
BANK FOR INTERNATIONAL SETTLEMENTS

58th ANNUAL REPORT

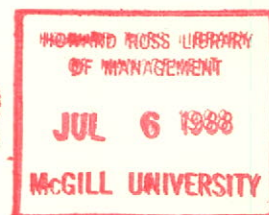
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Bank for International Settlements

58th Annual Report

1st April 1987 — 31st March 1988



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Table of Contents

	Page
Introduction	1
I. Looking back with consternation and some relief	3
II. General economic developments and policies in 1987	9
Highlights	9
Output: the global picture	10
Developments in output and demand: industrial countries	11
Inflation: consumer price and wage developments	16
Employment and unemployment	20
Domestic demand and external adjustment	23
Certain features of recent developments in manufacturing	24
Fiscal policy	29
Short-term developments	29
The debate over fiscal policy in the short term	33
The public debt constraint	34
Structural adjustment and micro-economic reform	36
The developing countries	37
Commodity prices and other external influences	39
Capital formation	41
Saving and financial balances	42
Inflation and anti-inflation policies	44
III. International trade and payments	47
Highlights	47
World trade	48
External adjustment in the three largest industrial countries	52
The persistence of imbalances and the outlook for adjustment in the three largest industrial countries	55
Current-account developments in other industrial countries	61
External developments in developing countries	65
The external situation of the major debtor countries: adjustment since 1982	67
International capital movements and the financing of current-account imbalances in the industrial countries	69
External financing of the developing countries	74
IV. Developments in domestic financial markets	76
Highlights	76
The persistence of saving/investment imbalances	77
Interest rates	79
Equity prices: fundamental valuation, speculative bubbles or market failure?	84
Causes of the market crash	86
The October equity market break	90
The US break	91

	Page
<i>The global break</i>	93
<i>Lessons and regulatory implications</i>	96
Financial markets and finance in a turbulent period	97
<i>Institutions and market activity</i>	97
<i>Finance flows and indebtedness</i>	100
Financial regulation: trends and implications of the past year	102
<i>Financial liberalisation</i>	102
<i>Supervision</i>	103
<i>Some implications</i>	104
 V. International financial markets.....	 107
Highlights	107
The overall picture	107
The international banking sector	112
<i>The development of the overall aggregates</i>	112
<i>Sources and uses of international banking funds within the reporting area</i>	112
<i>Development of the reporting banks' business with countries outside the reporting area</i>	114
<i>Developments in individual market centres</i>	117
<i>Currency composition of international banking activity and growth of the ECU market</i>	119
<i>The nationality structure of international banking</i>	120
<i>The syndicated loan market</i>	122
The international securities markets	122
<i>The Euro-note market</i>	122
<i>The international bond market</i>	125
<i>Outstanding debt and net credit flows in the international bond markets</i>	129
The debt situation.....	132
 VI. Monetary developments and policy	 139
Highlights	139
Monetary policy in the largest industrial countries in a context of imbalances in the world economy	140
<i>Exchange market developments as a constraint on monetary policy</i>	140
<i>Long-term interest rates as a constraint on monetary policy</i>	143
<i>Financial fragility as a constraint on monetary policy</i>	144
Alternative monetary policy objectives and strategies	146
Medium-term objectives of monetary policy and money stock targeting	148
<i>Interpreting rates of monetary expansion</i>	148
<i>Developments in targeting procedures</i>	152
Official foreign exchange market intervention and monetary policy.....	155
The conduct of exchange rate oriented monetary policy in small and medium-sized industrial countries.....	157
<i>Countries participating in the exchange rate mechanism of the EMS</i>	157
<i>Monetary policy with exchange rate guides in other countries</i>	161
<i>Flexibility in exchange rate based monetary policies</i>	162
The risk of excessive dependence on monetary policy	164

	Page
VII. The international monetary system	165
Highlights	165
Exchange markets	165
Current exchange rate developments	165
Longer-term perspectives	172
The experience with the Louvre Accord	175
The implications of a high rate of capital mobility for exchange rate stability	177
The importance of a predictable and internationally consistent policy framework	178
Developments within the EMS	179
Gold production and the gold market	182
International liquidity	185
Current reserve developments	185
Macro-economic implications	191
VIII. Activities of the Bank	194
Development of co-operation between central banks and international organisations ...	194
Functions as Agent, Trustee and Depositary	197
Trustee for international government loans and Depositary under the terms of the Act of Pledge concluded with the European Coal and Steel Community (ECSC)	197
Agent for the European Monetary Co-operation Fund (EMCF)	197
Agent for the private ECU clearing and settlement system	198
Financial assistance to central banks	199
Operations of the Banking Department	199
Liabilities (composition of resources)	200
Assets (employment of resources)	203
Net profits and their distribution	205
Changes in the Board of Directors and in the Management	206
Conclusion	209
* * *	
Balance Sheet and Profit and Loss Account at 31st March 1988	217
Board of Directors	222
Management	223

List of Graphs (*) and Tables

	Page
General economic developments and policies in 1987	
World output growth.....	10
Developments in real GNP/GDP and demand components.....	12
Changes in real GDP, other industrial countries.....	15
Consumer prices.....	16
Import and consumer prices, 1979-87*.....	17
Nominal wages, 1979-87*.....	18
Nominal wages in the smaller industrial countries.....	19
Unemployment rates, 1979-87*.....	21
Employment growth, 1973-87.....	22
Total domestic demand, 1982-87*.....	23
Output in manufacturing, 1980-87*.....	25
Developments in real value added, factor inputs and productivity.....	26
Developments in labour costs and international competitiveness.....	27
Real effective exchange rate and the trade balance for manufactured goods in the United States, 1960-87*.....	28
Indicators of market shares for manufacturing.....	29
General government budget balances.....	31
Central government deficits and debt, 1966-87*.....	35
Output growth in developing countries.....	38
Commodity price developments.....	39
Commodity composition of non-oil exports.....	40
External influences on developing countries' output developments.....	41
Investment: Output share and efficiency.....	42
Saving and financial balances.....	43
Inflation in the developing countries.....	45
International trade and payments	
World trade, 1984-87*.....	49
World trade in goods and services.....	51
Alternative measures of the current-account balances of the three largest industrial countries.....	52
Changes in the non-oil trade balances of the three largest industrial countries.....	53
Total domestic demand growth and real effective exchange rates, 1982-88*.....	56
Estimated production costs and profit margins of foreign suppliers to the markets of the United States, Japan and Germany, 1983-87*.....	57
Estimated production costs and profit margins of exporters in the United States, Japan and Germany, 1983-87*.....	59
International current-account balances.....	62
Relative cyclical positions and changes in trade balances in 1987*.....	63
South-East Asian economies: Current-account balances.....	66
Current-account balance and external debt of fifteen heavily indebted countries.....	69
United States: Capital-account transactions.....	70
Japan: Capital-account transactions.....	72
Germany: Capital-account transactions.....	73
Developing countries: Estimated external financing of the current-account imbalances of selected groups of countries.....	75

Developments in domestic financial markets

Sectoral financial balances	78
Nominal interest rates and inflation, 1985–88*	80
Bond yields less short-term interest rates	81
Premium on dollar instruments: Short-term interest rates and government bond yields ..	82
Volatility of government bond yields in the United States, Japan, Germany and the United Kingdom	83
Stock market prices, 1982–88*	85
Stock market indices	86
Real stock market prices, 1970–87*	87
Equity valuation indicators, 1979–87*	89
Program trading sales during the break	92
Trading concentration during the October break	93
The global equity market break	94
Turnover in major secondary asset markets, 1986–88	99
Frequency of large daily stock price index changes, 1987–88*	100

