	45,719	+ 4,428	+ 11

* The gold franc (abbreviated to GF) is the equivalent of 0.290 322 58... grammes fine gold – Article 4 of the Statutes. Assets and liabilities in US dollars are converted at US$ 208 per ounce of fine gold (equivalent to 1 gold franc = US$ 1.941 49...); all other items in currencies are converted on the basis of market rates against the US dollar.

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 Co-operation Fund as described in Section 2 above;
– gold held under earmark for the account of various depositors; this item amounted to 1,275 million gold francs on 31st March 1991, compared with 1,413 million gold francs on 31st March 1990.

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			
1987	1,270	27,626	1,048	29,944
1988	1,335	35,658	1,158	38,151
1989	1,404	39,875	955	42,234
1990	1,476	38,673	1,142	41,291
1991	1,557	42,856	1,306	45,719

A. Capital and reserves

(a) Paid-up capital GF 295,703,125

The Bank's authorised capital remained unchanged at 1,500 million gold francs; there was likewise no change in the issued capital, which is made up of 473,125 shares paid up to the extent of 25%.

(b) Reserves

The movements in the various reserve funds, commented upon below, are shown in the table at the end of this Report, under Item I.

(1) Legal Reserve Fund GF 30,070,313

The total of this Fund showed no change. It has remained unchanged since 1971, when it reached 10% of the then paid-up capital, this being the proportion laid down in Article 51 (1) of the Statutes.

(2) General Reserve Fund
after allocation of the net profit
for the financial year 1990–91 GF 646,716,157

This compares with 622.4 million gold francs on 31st March 1990. The increase of 24.3 million represents the amount which it is proposed to allocate to this Fund from the net profit in conformity with the provisions of Article 51 (3) of the Statutes.

(3) Special Dividend Reserve Fund

This Fund remained unchanged at GF 39,530,055 after having been raised by 4 million gold francs at the end of the preceding financial year.

(4) Free Reserve Fund after allocation of the net profit for the financial year 1990–91 GF 545,166,872

It is proposed that a sum of 56.7 million gold francs be transferred from the net profit, raising this Fund from 488.5 million to 545.2 million gold francs on 31st March 1991.

After the proposed allocation of the net profit for the financial year 1990–91 the total of the Bank's reserves thus shows an increase of 81 million gold francs, to stand at GF 1,261,483,397 compared with 1,180.5 million on 31st March 1990.

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
	1990	1991	
	in millions of gold francs		
Deposits of central banks	37,374	40,636	+ 3,262
Deposits of other depositors	1,299	2,220	+ 921
Total	38,673	42,856	+ 4,183

The increase in resources reflected new deposits received from both central banks and other depositors. The rise of 8.7% in "Deposits of central banks" was entirely due to the expansion in resources in currencies; the deposits in gold received from these institutions declined slightly.

The total of "Deposits of other depositors" – mainly international organisations – increased sharply (+ 71%), also owing to the receipt of substantial deposits in currencies.

The rise in deposits in currencies over the financial year 1990–91 reflected in particular an increase in deposits in ecus, US dollars and SDRs. These new deposits more than offset a significant decline in liabilities in Deutsche Mark. On 31st March 1991 US dollars represented approximately 40% of total resources and Deutsche Mark 30%, followed by deposits in ecus, which now make up more than 10%.

As a result of the appreciable increase in other depositors' placements with the Bank, the share of their deposits rose from 3.4 to 5.2%, while that of deposits of central banks declined from 96.6% at the end of the financial year 1989–90 to 94.8% for the financial year under review.

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
	1990	1991		1990	1991		1990	1991	
	in millions of gold francs								
Sight	4,454	4,399	−55	2,482	2,145	− 337	6,936	6,544	− 392
Not exceeding 3 months	14	51	+37	30,938	35,323	+4,385	30,952	35,374	+4,422
Over 3 months	–	–	–	785	938	+ 153	785	938	+ 153
Total	4,468	4,450	−18	34,205	38,406	+4,201	38,673	42,856	+4,183

Sight deposits in gold and in currencies showed a slight decrease compared with 31st March 1990.

The increase in resources was mainly attributable to the receipt of deposits, in gold and in currencies, with a maximum maturity of three months, although currency deposits with a maturity of over three months also rose.

As a proportion of total borrowed funds, the share of deposits in gold contracted further to 10.4%, compared with 11.6% on 31st March 1990, while deposits in currencies accounted for 89.6%, compared with 88.4%.

In terms of the maturity of the resources received, sight deposits amounted to 15.3% of the total, deposits with a maximum maturity of three months 82.5% and those at over three months 2.2%. The respective percentages had been 17.9, 80.1 and 2% at the end of the preceding financial year.