International financial markets

Activity in international financial markets, 1982–87*	108
Estimated net lending in international markets: International bank lending and securities issues	109
BIS reporting banks: Selected features of international banking activity	113
Estimated sources and uses of international banking funds	114
Estimated changes in positions of BIS reporting banks vis-à-vis groups of countries outside the reporting area	115
The reporting banks' business with individual groups of non-OPEC developing countries ..	116
Developments in individual banking centres	118
The currency composition of reporting banks' cross-border positions	119
The structure of the ECU banking market	120
International bank assets, by nationality of banks	121
International financial market activity, by market sectors and borrowers	123
Euro-note facilities: Issues outstanding, 1986–88*	124
Structural features of the international bond markets	126
Yields of selected international bonds and Euro-dollar deposit rates, 1986–88*	127
Yields and issuing activity in the Euro-dollar bond market, 1986–88*	128
Issuing activity in the equity-related bond market, 1986–88*	129
Debt outstanding and net borrowing in the international bond markets, by type and currency of issue	130
Debt outstanding and net borrowing in the international bond markets, by type and nationality of issuer	131
Evolution of major debtor countries' external indebtedness and debt service, 1980–87* ..	133

Monetary developments and policy

Official and market interest rates, 1986–88*	142
Monetary and credit aggregates: Objectives and rates of expansion	149

	Page
Components of the increase in the broad money stock and in total liquidity.....	150
Changes in the broad money stock and the contributions of selected counterparts.....	152
Influences on the central bank money stock	155
Interest rates in selected European countries, 1986–88*	158
Inflation-adjusted bond yields, March 1988	163

The international monetary system

Bilateral exchange rates against the US dollar, 1985–88*	166
Long-term interest rates and foreign exchange reserve movements, 1986–88*	168
Bilateral exchange rates against the Deutsche Mark, 1985–88*	171
Effective exchange rates, 1981–88*	173
Real bilateral exchange rates against the US dollar and the US current-account balance, 1972–88*	174
Spot exchange rates in the EMS exchange rate mechanism, 1987–88*	180
Market prices of gold, 1985–88*	182
World gold production	183
Estimated market sources and uses of gold	184
Changes in global reserves	186
US current-account balance and estimated changes in foreign exchange reserves, by types of placement	188
Changes in individual countries' official non-gold reserves	190

Activities of the Bank

Outstanding Community loans as at 31st March 1988	198
Development of the balance-sheet total over the past five financial years	200
Development of the composition of resources over the past five financial years	200
Borrowed funds, by origin	202
Borrowed funds, by nature and term to maturity	202
Distribution, by nature, of sight assets and other investments	204
Time deposits and advances and government and other securities at term, by term to maturity	205

58th Annual Report

*submitted to the Annual General Meeting of the
Bank for International Settlements
held in Basle on 13th June 1988*

Ladies and Gentlemen,

I have the honour to submit herewith the fifty-eighth Annual Report of the Bank for International Settlements for the financial year which began on 1st April 1987 and ended on 31st March 1988.

The net profit for the year amounted to 95,937,052 gold francs, after transfer of 964,341 gold francs to the Provision for Exceptional Costs of Administration and 22,000,000 gold francs to the Provision for Modernisation of Premises and Renewal of Equipment. This compares with a net profit for the preceding year of 91,081,090 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 30,937,052 gold francs in payment of a dividend of 175 Swiss francs per share.

The Board further recommends that 26,000,000 gold francs be transferred to the General Reserve Fund, 6,000,000 gold francs to the Special Dividend Reserve Fund and the remainder of 33,000,000 gold francs to the Free Reserve Fund.

If these proposals are approved, the Bank's dividend for the financial year 1987-88 will be payable to shareholders on 1st July 1988.

I. Looking back with consternation and some relief

1987 was an eventful year, but also, in important areas, a puzzling one for those concerned with economic analysis. Some things which it had been feared might go wrong did go wrong. But their immediate consequences were not as severe as had been anticipated; many observers even go so far as to speak of a blessing in disguise with respect to the most dramatic of them: the stock market crash. There is a widespread feeling that lessons should be drawn, but it is not easy to see what these lessons are. Are the linkages between the real and the financial world today weaker than in the past? Have some of the sequences of events in 1987 been merely fortuitous or can one count on them to hold in the future? Apart from these rather ambiguous cases, some things turned out better, others worse than had been expected; some came quite close to what had been foreseen. Surprisingly, in spite of all that has happened, world economic prospects in the spring of 1988 present a picture not strikingly different from that of a year ago. The balance of perceived chances and risks, after oscillating wildly, has returned to something like its previous position: neither gloom nor exuberance seem to be called for at present. This, of course, is also to say that most of the major problems for economic policy in evidence then are still awaiting solution.

Before embarking on a stocktaking, however, it might be useful to recall here the fears which in retrospect may be said to have been in part justified and in part unjustified: justified in that the events feared did come about, unjustified in that their effects were less harmful than or different from those generally assumed.

Major turbulence in the financial markets had figured prominently in all crisis scenarios for some time. And there was more than enough of such turbulence in 1987, the bond market "crash" in the United States being completely overshadowed, and in fact to some extent redeemed, by the crash in the equity markets. When this second crash came in October it stunned many — and not only those directly involved — both by its sheer size and by its speed. Stock markets the world over, large and small, that were open to foreign participation were almost simultaneously affected, and (with the exception of Japan) to a similar degree, irrespective of prevailing price levels, price/earnings ratios or price developments prior to the event. The uniformity of the fall in equity prices of between one-third and one-half from the peak in 1987 to post-crash lows was a phenomenon for which no one had been prepared; there had been much more awareness of the degree to which bond markets were linked internationally than of a similar globalisation of equity markets, and indeed the protracted boom on stock markets worldwide had differed quite markedly in intensity from one market to another.

The 1929 stock market crash (which was in fact less precipitous) was in everyone's mind, not least because of its ominous association with the subsequent slump in the world economy. Even those who pointed out that economic policy-making today is far more competent than it was in the early 1930s could not overlook the fact that an enormous amount of private wealth had been wiped out at a stroke. A significant contraction in consumer spending was widely forecast, in particular for the United States, where shareholdings represent as much as 20% of household financial wealth. Secondary effects on inventories and even on investment in consumer goods industries were not ruled out. Instead, the mid-year acceleration in economic growth was largely maintained in the fourth quarter, when the level of real GDP in the seven largest industrial countries was 4% higher than a year earlier. Growth forecasts have been revised upwards again in many countries. But that is not to say that the crash will not leave its mark, on private portfolio behaviour and on financing opportunities for industrial enterprises; the reduced availability of venture capital — always in short supply — may have long-term growth effects; market arrangements and regulations have come under close scrutiny.

Another fear, not unrelated to the anticipation of turbulence in the financial markets, had concerned the outlook for international policy co-ordination as a means of reducing external imbalances and of bringing greater stability to the foreign exchange markets. The sharp appreciation of the currencies of the surplus countries vis-à-vis the US dollar since early 1985, which by late 1986 had amounted to almost 60% for the yen and more than 70% for the Deutsche Mark (a little less in real terms), had caused not only export demand but also investment in machinery and equipment in those countries to slow down to such an extent that fears had mounted of a severe recession should the decline of the US dollar continue. Such a recession would not only have been obviously undesirable in itself, it would also have aggravated the international current-account imbalance. An improvement clearly required — and still requires — domestic demand to grow more strongly in the surplus countries than in the United States. A continued decline of the dollar was also seen as undesirable from the point of view of its effect on relative competitive positions; it seemed better to leave the large exchange rate adjustments that had already taken place to produce their effects on flows of goods and services, in other words to allow the temporary J-curve effects to work themselves out. Above all, it seemed imperative to avoid a substantial undervaluation of the US dollar, which could only serve to keep the pendulum swinging from one misalignment to another. The avoidance of future misalignments had, after all, been the solemn resolution made at the Plaza meeting in September 1985.

Against this background, the Louvre Accord of February 1987 represented a more substantial commitment on the part of the seven major industrial countries to co-ordinate macro-economic policies and exchange market intervention than those that had preceded it. It came at a time when the willingness of private foreign investors to take up US government bonds was declining sharply, leading not only to a further weakening of the US dollar in the exchange market but also to a rise in long-term US interest rates, which

had been on a downward trend for three years. The official intervention subsequently undertaken exceeded anything previously witnessed; the readiness of central banks to engage in this always somewhat precarious activity was, at least in some cases, stretched to its limits. After April 1987 the volume of intervention decreased, and there was little intervention in support of the dollar until the second half of August. The authorities seemed to have succeeded, after considerable effort, in convincing the markets that they were serious about keeping exchange rates around their existing levels for the time being. Almost simultaneously, however, policy-makers were faced with one consequence of the new market perception of greater exchange rate stability that they had not bargained for — the existing interest rate differentials in the bond markets were inconsistent with expectations of relatively stable exchange rates for the currencies in question: long-term interest rates in Japan and Germany started to rise.

This development met with little policy resistance in either Japan or Germany. The central banks of both countries felt that their policies had been more expansionary than was justified in a medium-term perspective and in relation to their declared or undeclared monetary targets. Sooner or later the rise in bond yields provided an argument for at least a small increase in short-term rates as well. In the United States bond yields, which, as already mentioned, had started to move up in January when central banks began to take the place of foreign private investors in the exchange market (but not, of course, in the bond market), had stabilised from May to mid-August but subsequently continued to rise, and the Federal Reserve “sanctioned” this by raising the discount rate in early September.

These parallel interest rate movements appeared highly “unco-ordinated” and raised doubts as to whether the Louvre Accord really represented a step towards credible policy co-ordination. The fact that in the meantime much had been done in the required direction in the fiscal field, with a sizable stimulative package in Japan, a bringing-forward of some tax relief measures in Germany and a sharp, if partly fortuitous, reduction of the fiscal deficit in the United States, was largely ignored. With the stock market crash, which at least in its timing seemed related to quarrels about the absence of policy co-ordination, and with a renewed fall of the dollar and no sign of improvement in the nominal US trade balance, all the fears and uncertainties as to whether the Louvre Accord had been the right answer to the problems of exchange market instability and external imbalances seemed to be vindicated. Many observers were quick to claim that they had known all along that the agreement would fail; some strongly urged the authorities to renounce all efforts at policy co-ordination, which they regarded as fundamentally futile.

These fears and arguments against policy co-ordination, which seemed at least partially justified in late 1987, no longer look so a few months later. The agreement of 22nd December 1987, although lower-key than its predecessors (it was achieved without a meeting of Ministers and central bank Governors), was followed by substantially less exchange market intervention; policy co-ordination, pronounced dead in November 1987, is now firmly in place again. Volatility in the exchange markets has subsided somewhat. The

excessive response to monthly US trade figures is, however, an indication of persisting uneasiness about whether the external imbalances have been reduced to sustainable levels, i.e. to levels which will be financed by private capital flows without the risk of disruption in financial markets.

On the debt front, Brazil's decision in early 1987 to stop servicing its medium and long-term debt to commercial banks came fairly close to confirming the worst fears harboured in this area: namely, that one of the major debtor countries would actually repudiate its external debt. Had this move proved successful, others might have followed suit, which would have entailed systemic risks, notwithstanding the fact that the banks' exposure to problem debtor countries had been reduced substantially in relation to their capital and reserves. However, once again the consequences were less damaging than expected: not only was there no chain reaction, but Brazil itself reversed its decision late in 1987 and has now resumed interest payments. Meanwhile, some banks which had hitherto made little or no provision for the risks inherent in such problem loans now did so on a large scale, even at the cost of having to post an overall annual loss. Stock markets at the time reacted quite favourably to these moves, a rare example of markets taking a long-term view.

There have been other developments in this field which suggest that the situation is no longer doomed to deteriorate as time goes on: some banks have been prepared to make substantial concessions in order to mobilise frozen assets or to switch them into assets of higher quality; and attempts have been made to broaden the range of options open to both creditors and debtors. There have been improvements also in some debt burden indicators, owing to the decline in interest rates up to 1987, as well as, in some cases, to recent improvements in commodity prices and sustained demand from industrial countries. While these are hopeful signs, there can be no denying that there is still a long way to go if the countries concerned are to "grow" out of their difficulties, and that this will be impossible unless there is a resumption of net capital flows into these countries. As the one presupposes the other, however, there can be no single, simple solution. What can be achieved by ad hoc approaches is no more than a series of difficult compromises, bringing together disparate and even normally irreconcilable elements. Debt servicing problems in developing countries have invariably had the effect of dampening their growth prospects, and their performance contrasts sharply with that of other developing countries without such problems. On the whole the developing countries grew less in 1987 than in 1986 (by 3.1 as against 4.1%), but, above all, the gulf between their performances has widened further.

Other events of 1987, which may also hold lessons worth learning, do not fall into the rather unusual pattern of feared events occurring, but without the feared immediate consequences. Contrary to often rather gloomy medium-term growth forecasts, there have been quite favourable developments in a number of countries, including the United Kingdom, Canada and, most importantly, Japan (with GDP growth of between 3.6 and 4.2%) and also some new members of the EEC, namely Spain and Portugal (where output expanded by 5% or more). There is, however, no common policy denominator to

account for the strong growth performance of these countries. Whereas in the case of Spain and Portugal accession to EEC membership itself may well have been the most important single contributory factor, the United Kingdom and Japan might be cited as evidence of the efficacy of supply-side and demand management policies respectively. These two cases also demonstrate the different time dimensions of supply and demand-side policies. Improving supply-side conditions in an economy requires of policy-makers above all courage, single-mindedness, perseverance and patience. Rewards are never quick in coming. The Japanese example of successful demand management through fiscal action surprised chiefly by the speed with which it stimulated domestic demand (announcement effects apparently being quite strong), thus dissipating the earlier fears of a recession when profits in export industries had been hard-hit. The case of Canada does not fit into either of these two moulds: a strong growth impetus came from private investment, in response presumably to a prolonged high rate of capacity utilisation and, perhaps, to firming commodity prices.

In continental Europe, apart from the exceptions already mentioned, surprises with regard to growth were more of the negative kind. Domestic demand in these countries was generally more buoyant than GDP growth, as is only to be expected of surplus countries in the process of adjustment, which a number of them are. The appreciation of European currencies continued to take its toll on export demand from elsewhere. The European market as a whole is, of course, the largest "common market" in the world and in principle should not have to have its growth rate determined by demand from outside. At present, however, there are still major obstacles to enjoying the benefits to be obtained from a unified market. Policy-making is still fragmented. For a country within the EMS it is considered to be asking for trouble to grow more strongly than Germany, which, however, is itself no more prepared to take on a locomotive role in the European context than on a global basis. Its authorities have little confidence in the effectiveness of demand management. But, at the same time, improving supply-side conditions in that country is still largely an unfinished business, as the Government itself admitted recently in appointing a special commission to look into all aspects of deregulation. With a declining population there is no pent-up demand for housing, which in Japan and Canada was important in stimulating domestic demand.

Having discussed the fears that turned out to be in some ways justified, in others unjustified, and reviewed some unexpected developments, it may also be worthwhile, as a further prelude to the detailed stocktaking to be found in the body of this Report, to list the areas where things worked out more or less as foreseen in 1987 and where no surprises, welcome or unwelcome, occurred. Inflation was largely kept in check, although a truer — and less auspicious — picture of the underlying trend emerged as windfall stability gains from the decline in oil prices and commodity prices in general ceased to play a role. Excessive monetary growth in quite a number of countries (the United States being the main exception) has as yet had little impact on price performance because demand pressures have remained moderate, albeit with some exceptions, and wage behaviour has remained largely unchanged in spite

of a slightly modified price climate. The stock market crash had a clear dampening effect on inflationary expectations and thus helped to maintain the balance in most economies. By the same token, sharp price increases for real estate and other fixed assets are as a rule not only an early indicator of excess liquidity even when consumer prices remain fairly stable, but are also a factor in the formation of inflationary expectations. A stock market crash is not the best way to keep inflationary expectations down; the avoidance of excess liquidity is undoubtedly a far better method. This is not always easy at times when central bank intervention is called upon to play an important role in bringing greater stability to the exchange markets and foreign exchange reserves grow rapidly. It is true, however, that overall there was no strong acceleration of monetary growth in 1987 compared with 1986, although the volume of intervention in 1987 far exceeded that of the previous year.