(a) Deposits in gold GF 4,450,642,213

This compares with 4,468 million gold francs on 31st March 1990. The decrease of 18 million represents the difference between the decline in sight deposits and the increase in time deposits (with a maximum maturity of three months).

(b) Deposits in currencies GF 38,405,800,355

This item increased by 4,201 million gold francs, or 12.3%, after having recorded a decrease of 2.8% in the year to 31st March 1990. The rise was due to an expansion in time deposits, while sight deposits declined.

C. Other liabilities

Other liabilities totalled GF 1,305,510,839
against 1,142 million gold francs on 31st March 1990.

These liabilities comprise:

(a) Staff pension scheme GF 150,051,390

This compares with 130 million gold francs on 31st March 1990. This item, which represents the Bank's liability in respect of staff pensions, is denominated in Swiss francs; the amount held was increased progressively during the financial year.

(b) The item *"Miscellaneous"* stood at GF 1,121,566,666

against 980 million gold francs on 31st March 1990. The rise of 141 million compares with one of 157 million in the financial year 1989–90. This development was due to the fact that this item was less affected by exchange rate fluctuations during the financial year 1990–91.

(c) Dividend payable on 1st July 1991 GF 33,892,783

The dividend of 200 Swiss francs per share is the same as that paid for the financial year 1989–90.

The sum of 33.9 million gold francs which it is proposed to set aside out of the net profit for the financial year 1990–91 is, however, slightly greater than the 32.3 million allocated in respect of the preceding financial year; the difference reflects the appreciation of the Swiss franc in gold franc terms.

The net surplus for the financial year 1990–91 amounted to 114,892,783 gold francs, compared with 104,330,524 gold francs for the preceding financial year. Details of the allocation it is proposed to make, in accordance with the provisions of Article 51 of the Statutes, are given in Section 5 of this chapter.

Assets (employment of resources)

The following table gives a breakdown of the balance-sheet asset items according to their nature:

BIS: Development of investments and other assets, by nature

Nature	Financial years ended 31st March				Movement	
	1990		1991			
	in millions of gold francs					
Sight assets						
Gold	4,981		4,861		− 120	
Currencies	15	4,996	7	4,868	− 8	− 128
Treasury bills		905		2,461		+ 1,556
Time deposits and advances						
Gold	206		389		+ 183	
Currencies	28,203	28,409	30,604	30,993	+ 2,401	+ 2,584
Government and other securities at term		6,887		7,384		+ 497
Miscellaneous		94		13		− 81
Total						
Gold	5,187		5,250		+ 63	
Currencies	36,104	41,291	40,469	45,719	+ 4,365	+ 4,428

The increase in assets in currencies reflected the deposits received from central banks and other depositors.

(a) Gold

Assets in gold – holdings on sight account and time deposits – showed a net increase of 63 million gold francs, while resources declined by 18 million. The difference of 81 million gold francs between the movements recorded in assets and liabilities in gold was reflected in a corresponding rise in forward gold operations.

– Holdings on sight account GF 4,860,628,212

This compares with 4,981 million gold francs on 31st March 1990.

– Time deposits GF 389,822,640

This compares with 206 million gold francs on 31st March 1990.

(b) Cash on hand and on sight account with banks GF 7,011,311

This item had amounted to 15 million gold francs on 31st March 1990.

(c) Treasury bills GF 2,461,195,866

This portfolio, which had stood at 905 million gold francs on 31st March 1990, recorded a marked expansion; there was also an increase in the number of currencies in which these securities are held.

(d) Time deposits and advances GF 30,993,504,074

This item, which comprises investments in gold – already mentioned – and in currencies, had amounted to 28,409 million gold francs at the end of the preceding financial year.

Investments in currencies increased from 28,203 million gold francs on 31st March 1990 to 30,604 million at the end of the financial year under review; this represents a rise of more than 8%.

Assets denominated in US dollars and Deutsche Mark remained the largest items; the increase in investments in ecus reflected a corresponding movement in resources in that currency.

(e) Government and other securities at term GF 7,383,920,813

This compares with 6,887 million on 31st March 1990.

The rise in this item was due almost entirely to purchases of medium-term government paper.

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
	1990	1991	
	in millions of gold francs		
Not exceeding 3 months	30,023	33,126	+3,103
Over 3 months	5,273	5,251	− 22
Total	35,296	38,377	+3,081

The total of investments with maturities not exceeding three months rose to represent 86.3% of investments, compared with 85.1% on 31st March 1990; investments with maturities of over three months accounted for 13.7%, compared with 14.9%.

(f) Miscellaneous GF 12,879,653

This compares with 94.5 million gold francs on 31st March 1990.