The main body of this Report, in which all these topics will be discussed in greater depth, is organised in the same way as in the past two years, with two chapters each on "real" economic developments, on financial markets and on policy issues, one chapter analysing developments from a national angle, the other viewing them in the international context. This broad organising principle has not been applied rigidly; a certain amount of overlapping between chapters has been accepted when it seemed warranted for reasons of coherence. More coverage than before has been given to developing countries. The conclusion of the Report tries not so much to summarise the main points as to give a comprehensive view of where we stand at present in the continuing struggle with the problems besetting the world economy.

II. General economic developments and policies in 1987

Highlights

Economic growth was well maintained on average in the industrial countries last year, accelerating slightly to 3% compared with 2¾% in 1986. This fact was not obvious during the year itself, however, as the first half proved to be weaker than had been expected and the second half stronger, both before and after the stock market crash. Between the fourth quarters of 1986 and 1987 the growth rate was 4%; in Japan it was as much as 5¼%. The indicators available so far this year also show no discernible untoward influence of the crash. Nevertheless, underlying growth remained rather weak in much of continental Europe.

In the developing countries, on the other hand, growth declined as external demand weakened in real terms. In some countries, especially in Latin America, restrictive policy measures had to be taken in the face of sharply accelerating inflation.

After declining in 1986 as the oil price fell, inflation in the industrial countries rose again somewhat last year. By the end of the year consumer prices were on average almost 4% above their level a year earlier. In a few countries and markets there were some muted signs of a revival of domestic inflationary pressures. For the most part, however, domestic inflation remained under control. In the developing world, by contrast, inflation rose, with a particularly sharp acceleration in the Latin American countries.

Last year's growth performance, combined with some tendency for labour force growth to slacken, resulted in a small decline in average unemployment in the industrial countries. This was, however, the outcome of disparate trends as unemployment remained high or even increased slightly in much of Europe.

During 1987 it became clearer that the international adjustment process was under way in real terms, but its pace was slow. The process was seen most clearly in the very sharp, policy-assisted, acceleration in the growth of domestic demand in Japan in the second half of the year. The corresponding slowdown in the United States was less sharp, however, and indeed began to be reversed in the second half of the year. In addition, a portion of the counterpart of the improvement in the US real foreign balance was seen in countries which are not in surplus. The performance of manufacturing industry will be important for the continued adjustment of the US trade position. Some recent improvement is visible here, but it is questionable whether capacity is expanding sufficiently rapidly. Further fiscal correction is also required.

Macro-economic policy continued to be set in a mainly medium-term framework last year, with emphasis on attempts to facilitate structural adjustment and micro-economic reform and to reduce fiscal imbalances. The

US budget deficit declined sharply under the influence of some temporarily favourable factors. The Japanese authorities, however, introduced a significant package of short-term expansionary measures with a view to speeding up the international adjustment process. In Germany there was a similar, but less extensive, compromise with medium-term goals for public finance. Generally, however, the room for short-term macro-economic policy manoeuvre is still perceived to be limited, in particular because of the need to keep both inflation and public debt under medium-term control. It is this which explains the intensified search for ways to strengthen the supply potential of the industrial economies.

World output growth ¹								
Country groups and regions	1985 GDP in billions of US dollars	1976–81	1982	1983	1984	1985	1986	1987
		percentage change in real GDP, annual rate						
Seven major countries	7,649	2.9	−0.6	2.9	5.2	3.3	2.8	3.1
Other industrial countries ²	1,183	2.1	0.8	1.6	3.6	3.1	2.6	3.0
Developing countries	2,302	4.4	1.7	2.0	4.5	3.1	4.1	3.1
Major oil producers ³	882	2.9	−0.3	−2.0	0.9	−0.9	0.5	−0.6
Other developing countries	1,420	5.5	3.1	4.6	6.7	5.4	6.3	5.4
Africa and Middle East	168	4.3	6.3	3.9	−0.5	1.7	3.4	1.0
Asia	832	6.5	4.8	7.6	9.2	6.8	6.7	7.3
of which: NICs ⁴	195	9.3	4.4	8.3	9.0	3.5	10.7	12.2
Latin America	420	4.1	−1.5	−1.2	4.7	4.2	6.5	3.3
Eastern Europe ⁵	1,066	3.8	2.7	3.8	3.5	3.4	4.2	2.4
World	12,200	3.2	0.3	2.8	4.8	3.2	3.2	3.0

¹ For industrial countries, group averages are calculated using GDP weights and exchange rates of the preceding year. For other country groups and for the world total, averages are calculated using 1985 GDP weights and exchange rates. Owing to lack of data the following countries are not included: Afghanistan, Angola, Kampuchea, Laos, Mongolia, Mozambique, North Korea and Vietnam. ² Includes the countries listed in the table on page 15, Iceland and Luxembourg. ³ OPEC members, Mexico and Trinidad and Tobago. ⁴ Hong Kong, Singapore, South Korea and Taiwan. ⁵ Net material product.

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

Output: the global picture

Early last year most forecasters predicted a small but general decline in world output growth. In the event, the decline was close to the predicted one for the world as a whole, but was entirely accounted for by the developing countries, where growth fell by one percentage point. Moreover, the distribution of growth rates between the industrialised countries was more uneven than had generally been envisaged. The strong upturns in Japan, the United Kingdom, Canada, Spain and Portugal took most forecasters by surprise. At the same time, few had expected that output growth in continental Europe would be so weak as to cause a further rise in unemployment. The quarter-to-quarter changes in output growth were also uneven, the first quarter of the year being especially weak, partly as a result of harsh weather conditions in Europe. On the other hand, the final two quarters were unexpectedly strong, particularly in the light of the stock market crash. Initially, many observers discounted the strength of demand and output in the fourth quarter because of the substantial

Growth strengthens in industrial countries . . .

contribution of inventory build-ups (about one-quarter of GDP growth for the seven largest countries), and forecasts for 1988 real growth were lowered by $\frac{1}{2}$ to 1 percentage point. However, as subsequent developments in current and forward-looking indicators point to continued strength, the forecasts for 1988 are on average back to or above their pre-crash levels.

... but slows in
the developing
world

The lower output growth in the less developed countries was partly the result of developments in Latin America, where a previous deterioration in the current external account and the build-up of inflationary pressures had forced a number of countries to take restrictive measures. The decline in output growth was not, however, confined to Latin America. Mainly owing to unfavourable commodity price developments in the early part of the year and adverse weather conditions, GDP growth in Middle Eastern and African countries fell to only 1%. Per capita income in sub-Saharan Africa, which includes most of the countries with incomes of less than US\$ 400 per head, declined to a level almost 6% below that of 1980. Oil-producing countries experienced a fall in output as the combined result of weak demand in international oil markets and restrictive policies aimed at reducing imports and protecting the level of foreign reserves. By contrast, output growth in the Asian region accelerated, and for the second consecutive year the four newly industrialised countries (NICs) recorded double-digit growth rates.

Developments in output and demand: industrial countries

Seven major
countries

Average output growth in the seven major industrial countries accelerated slightly last year, although the growth of total domestic demand fell. A similar development may be observed for the three largest countries on average, but this outcome was the result of very different trends in the three countries: in the United States output growth was stable, as an improvement in the real external account offset a fall in the growth of domestic demand; in Japan domestic demand growth accelerated and the decline in real net exports was less than in 1986; in Germany both output and domestic demand growth declined, while the contribution of changes in the real external account was the same as in 1986.

US demand
slowdown
smaller than ...

A major factor behind the slowdown in real domestic demand growth in the United States was weaker household spending, owing to lower real disposable income growth. But at the same time business fixed investment showed some recovery, and a strong build-up of inventories — particularly in the last quarter — accounted for one-third of the total rise in domestic demand. It probably also contributed to the continued high pace of import growth, which at over 7% entailed further losses of domestic market shares. Perhaps because of wealth effects stemming from the rise in the stock market, but also as a result of the usual lag between household spending and income and only a small rise in business saving, private saving (as a percentage of GNP) declined to an all-time low last year. In combination with the inventory build-up it also led to a sharp fall in the private sector financial balance, so that in contrast to earlier patterns the improvement in the public sector financial

Developments in real GNP/GDP and demand components¹

Countries	1976-81 ²	1982	1983	1984	1985	1986	1987 ³	1987 ^{3,4}
	percentage change, annual rate							
United States								
Private consumption	2.3	1.3	4.7	4.8	4.6	4.2	1.8	1.0
Public consumption	1.6	1.9	1.1	4.4	7.3	3.8	2.3	2.2
Gross fixed investment	3.9	-9.6	8.2	16.8	5.5	1.8	0.7	2.6
of which: Private non-residential	6.3	-7.2	-1.5	17.7	6.8	-2.3	1.0	5.1
Inventory changes ⁵	0.0	-1.4	0.6	2.1	-1.7	0.1	0.8	1.9
Domestic demand	2.4	-1.9	5.1	8.7	3.6	3.9	2.5	3.4
Exports	7.4	-7.8	-3.8	6.8	-1.7	3.3	12.8	16.9
Imports	3.8	-2.2	9.6	23.9	3.9	10.5	7.3	9.1
GNP	2.8	-2.5	3.6	6.8	3.0	2.9	2.9	4.0
Japan								
Private consumption	3.7	4.1	3.3	2.7	2.7	3.2	3.9	4.2
Public consumption	4.3	1.9	3.0	2.8	1.7	6.5	-0.6	-10.2
Gross fixed investment	4.2	0.8	-0.3	4.9	5.6	6.6	10.1	14.8
of which: Private non-residential	6.2	2.5	2.6	11.5	12.7	6.2	8.2	11.5
Inventory changes ⁵	0.0	-0.1	-0.4	0.4	0.4	-0.3	-0.3	0.6
Domestic demand	3.9	2.8	1.8	3.8	3.9	4.0	5.1	6.7
Exports	9.7	3.7	4.0	17.5	5.4	-5.0	3.6	5.6
Imports	4.0	1.7	-5.2	11.1	-0.1	2.8	9.1	14.8
GNP	4.7	3.1	3.2	5.0	4.8	2.5	4.2	5.3
Germany								
Private consumption	2.5	-1.3	1.7	1.5	1.8	4.3	3.1	4.1
Public consumption	2.6	-0.8	0.2	2.4	2.1	2.3	1.5	1.6
Gross fixed investment	2.6	-5.3	3.1	0.8	0.1	3.1	1.7	1.2
of which: Private non-residential	4.1	-4.5	4.9	0.7	5.5	4.2	3.3	2.4
Inventory changes ⁵	-0.5	0.0	0.6	0.5	-0.5	0.2	0.5	0.1
Domestic demand	2.0	-2.0	2.3	2.0	1.0	3.7	2.9	3.0
Exports	5.1	3.2	-0.5	9.0	6.7	-0.1	0.8	4.5
Imports	4.4	-0.1	0.6	5.3	3.7	3.7	4.7	7.2
GNP	2.3	-1.0	1.9	3.3	2.0	2.5	1.7	2.3
Memorandum items:								
Domestic demand, average ⁶	2.6	-0.9	4.0	6.9	3.4	3.9	3.3	4.3
GNP, average ⁶	3.1	-1.1	3.3	6.0	3.4	2.8	3.1	4.1

See footnotes to table on page 13.

balance was not matched by a decline in the inflow of foreign savings. In other words, some doubt remained as to whether US demand growth was slowing down as much as the adjustment process required.

In Japan, on the other hand, the acceleration of domestic demand growth was rapid and was led by a considerable pick-up in fixed investment, particularly residential, reflecting the influence of an expansionary monetary policy and low nominal interest rates, tax concessions and a marked improvement in company profits. The upturn in demand was particularly sharp in the second half of the year, following parliamentary approval of a significant package of stimulatory fiscal measures in July, and was accompanied by a sharp rise in imports, even though many Japanese firms also found it profitable to increase the share of output sold in the home market.

... the pick-up
in Japan

In Germany, however, all domestic demand components except inventories contributed to the slowdown. The weakness of business fixed

German growth
weak

Developments in real GNP/GDP and demand components,¹ (continued)

Countries	1976-81 ²	1982	1983	1984	1985	1986	1987 ³	1987 ^{3,4}
	percentage change, annual rate							
France								
Private consumption	2.5	3.5	0.9	1.0	2.4	3.4	2.4	3.1
Public consumption	3.5	3.8	2.1	1.2	2.3	2.7	3.0	2.6
Gross fixed investment	1.5	- 1.4	-3.6	-2.3	2.8	3.0	3.7	5.0
of which: Private non-residential	2.6	0.6	-4.2	-1.4	3.3	3.3	4.4	7.0
Inventory changes ⁵	-0.4	1.0	-0.9	0.1	-0.2	0.8	0.6	0.2
Domestic demand	2.0	3.5	-0.7	0.5	2.2	3.7	3.3	3.6
Exports	4.9	- 1.7	3.7	7.1	1.5	-0.6	1.7	6.0
Imports	3.3	2.6	-2.7	2.8	4.2	7.3	6.4	10.1
GDP	2.3	2.5	0.7	1.4	1.7	2.1	2.2	2.6
United Kingdom								
Private consumption	1.8	0.8	4.0	2.1	3.9	6.0	5.2	6.1
Public consumption	0.9	0.8	1.9	0.8	0.1	1.2	1.2	2.0
Gross fixed investment	-2.3	5.2	5.2	8.2	2.9	-0.2	3.5	5.2
of which: Private non-residential	2.6	8.4	-1.1	12.8	12.7	-2.6	7.2	9.1
Inventory changes ⁵	-0.3	0.6	0.8	-0.2	0.1	0.0	0.1	-0.4
Domestic demand	0.5	2.2	4.5	2.7	2.9	3.7	4.2	4.7
Exports	2.1	0.7	2.4	7.0	5.9	3.1	5.5	3.4
Imports	1.7	5.0	6.4	9.8	2.8	6.2	7.6	7.8
GDP	0.7	1.1	3.5	2.0	3.9	2.9	3.6	3.4
Italy								
Private consumption	3.5	1.1	0.7	2.4	3.0	3.5	4.3	3.4
Public consumption	2.2	2.9	2.9	2.6	3.5	3.1	3.4	3.2
Gross fixed investment	3.6	- 5.7	-0.1	5.3	2.5	1.4	5.2	4.9
of which: Non-residential	3.9	- 6.0	-1.8	7.2	4.3	2.5	8.4	8.0
Inventory changes ⁵	0.4	0.6	-0.6	0.9	0.2	0.2	0.3	1.1
Domestic demand	3.6	0.3	0.2	4.0	3.1	3.2	4.7	4.9
Exports	5.7	- 1.1	2.3	7.6	3.8	3.4	3.6	9.5
Imports	7.4	- 0.7	-1.6	11.0	4.7	4.7	10.0	17.1
GDP	3.3	0.2	1.1	3.2	2.9	2.9	3.1	2.8
Canada								
Private consumption	2.8	- 2.6	3.5	4.3	5.2	3.8	4.5	5.5
Public consumption	2.4	2.4	1.5	1.5	2.7	0.9	2.4	2.8
Gross fixed investment	6.9	-11.0	-0.7	1.6	8.1	5.1	9.8	15.2
of which: Private non-residential	10.1	-11.6	-6.3	1.3	6.1	2.2	9.2	18.9
Inventory changes ⁵	-0.2	- 2.9	1.9	1.8	-0.4	0.3	-0.4	0.9
Domestic demand	3.4	- 6.6	4.1	4.9	4.9	3.9	4.8	8.1
Exports	6.9	- 2.2	6.4	18.8	6.0	4.7	5.6	7.7
Imports	6.8	-15.2	9.0	16.6	8.3	7.2	9.0	15.8
GDP	3.4	- 3.2	3.2	6.3	4.2	3.3	3.9	5.7
Seven major countries ⁶								
Private consumption	2.7	1.5	3.4	3.6	3.8	4.0	2.9	2.7
Public consumption	2.1	1.7	1.4	3.3	5.0	3.5	1.9	1.1
Gross fixed investment	3.1	- 4.3	3.2	8.5	4.6	3.0	4.6	7.1
of which: Private non-residential	5.5	- 2.8	-0.4	11.0	8.0	1.3	5.0	7.9
Inventory changes ⁵	-0.1	- 0.7	0.3	1.3	-0.8	0.1	0.5	1.1
Domestic demand	2.5	- 0.3	3.4	5.8	3.3	3.8	3.5	4.4
Exports	5.8	- 1.7	0.6	9.9	3.1	0.9	5.4	8.6
Imports	4.2	- 0.5	3.0	13.6	3.7	6.9	7.4	10.6
GDP/GNP	3.0	- 0.6	2.9	5.2	3.3	2.8	3.1	4.0