The movements in this item for the most part reflected the impact of exchange rate fluctuations on forward operations concluded in currencies.

Forward gold operations

These operations, which are mentioned in Note 2 to the Balance Sheet, resulted in a negative balance of GF 137,720,955 compared with a negative balance of 56.8 million gold francs on 31st March 1990.

The volume of transactions involving a repayment of gold by the Bank at maturity was greater than at the end of the previous financial year. This resulted in an increase in the negative balance of forward gold operations.

5. Net profits and their distribution

The accounts for the sixty-first financial year ended 31st March 1991 show a net operating surplus of 134,066,732 gold francs, compared with 126,845,080 gold francs for the preceding financial year. This year's result is shown after deduction of 41,614,970 gold francs in respect of costs of administration, the substantial increase over the previous year's figure of 31,023,829 gold francs reflecting the rise, for most of the year, in the gold franc value of the Swiss franc, in which currency most of the Bank's expenditure is incurred; in terms of Swiss francs the total administrative costs actually rose by only 12%.

The Board of Directors has decided to transfer 4,173,949 gold francs to the Provision for Exceptional Costs of Administration and 10,000,000 gold francs to the Provision for Building Purposes (which was set up to meet expenditure associated with the acquisition by the Bank of various extensions to its premises) and to supplement – by means of a further transfer of 5,000,000 gold francs – the Provision for Modernisation of Premises and Renewal of Equipment, the main purpose of which is to meet the cost of the continuing series of technical projects involving investment expenditure. As a result of these transfers, the net profit amounts to 114,892,783 gold francs, against 104,330,524 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 114,892,783 gold francs be applied by the General Meeting in the following manner:

(i) an amount of 33,892,783 gold francs in payment of a dividend of 200 Swiss francs per share;
(ii) an amount of 24,300,000 gold francs to be transferred to the General Reserve Fund; and
(iii) an amount of 56,700,000 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 1991 to the shareholders whose names are contained in the Bank's share register on 20th June 1991.

The Balance Sheet, the Profit and Loss Account and a summary statement showing the movements during the financial year in the Bank's reserves will be found at the end of this Report. The Bank's accounts have been audited by Price Waterhouse, who have confirmed that the Balance Sheet and the Profit and Loss Account, 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 1991 and of its profit for the year ended on that date. Price Waterhouse's report is appended at the foot of the Balance Sheet.

6. Changes in the Board of Directors and in the Management

Dr. W.F. Duisenberg relinquished the offices of Chairman of the Board of Directors and President of the Bank on 31st December 1990, on completion of the three-year period for which he had been elected. The Board elected Mr. Bengt Dennis, Governor of Sveriges Riksbank, as successor to Dr. Duisenberg in these two positions for a period of three years commencing on 1st January 1991.

Baron Godeaux relinquished his directorship on 15th September 1990. To succeed him, M. Verplaetse, Governor of the National Bank of Belgium, appointed M. Philippe Wilmès as from 1st March 1991. Dr. Lamberto Dini and Prof. Dr. Leonhard Gleske were re-appointed to the Board in November and December 1990 respectively. Dr. W.F. Duisenberg was re-elected to the Board in March 1991.

In September 1990 Mr. Leigh-Pemberton, Governor of the Bank of England, appointed Mr. Michael Foot as his Alternate to succeed Mr. Lionel Price.

As regards the Management of the Bank, Mr. Michael G. Dealtry, Deputy Head of the Monetary and Economic Department and Manager, retired at the end of September 1990. Herr Alexander Radzyner, M. Claude Sivy and Herr Günter Pleines were promoted to the rank of Assistant Manager in December 1990 and Herr Robert von Werra to the same rank in April 1991.

The Bank learned with deep regret of the death of M. Renaud de la Genière on 16th October 1990, M. Jacques Brunet on 15th December 1990, Lord Cromer on 16th March 1991, and Dr. Karl Klasen on 22nd April 1991. They had all been ex officio members of the Board, M. de la Genière and M. Brunet as Governor of the Bank of France from November 1979 to November 1984 and from January 1960 to April 1969 respectively, Lord Cromer as Governor of the Bank of England from July 1961 to June 1966, and Dr. Klasen as President of the Deutsche Bundesbank from January 1970 to May 1977.

Conclusion

At the end of this Report one may be left with a sense of apprehension at the formidable challenges that confront policy-makers at this juncture. The uncertainty regarding a resumption of economic growth in the industrial countries clouds the picture. Will an upswing in the countries that are now in recession occur before the slowdown spreads to those where domestic demand is still relatively strong? While most forecasts for 1992 seem reassuring, suggesting a marked recovery in virtually all industrial countries, tangible signs of a revival of activity are as yet very few. This Conclusion concentrates on the policy issues in industrial countries related to the business cycle. This is not to say that these are the most important issues in the world economy, but they are of greatest concern to central banks. First, however, a few observations on some of the other problems.

There is no lack of almost daily reminders of just how wretched living conditions in many developing countries are. Relief programmes are called for constantly but they do not solve the underlying economic problems. The industrial countries cannot fail to join in efforts to alleviate poverty and to help create viable economies in these countries. For almost nine years now most efforts have been directed towards breaking out of the impasse of the debt crisis. More than rescheduling, it needed debt and debt service reduction. In a handful of cases this has led to improved economic performance, even to spontaneous inflows including the repatriation of flight capital and equity investment. Some people believe that the tide has now turned, as more and more developing countries adopt development strategies aimed at making their economies more open and competitive. Even so, the destiny of the developing countries is closely linked to that of the developed countries in many ways besides trade. Trade, nevertheless, is the paramount factor: all agree that the Uruguay Round must be brought to a successful conclusion.

The industrial countries are also committed to giving full support to the transformation of eastern Europe. Of most importance in this respect is the exceptional balance-of-payments assistance to supplement funds provided by the Bretton Woods institutions. The basic condition for help in meeting a residual financing gap is the implementation of a sound programme of economic stabilisation and comprehensive reforms aimed at establishing open, market-based economies. This exceptional assistance seemed essential to afford these countries some relief from the external constraints which they would otherwise immediately encounter in the early stages of reform, when it is still difficult to attract private capital on a large scale. Other forms of support are macro-economic policy advice and technical assistance, which have been offered on a broad front. In the crucial area of structural reform the elected governments have largely to find their own way since no precedent exists; they have to provide strong leadership by forging a broad consensus. Outside aid designed to keep consumption at an unsustainable level would only weaken the incentives of the market system and offer a temptation to delay difficult decisions, thus hindering and not furthering the transition process. By far the most effective help the industrial world could give to the reforming eastern European countries would be to allow them much greater access, and on a permanent basis, to its markets. In the short run, this would facilitate their adjustment to the losses resulting from the demise of the Comecon trading system and the shrinking capacity of the Soviet Union to finance imports. In the longer term, it would help them service their external debts, promote the reshaping of their production structures by integrating them in the world economy and, last but not least, provide an incentive to western direct investment.

The desynchronisation of business cycles among the industrial economies, with Japan and some of the European countries, in particular Germany, in one phase and most other industrial countries in another, has not created overwhelming problems for policy co-ordination with respect to the exchange markets. While policy-controlled short-term interest rates – responding to overheating on the one hand and to recession on the other – moved far apart, the largely market-determined long-term interest rates did not always react in similar fashion. The tendency towards globalisation of financial markets has opened new channels of interdependence, not only between financial markets in different countries but also between financial markets and foreign exchange markets, which make it even more difficult to predict how policy measures and political events will shape exchange rate structures. This could be clearly observed in the gyrations of the DM/$ rate in March and April this year.

Within Europe questions of policy co-ordination and exchange rate determination continued to be posed in the context of the EMS exchange rate mechanism (ERM) and the move towards economic and monetary union (EMU), the latter now having entered its first stage. No compelling reason for realignment within the ERM arose. The much more ambitious project of monetary union and its timetable may, however, test the limits of what the Community countries are willing to concede at this stage, as both the divergence of economic performances and the substantial discrepancies between the national proposals submitted to the intergovernmental conference charged with preparing the necessary amendments to the Treaty of Rome would suggest. While communiqués can gloss over incompatible views, legal language requires more precision and hence agreement on substance.

With regard to the cycle-related policy issues in industrial countries, it might first be noted that there is less talk today about the relative merits of supply and demand-side policies. The importance of improving the supply side has been accepted in principle. Some of the easier measures in this area have been taken, but there is unfinished business everywhere. Not everybody may agree, therefore, that structural improvements have in fact played a major role in revitalising the economies of most industrial countries. Nonetheless, it is difficult to deny that nominal and real wage moderation has been an important factor in bringing down unemployment rates to well below their peaks in the mid-1980s, in raising the share of private fixed investment in GNP/GDP, and in fostering economic growth in general. Some of what had been gained in these areas by 1989 may appear to have been lost. Developments in 1990 clearly do not, however, reflect a reversal of supply-side efforts, but rather the cyclical weakening in a growing number of industrial countries. This has shifted the focus back onto how demand management policies should respond to the slowdown in the industrial world.