¹ GNP for those countries (the United States, Japan and Germany) which include factor payments to and income from abroad under imports and exports. ² For France 1977-81, for Italy 1976-80. ³ Preliminary. ⁴ Changes from fourth quarter 1986 to fourth quarter 1987. ⁵ Changes as percentages of previous year's GNP/GDP. ⁶ Expenditure weights and exchange rates of the preceding year.

investment, notably in plant and buildings, was particularly disappointing, since the share of gross profits had returned to the level of the early 1970s, thus allowing firms for the second consecutive year to finance 94% of investment out of their own funds. It is likely that firms' profit expectations were below actual profits owing to uncertainty with respect to future exchange rates. Nonetheless, recent developments in Germany show signs of a "growth trap", as weak demand growth discourages capital formation, which, in turn, reduces potential output growth and narrows the scope for expansionary policy measures.

Output growth in the other four major countries ranged from 3.5–4% in the United Kingdom and Canada to only 2% in France, while Italy recorded a rate of 3%. The strong performance of the United Kingdom brought GDP to almost 20% above the trough level of 1981, implying a recovery rate almost as high as that of the United States. Despite slower growth in real disposable income, household spending accounted for more than half of the rise in GDP, as the saving ratio fell to only 5.6%, the lowest in almost thirty years. Other notable features of developments in the United Kingdom were the strong rise in business fixed investment and the relatively moderate increase in imports, probably influenced by an improved competitive position. In Canada, too, business fixed investment was an engine of growth, and incomes were further boosted by a large terms-of-trade gain, although changes in the real external balance had a negative influence. In France and Italy net exports had an even larger negative influence, as GDP growth fell 1½ points short of that of domestic demand. In Italy this was probably the joint result of a weakening competitive position and buoyant household spending. For France the adverse influence of the external balance is more difficult to explain. The competitive position vis-à-vis most trading partners improved last year owing to moderate wage increases and strong productivity growth, and the rise in household spending was smaller than in 1986. However, because business fixed investment was virtually stagnant between 1981 and 1985, lack of capacity may have prevented firms from reaping the full benefits of the improved competitive position. Moreover, the pick-up in investment last year is likely to have increased the import elasticity of total demand.

Spain and Portugal outperformed most of the other industrial countries shown in the table on page 15, recording output growth rates of 5% or more in 1987. In both countries the boom was led by an upsurge in domestic demand, with particularly strong increases for business fixed investment. Accession to the European Economic Community had no doubt strengthened business confidence, and it was further boosted by substantial capital inflows, to a large extent in the form of direct investment. External factors also had an important influence on the relative performance of the other industrial countries shown in the table. Thus, Denmark, Greece and Norway were forced to take restrictive measures to improve their current external account. High external deficits also forced New Zealand and Australia to adopt a restrictive policy stance; nevertheless, in Australia GDP growth showed an unexpected acceleration owing to a strong rise in exports. The underlying strength of this change is, however, difficult to assess since a large swing in the

United Kingdom and Canada show upturn in growth . . .

. . . but net exports reduce growth in France and Italy

Smaller industrial countries

statistical discrepancy accounted for one-third of overall growth. Belgium and the Netherlands, on the other hand, entered 1987 with comfortable balance-of-payments positions, but in both countries efforts to reduce the government deficit exerted a dampening influence on the growth of domestic demand. Switzerland, too, has a large current-account surplus and is, furthermore, one of the few countries with a small fiscal imbalance. Last year domestic demand increased by 5% but a further deterioration in the real external account held the domestic output expansion to 2½%. Efforts to consolidate the budget have also influenced output and demand developments

Changes in real GDP, other industrial countries								
Countries	1985 GDP in billions of US dollars	1976-81	1982	1983	1984	1985	1986	1987 ¹
		percentage change, annual rate						
Australia	160.0	2.6	0.0	0.8	7.3	5.5	1.8	4.4
Austria	65.5	2.5	1.1	2.2	1.4	2.8	1.7	1.3
Belgium	79.6	1.6	1.5	0.1	2.1	1.4	2.4	1.7
Denmark	58.1	1.0	3.0	2.5	3.5	3.7	3.4	-1.5
Finland	54.3	3.3	3.6	3.0	3.3	3.5	2.4	3.2
Greece	33.4	3.1	0.4	0.4	2.8	3.0	1.3	-0.5
Ireland	18.3	5.0	2.3	-1.1	3.8	1.1	-0.3	2.9
Israel	22.9	3.0	0.9	2.6	1.7	2.5	2.4	4.6
Netherlands	125.4	1.5	-1.4	1.4	3.2	2.3	2.4	2.5
New Zealand	22.4	-0.2	0.0	5.0	4.1	2.7	1.7	0.9
Norway	58.4	3.6	0.3	4.6	5.7	5.4	4.4	1.3
Portugal	20.7	4.2	2.4	-0.3	-1.6	3.3	4.3	5.0
South Africa	54.8	3.3	-0.8	-2.1	5.1	-1.5	0.5	2.6
Spain	163.8	1.3	1.2	1.8	1.9	2.3	3.3	5.2
Sweden	100.1	1.1	0.8	2.4	3.9	2.1	1.2	2.8
Switzerland	92.8	2.3	-1.1	0.7	1.8	4.1	2.7	2.5
Turkey	52.8	2.0	5.0	3.7	5.7	5.1	7.9	6.8
Average ²		2.1	0.8	1.6	3.6	3.1	2.6	3.0
¹ Preliminary. ² GDP weights and exchange rates of the preceding year. Sources: OECD National Accounts, IMF International Financial Statistics, and national data.								

in Austria, and in Sweden a major policy concern was to prevent the rate of inflation from rising further. Nonetheless, helped by a 14% rise in investment in industry, the rate of growth of real GDP more than doubled between 1986 and 1987. In Ireland a recovery in the agricultural sector and booming exports were major influences on aggregate growth, while South Africa benefited from strong domestic demand growth, in particular of private consumption. The strong growth performance in Israel and Turkey owes much to earlier comprehensive stabilisation policies including measures to reduce inflation, though, in the case of Turkey, a recent marked improvement in the real external balance also played a role. Finland, which has achieved the most stable growth performance of the countries shown in the table, returned to a 3-3½% trend, owing to strong increases in all domestic demand components and despite a negative influence from changes in the real external account.

Inflation: consumer price and wage developments

In terms of changes over twelve months, consumer price inflation in the industrial countries reached a low point of slightly less than 2½% at the end of 1986 before beginning to rise again to almost 4% by the end of 1987. Even so, with domestic cost inflation remaining well under control, there was little suggestion last year of any general risk of an early revival of inflation in the industrial world.