Fiscal policy has not returned to favour as the principal tool for countering an economic slowdown. Even the automatic fiscal stabilisers that operate in any recession are being partially offset in the United States and Canada by increases in user fees and taxes. The build-up of public debt and the intractability of large structural budget deficits in many countries serve as strong deterrents to the discretionary use of fiscal policy for counter-cyclical purposes. (The jump in the German fiscal deficit obviously reflects the very special circumstances of unification, not counter-cyclical fiscal policy: it is hoped that it will prove only temporary.)

Scepticism about the ability of policy-makers to fine-tune the economy and to eliminate cyclical swings or dampen them significantly also applies to monetary policy. Long and variable lags in the response to monetary policy make attempts to use it counter-cyclically a hazardous undertaking at best; the main impact of policy changes on economic activity may well be felt only after the cyclical situation has changed. Few now believe that monetary policy is in fact capable of imparting a lasting stimulus to economic activity. These considerations suggest that monetary policy should have a medium-term orientation, concentrating on containing inflation and avoiding "stop-go" policies.

Recent debates on monetary policy and even certain policy actions may raise some doubt about how far these considerations are indeed the guiding principles of monetary policy at present. It is true that adherence to a medium-term strategy has not prevented monetary policy from being tightened whenever overheating threatened. But now the assumption seems also to be that, having failed to forestall first overheating and then a recession, monetary policy must take on a stimulative role to lift economies out of recession.

The case for a medium-term strategy, however, never rested on the belief that there would be no business cycle if only monetary policy kept to a steady course. Few policy-makers ever expected wages and prices to be sufficiently flexible to adjust rapidly to any kind of disturbance. There was ample evidence in the 1960s and 1970s that wage and other rigidities in the private sector contributed significantly to unemployment in many countries. Efforts to offset this through demand management policies committed to maintaining a low level of unemployment resulted in a strong inflationary bias. In the 1970s major supply shocks occurred, and it came to be recognised that, stable monetary policies notwithstanding, disturbances in the real economy resulted in movements in output and employment not unlike those characteristic of business cycles. Thus the business cycle is certainly no longer seen as a purely mechanical sequence of events. The steadier policies followed in the 1980s seem to have contributed towards making the upswing more moderate and thus considerably longer. But policy-makers have never assumed that they had found the formula for a never-ending upswing. The concept of a medium-term strategy as the safest or least accident-prone course for monetary policy merely implied that the authorities would show great restraint in responding to cyclical swings, particularly on the downside, trying instead through stable policies to contribute as much as possible towards a steadier and more sustainable medium-term development.

Clearly, there are constraints on such a course of action in the political environment in which most central banks, however independent, operate. A downswing is never welcome, even though – intellectually – it may be accepted that a period of consolidation forms a necessary basis for a new upswing.

Before addressing the political aspects we should consider a more technical reason why the concept of a medium-term policy orientation may find less support at present than was to be expected on the basis of earlier experience. The medium-term orientation was closely associated with the use of an intermediate monetary target which was designed to keep policy on a steady course and even to define what such a steady course would be. With the globalisation of financial markets, deregulation and financial innovation, a growing number of central banks found that the previously established links between their targeted monetary aggregate and the ultimate objective seemed to have weakened. Although most central banks continued to use monetary targets in spite of such difficulties, all accepted that policy should not, in general, be aimed at controlling the development of the monetary aggregates too closely in the short run and that other forward-looking indicators – financial and non-financial – should be taken into account in determining whether policy is on a stable medium-term course. This may have opened the door a little wider for the return of attempts at discretionary counter-cyclical policy, even though the medium-term strategy has not been abandoned in principle.

Behind such technical controversies over the "optimal" time horizon of monetary policy, there presumably lie more fundamental disagreements about political priorities. On the face of it they may seem to concern the importance given to a higher or lower degree of price stability. Central bankers are often suspected of having a professional bias in favour of price stability and of not caring enough about growth and unemployment, although on the other hand they are also often reproached for not delivering the one thing for which they should be held responsible, namely price stability. Criticism from both sides can sometimes be taken as an indication that policy is on the right track, but there is little reason for complacency. A half-way course of fighting inflation most of the time but hardly ever fully succeeding cannot be regarded as the kind of middle-of-the-road solution which one has learned to expect and accept. It is true that the record on price stability was better in the second half of the 1980s than in the 1970s and the first half of the 1980s, but part of what had been achieved – not least owing to the terms-of-trade gains when oil prices dropped in 1986 – has since been slipping away.

The real issue behind present policy controversies may, however, not be the importance to be attached to price stability as such, but rather the question of the time horizon, i.e. the urge to get results quickly. This desire inevitably leads to the view that economic policy (monetary policy included) should concentrate on the goal that is currently most at risk. Given the recession in many countries and the uncertainty about when it will end and how far it might spread in the meantime, a monetary policy stance that favours growth seems to be the obvious choice in the countries concerned. The way to achieve that is seen in bringing down long-term interest rates, on the premise that "real" interest rates are unusually high. This line of argument raises several questions which will be examined in turn.