Inflation rises
from low point

Behind this profile of recent price changes, movements in commodity prices have been by far the most important factor, especially the fall in oil prices early in 1986 and their subsequent partial recovery up to mid-1987. (Commodity price developments are discussed in detail on page 39 below.) For most countries these developments were reflected — in conjunction with the price effects of exchange rate changes — in import prices, changes in which are presented for a selection of countries in the graph opposite.

Role of external
factors

Consumer prices							
Countries	1985	1986	1987				1988
			March	June	Sept.	Dec.	March
	percentage changes over one year ¹						
United States	3.6	1.9	3.0	3.7	4.3	4.4	3.9
Japan	2.0	0.6	-0.5	0.3	0.8	0.8	0.7
Germany	2.2	-0.3	-0.3	0.2	0.4	1.0	1.0
France	5.8	2.6	3.3	3.3	3.2	3.1	2.5
United Kingdom	6.1	3.4	4.0	4.2	4.2	3.7	3.5
Italy	8.6	6.2	4.2	4.1	5.0	5.1	4.9
Canada	4.0	4.2	4.2	4.8	4.5	4.2	4.1
Australia	6.8	9.1	9.5	9.3	8.3	7.1	6.9
Austria	3.2	1.7	0.5	1.9	1.9	1.7	2.3
Belgium	4.9	1.3	1.3	1.7	1.7	1.5	1.0
Denmark	4.7	3.7	5.3	3.4	3.6	4.1	4.7
Finland	5.9	3.6	3.8	3.4	3.9	3.6	4.1 ²
Greece	19.2	23.0	16.8	18.1	14.7	15.7	13.2
Ireland	5.4	3.8	3.4	2.9	3.2	3.1	1.9
Israel	304.6	48.1	22.8	19.5	18.8	16.1	15.6
Netherlands	2.2	0.2	-1.1	-0.8	0.2	-0.2	0.6
New Zealand	15.4	13.2	18.3	18.9	17.0	9.6	9.0
Norway	5.7	7.2	10.5	8.9	7.8	7.4	7.2
Portugal	19.3	11.8	9.8	8.9	9.3	8.9	8.2
South Africa	16.2	18.6	16.8	17.2	15.6	14.7	13.4
Spain	8.8	8.8	6.3	4.9	4.4	4.6	4.4
Sweden	7.4	4.2	3.8	3.3	5.0	5.2	5.5
Switzerland	3.4	0.8	1.0	1.3	1.6	1.9	1.9
Turkey	45.0	34.8	34.7	37.7	39.7	55.1	69.8
All industrial countries	5.4	2.8	3.0	3.4	3.8	3.8	3.6

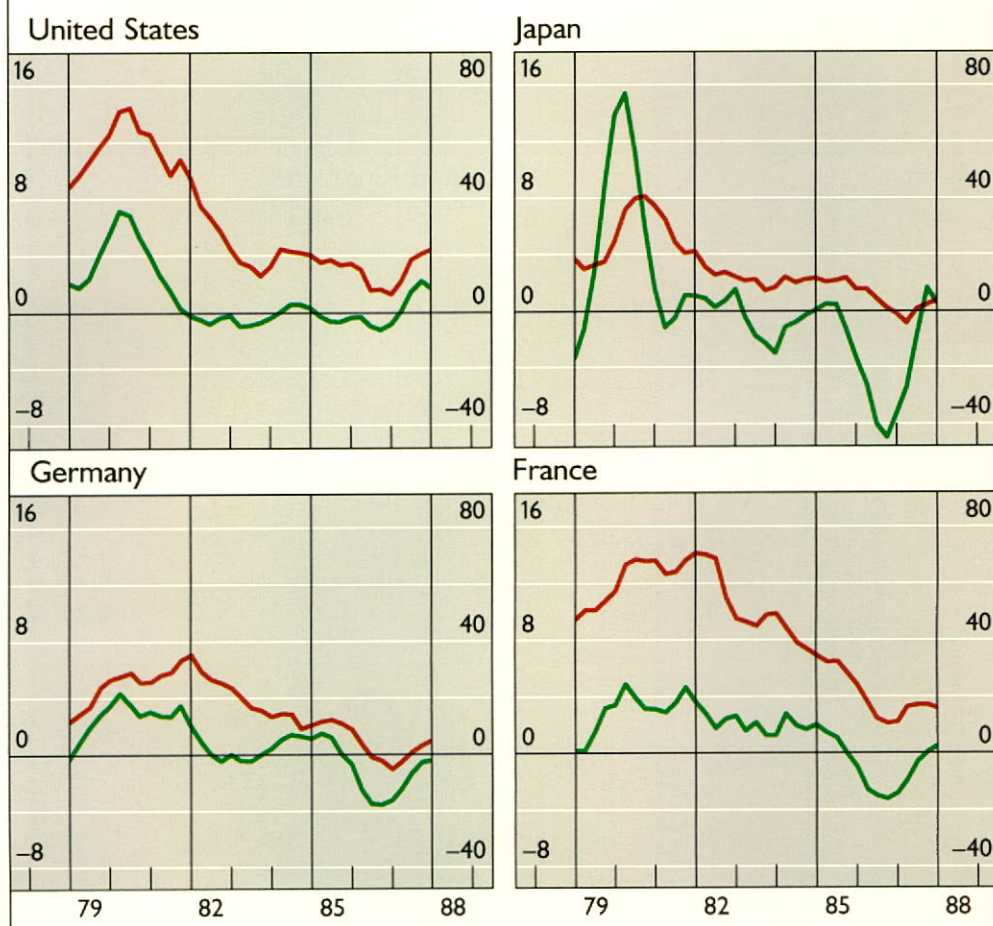
¹ Average year-to-year changes for 1985 and 1986 and changes over twelve months (over four quarters for Australia, Ireland and New Zealand) for the remaining columns. ² New series.

Sources: OECD Main Economic Indicators, IMF International Financial Statistics, and national data.