There is, first of all, the simple question of what is known about "real" interest rates. Because "real" interest rates are nominal interest rates less some compensation for the expected loss of purchasing power, we know only as much about "real" interest rates as we know about inflation expectations, which means that we know very little with any degree of precision. The widespread practice of using recent inflation rates as indicators of inflation expectations even for calculating "real" *long-term* interest rates gives a semblance of accuracy to a procedure that has only convenience to recommend it but lacks even a minimum of plausibility. It implies, for instance, that inflation expectations are insensitive to recent trends in inflation rates – that is, whether the present level has been reached from below or above – as well as to the ranges over which inflation rates have fluctuated in the not too distant past. It might be argued, for example, that in the early 1970s real rates were not as low as usually calculated, since inflation expectations were then much lower than actual inflation rates, which had recently risen but were seen in the markets as quite temporary. By contrast, the apparently high levels of real interest rates at present may reflect the inflation disappointments of the past.

A second question in the same context relates to how the level of nominal long-term interest rates is determined. To argue that "real" interest rates should be lowered in order to stimulate economic growth presupposes that somebody is in control of *nominal* long-term interest rates. (Lowering real interest rates by pushing up inflation expectations cannot be anybody's intention.) Central banks of course exercise close control over a particular short-term interest rate in their own country. This short-term rate has a bearing on other interest rates. But the link to the long-term interest rate at the other end of the yield curve is not simply weak, it is even uncertain in its direction. Other influences on nominal long-term interest rates which may easily outweigh the desired effects of monetary policy are inflation expectations and international capital flows (which in turn respond to interest rate differentials between countries, interest rate expectations in different countries and exchange rate expectations). Moreover, nominal long-term interest rates are rooted in private and public saving and investment patterns and thus influenced by the real return on productive capital.

It is therefore hard to see how international policy co-ordination could ever successfully use nominal long-term interest rates as its focal point, quite apart from the fact that the wide divergence between the cyclical positions of the largest industrial countries would in any event obviously rule out parallel policy moves at present. This is not to deny that the declining trend in western saving ratios is a matter for concern since it puts a dangerously low ceiling on non-inflationary growth, presumably by keeping up, for some time, long-term interest rates. The point is rather that monetary policy cannot do anything about it.

Of much greater importance, however, is the question whether policy-makers are well-advised to concentrate on what they consider to be the "most endangered" goal, for example on inflation when it is about to get out of control and growth when there is slack in the economy. This question is close to, but not quite the same as, that of the choice between counter-cyclical and medium-term strategies already discussed. It may be worth casting light on this from a different angle. Concentrating always on the most endangered goal would in fact mean ignoring some of the most fundamental lessons learned about monetary policy in the last two decades: the complex time dimension of the processes that policy tries to influence, the vital role of expectations and what it takes to establish the credibility of the monetary authorities – three matters that are closely interconnected.

Trite though such a remark may seem, it is important to bear in mind that the economic activity observed at any given moment is the outcome of myriad decisions which have been taken over a long time span, some relatively recently, others years, decades and, if one thinks of the problems of soil erosion due to deforestation in some countries or of the building of railways, even centuries earlier. Similarly, decisions which are taken now – on the basis of current perceptions of economic trends and future policies – will have effects for a long time to come. This is self-evident in the case of the real economy, but it is also true to a considerable extent, though on a different scale, of the process of price formation.

Prices in final product markets rarely simply reflect current supply and demand conditions. Suppliers decide on the prices they ask partly on the basis of historical costs and partly on that of perceived replacement costs. Prices in markets for intermediate products and for factors of production have still deeper roots in earlier decisions and in perceptions of economic trends and policies. Hence, in order to have a significant influence on the process of price formation what is needed is steadfast policies that exert a stabilising influence on a whole range of decisions taken over time.

Expectations are an essential element in the price formation process. However complex the underlying factors, there can be little doubt that price expectations essentially translate the memory of past price performance into projections for the future. Good past price performance forms the basis of policy credibility, which, if not undermined by new developments, helps to keep inflation expectations down. In short, a policy that frequently alters direction according to changing perceptions of what is the most endangered goal cannot be relied upon to achieve any of its objectives, but by the same token a policy that is steadfastly maintained may have a chance of eliminating inflation altogether – and at a cost which may not be excessive in terms of output sacrificed given the long-term benefits to be expected, mainly from a smoother functioning of the market mechanism.

This challenging goal has recently moved out of the realm of the utopian into the political arena, at least in some countries. Of course, stability of the general price level would not mean that all prices are stable. In a well-functioning price system, product and factor prices vary in response to changes in relative demand and costs, although over longer periods of time relative cost structures tend to determine price structures. This is demonstrated by the relative price decline over recent decades in the manufacturing sector, where developments have been dominated by rapid technological advances and economies of scale in production, and the relative price rise in most service sectors, where productivity growth has been less marked. In an environment of moderate inflation such as that of the 1980s most relative price changes come about through differential rates of price increase, while in a non-inflationary environment they result from a decline in some prices and a rise in others. It has been argued that a quality bias in price level calculations implies that inflation rates in the range of 1–2% may be considered price stability for all practical purposes. Nonetheless, the move from an environment of low or moderate inflation to one of no inflation implies an important psychological shift: the average norm becomes one of no price change, and price flexibility needs to be symmetric on the downside as well as the upside if costly output losses are to be avoided.

A basic problem is that price flexibility is often not symmetric; rather there tends to be considerable downward rigidity in prices and wages – as firms and workers show great reluctance to lower previously established norms unless they come under intense and persistent competitive pressure. Few restraints exist, however, to limit price developments on the upside. This difficulty is compounded if the economy is hit by significant shocks, so that rapid, and perhaps large, relative price changes become necessary to keep growth from faltering and unemployment from rising. Partly for this reason, it has proved very difficult in recent decades to do better than achieve merely low inflation and to move on to actual price stability, even in those countries with the best price performance. Moreover, the lowest rate of inflation (around 2%) in the industrial economies during the past quarter-century was reached in 1986 in large part because of the sharp drop in commodity prices, primarily the price of oil. This fall in external prices tended to offset more rapid increases in the prices of domestically produced goods, thus dampening the rise in the general price level but not affecting the underlying inflationary trend.

From all this it must be clear why central banks – even if they enjoy full independence from governments, act with great wisdom and possess exceptional powers of persuasion – find it difficult to pursue the objective of absolute price stability. Certain conditions would have to be fulfilled. An obvious condition is a sufficient degree of social consensus, since in a world in which unavoidable price increases need to be offset by price declines, the consequences will be felt very differently by different social groups. Even more importantly, the trade-off between short-term costs and long-term benefits will also impinge on different sections of society differently. Finally, what is also required is that governments and legislators accept the need to work with a longer time horizon, despite the constraint of the electoral cycle.

These are formidable conditions whose attainment may seem hopelessly unrealistic. But would such a pessimistic conclusion be justified? Perhaps not: several developments, with converging lessons, provide a ray of hope. As the environmental debate illustrates, it is by no means impossible to convince large segments of the population that the systematic undervaluation of future interests needs to be corrected. To be sure, it has taken time and argument, but a shift in public opinion *has* taken place. Something similar has also happened with the public perception of the need to combat inflation. A fundamental change in public perception may well signal the emergence of a more demanding attitude towards the authorities' success in combating inflation. Even more directly relevant is the behaviour of bond markets. Operators in this market have worldwide acquired a much longer time horizon with a strong, well-founded interest in the future course of inflation. They are able to deliver a more convincing message to all policy-makers on the appropriateness of monetary policy than any academic speculation regarding the tolerable level of inflation.

Basle, 23rd May 1991

ALEXANDRE LAMFALUSSY
General Manager

Balance Sheet and Profit and Loss Account

at 31st March 1991

Balance Sheet at 31st March 1991

(in gold francs - see Note 1)

Assets		
Gold		4 860 628 212
Cash on hand and on sight account with banks		7 011 311
Treasury bills		2 461 195 866
Time deposits and advances		
Gold		
Not exceeding 3 months	181 974 060	
Over 3 months	207 848 580	
Currencies		
Not exceeding 3 months	27 803 472 834	
Over 3 months	2 800 208 600	
		30 993 504 074
Government and other securities at term		
Not exceeding 3 months	5 141 064 013	
Over 3 months	2 242 856 800	
		7 383 920 813
Miscellaneous		12 879 652
Land, buildings and equipment		1
		45 719 139 929

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 1991, gold payable against currencies on forward contracts amounted to 137 720 955 gold francs.

		Before allocation of the year's Net Profit	After allocation of the year's Net Profit
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	622 416 157		*646 716 157*
Special Dividend Reserve Fund	39 530 055		*39 530 055*
Free Reserve Fund	488 466 872		*545 166 872*
		1 180 483 397	*1 261 483 397*
Deposits (gold)			
Central banks			
Sight	4 399 417 003		
Not exceeding 3 months	51 224 811		
Other depositors			
Sight	399		
		4 450 642 213	*4 450 642 213*
Deposits (currencies)			
Central banks			
Sight	2 106 981 016		
Not exceeding 3 months	33 140 509 953		
Over 3 months	938 196 164		
Other depositors			
Sight	38 046 718		
Not exceeding 3 months	2 182 066 504		
		38 405 800 355	*38 405 800 355*
Staff Pension Scheme		150 051 390	*150 051 390*
Miscellaneous		1 121 566 666	*1 121 566 666*
Profit and Loss Account		114 892 783	—
Dividend payable on 1st July 1991		—	*33 892 783*
		45 719 139 929	*45 719 139 929*

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 1991 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, 26th April 1991 — *PRICE WATERHOUSE*

Profit and Loss Account

for the financial year ended 31st March 1991
(in gold francs)

Net interest and other operating income		175 681 702
Less: Costs of administration		
Board of Directors	759 571	
Management and Staff	27 915 205	
Office and other expenses	12 940 194	41 614 970
Net operating surplus		134 066 732
Less: Amounts transferred to		
Provision for Exceptional Costs of Administration	4 173 949	
Provision for Building Purposes	10 000 000	
Provision for Modernisation of Premises and Renewal of Equipment	5 000 000	19 173 949
Net Profit for the financial year ended 31st March 1991		114 892 783

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: 200 Swiss francs per share on 473 125 shares	33 892 783
	81 000 000
Transfer to General Reserve Fund	24 300 000
	56 700 000
Transfer to Free Reserve Fund	56 700 000
	—

Movements in the Bank's reserves

during the financial year ended 31st March 1991
(in gold francs)

I. Development of the Reserve Funds resulting from allocations for the financial year 1990–91

	Legal Reserve Fund	General Reserve Fund	Special Dividend Reserve Fund	Free Reserve Fund
Balances at 1st April 1990, after allocation of Net Profit for the financial year 1989–90	30 070 313	622 416 157	39 530 055	488 466 872
Add: Allocations for the financial year 1990–91..	—	24 300 000	—	56 700 000
Balances at 31st March 1991 as per Balance Sheet	30 070 313	646 716 157	39 530 055	545 166 872

II. Paid-up Capital and Reserve Funds at 31st March 1991 (after allocation) were represented by:

	Paid-up Capital	Reserves	Total
Net assets in			
Gold...	295 703 125	366 384 559	662 087 684
Currencies..	—	895 098 838	895 098 838
	295 703 125	1 261 483 397	1 557 186 522

Board of Directors

Bengt Dennis, Stockholm
Chairman of the Board of Directors,
President of the Bank

Bernard Clappier, Paris
Vice-Chairman

Dr. Carlo Azeglio Ciampi, Rome
Dr. Lamberto Dini, Rome
Dr. W.F. Duisenberg, Amsterdam
Prof. Dr. Leonhard Gleske, Frankfurt a/M.
Jacques de Larosière, Paris
The Rt.Hon. Robert Leigh-Pemberton, London
Dr. Markus Lusser, Zurich
Karl Otto Pöhl, Frankfurt a/M.
The Rt.Hon. Lord Richardson of Duntisbourne, London
Alfons Verplaetse, Brussels
Philippe Wilmès, Brussels

Alternates

A. D. Crockett, London, or
M. D. K. W. Foot, London
Dr. Antonio Fazio, Rome, or
Dr. Carlo Santini, Rome
Philippe Lagayette, Paris, or
Francis Cappanera, Paris
Jean-Jacques Rey, Brussels
Dr. Hans Tietmeyer, Frankfurt a/M., or
Dr. Wolfgang Rieke, Frankfurt a/M.

Management

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R.T.P. Hall	Assistant General Manager
Dr. Giampietro Morelli	Secretary General, Head of Department
Rémi Gros	Head of the Banking Department
Dr. Horst Bockelmann	Economic Adviser, Head of the Monetary and Economic Department
Marten de Boer	Manager, Banking Department
Jean Vallet	Deputy Secretary General
André Bascoul	Deputy Manager, General Secretariat
Dr. H.W. Mayer	Deputy Manager, Monetary and Economic Department
Dr. Kurt Spinnler	Deputy Manager, Banking Department
Prof. Dr. Mario Giovanoli	Legal Adviser, Deputy Manager
Dr. Joseph R. Bisignano	Assistant Manager, Monetary and Economic Department
Jean-Claude Dagassan	Assistant Manager, EMCF Agent
P.C. Bridge	Assistant Manager, Banking Department
Tullio Pollonio	Assistant Manager, Chief Accountant
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
Robert von Werra	Assistant Manager, Monetary and Economic Department

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Dr. Gunter D. Baer	Secretary General of the Committee of Governors of the Central Banks of the Member States of the EEC