Import and consumer prices, 1979–87

Changes over four quarters, in percentages

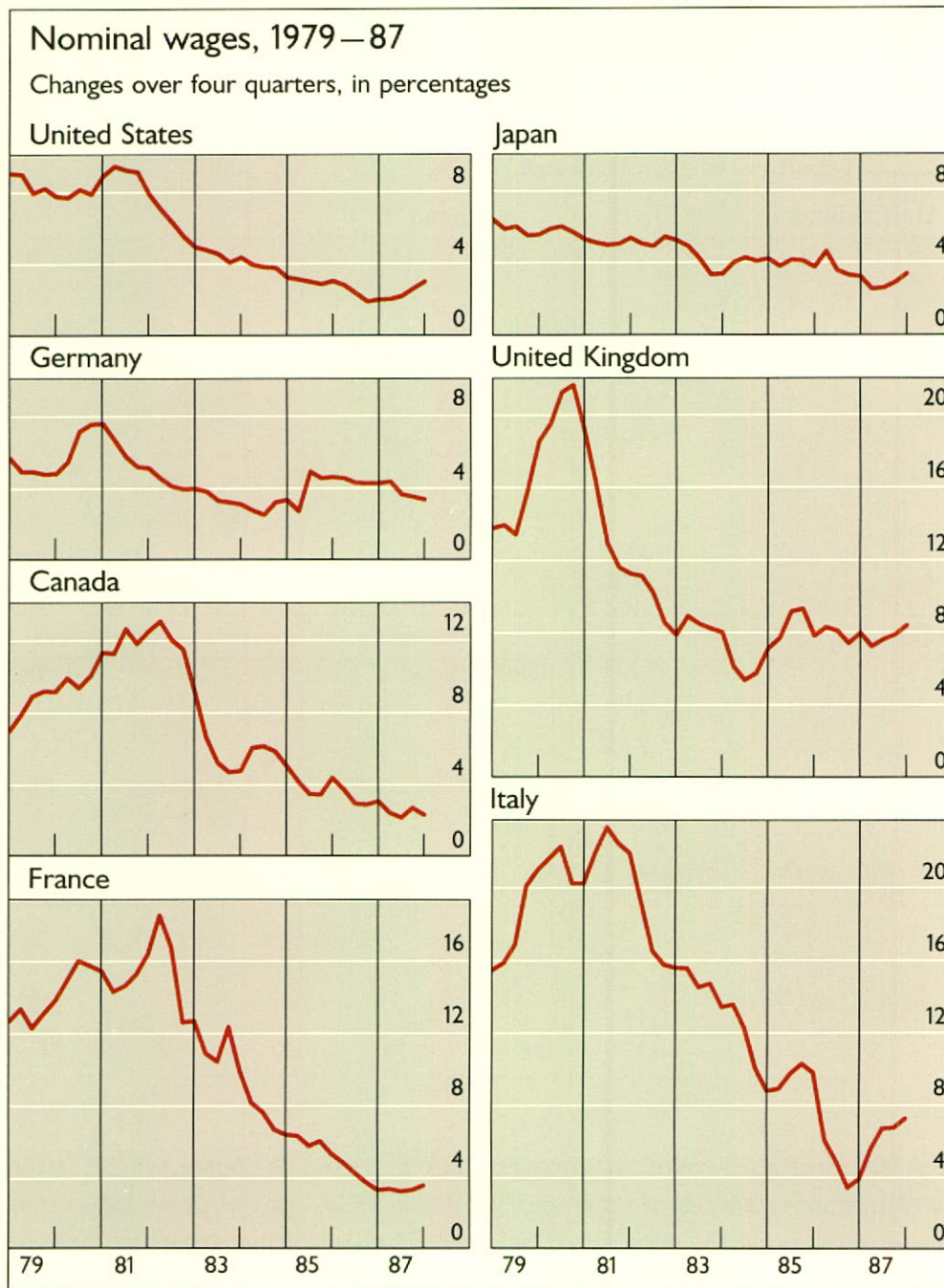
— Consumer prices (left-hand scale)
— Import prices (right-hand scale)



The sharpest turn-round in import prices occurred in Japan, where, after twelve-month declines of up to nearly 50% in 1986, rises of up to 15% were being seen during the summer of last year. The size of the earlier fall was, of course, affected by the high primary commodity content of Japan's imports as well as by the appreciation of the yen in 1985 and 1986. With the import content of domestic expenditure being relatively low, however, the accompanying movements in consumer price inflation were much more modest, especially as the pace of wage increases has not changed appreciably for some time.

In the United States import price inflation did not change much in the face of the drop in oil prices in 1986, presumably because the effect of the dollar's depreciation on other imported goods prices provided an offsetting influence. But neither has the more recent acceleration been other than muted, because foreign exporters of manufactured goods were absorbing some of the dollar's continuing decline in the form of lower profit margins (see Chapter III).

Import price changes notwithstanding, the major factor continuing to influence medium-term price performance in most countries last year



remained the steadily declining path of wage growth that has been noticeable for several years now. It is true that there may have been a temporarily favourable effect on wages as a result of the decline in commodity prices the previous year so that underlying wage trends were somewhat understated by the 1986 outcome. Even so, wage trends were not seen as a major problem in most countries last year. The United States provided a particularly encouraging example: although there was a slight acceleration in the second half of the year, wages rose less than consumer prices, despite the fact that unemployment continued to decline, dropping to levels at which many believe inflation could tend to accelerate. Wage behaviour was also quite moderate in Canada and France, although in the latter case its performance has to be seen against the background of continuing high unemployment, and by the end of the year

Generally moderate wage behaviour . . .

... with some exceptions

there were some signs of increasing demand pressure in the Canadian labour market. Australia is a relatively unusual case by current standards in that wage pressures have been successfully held in check for some years now by the two "accords" negotiated between the Government and the trade unions.

At the other end of the spectrum, while there were few signs of any imminent wage explosions, some concern was expressed over wage developments in the United Kingdom and Italy. In the former case, wage inflation had apparently become stuck at a rather high level some years ago despite record unemployment. For a time, high productivity growth, at least in

Nominal wages in the smaller industrial countries*							
Countries	1979-84	1985	1986	1987			
				first quarter	second quarter	third quarter	fourth quarter
	percentage changes over one year						
Australia	10.3	5.0	7.8	5.4	6.2	4.8	5.5
Austria	5.9	6.1	4.4	2.4	2.7	3.3	4.1
Belgium	6.9	3.6	2.8	0.1	3.0	1.8	2.4
Denmark	8.4	4.8	4.7	7.7	9.9	9.7	10.0
Finland	11.1	7.7	6.1	6.9	6.6	9.2	9.2
Greece	26.6	19.9	12.8	10.5	10.4	8.6	10.4
Ireland	15.0	7.9	7.2	5.5	5.4	4.7	n.a.
Israel	176.6	252.4	61.3	32.3	33.9	30.4	n.a.
Netherlands	4.3	2.7	3.3	2.3	2.6	1.9	n.a.
New Zealand	10.3	11.0	15.8	8.0	7.4	7.4	8.5
Norway	9.3	8.0	10.3	18.7	18.3	14.0	13.9
Portugal	20.8	21.1	16.8	16.2	16.6	10.6	n.a.
South Africa	17.4	11.2	14.2	14.7	12.5	15.2	n.a.
Spain	16.5	10.0	11.0	5.1	10.7	5.5	5.5
Sweden	8.9	7.6	7.4	5.9	7.0	6.4	6.3
Switzerland	5.0	3.1	3.6	2.0	2.6	2.9	2.1

* Hourly earnings except for Israel and Portugal (daily earnings), Australia (weekly earnings), Austria (monthly earnings), New Zealand (weekly rates) and South Africa and Switzerland (average earnings per employee).

Sources: OECD Main Economic Indicators and OECD Economic Outlook, IMF International Financial Statistics, and national data.

manufacturing industry, offset some of the effect of this excessive wage growth on unit costs. But last year, with unemployment falling sharply and productivity growth likely to cease benefiting from cyclical factors, there was a slight tendency for wage inflation to accelerate during the year. In Italy, where unemployment remained high and where cyclical productivity gains showed signs of coming to an end, the acceleration of wage inflation was sharper, albeit from a level in 1986 which had shown a considerable decline compared with the previous year (see the graph on page 18). In parts of Scandinavia, too, nominal wage pressures also increased, for example in Denmark, but most notably in Norway, where early this year a wage freeze was introduced with the agreement of both sides of industry. In New Zealand, on the other hand, further wage moderation was achieved even in the face of sharply higher

consumer prices. It seems that wage bargainers were prepared to take into account the cut in direct taxation, which was the counterpart of the large increase in indirect taxes involved in the tax reform programme.

Employment and unemployment

Broadly speaking, the contrast seen for some years now between labour market trends in North America and Europe was again a feature of developments in 1987. Unemployment in the United States and Canada continued to decline despite a further appreciable increase in their labour forces. However, in parts of continental western Europe unemployment remained high even in the face of slow or declining labour force growth. The best that can be said is that there was little tendency for the European unemployment problem to worsen in terms of absolute numbers, but it almost certainly continued to do so in the sense that the high incidence of long-term unemployment tends progressively to reduce the employment prospects of the individuals involved.

Unemployment
down further in
North America
but high in
Europe

Employment growth accelerated to 2¾% in the United States last year. The implication of this, however, is that, for the economy as a whole, there was virtually no rise in output per person employed. The proximate reason for this is that the bulk of the increase in employment occurred in the services sector, where productivity tends to be relatively low. However, recent trends more generally suggest that it is in this sector that most opportunities for employment growth currently lie. Canada, Australia, Italy, Norway, Spain and, to a lesser extent, Japan and the United Kingdom have similarly recorded relatively high growth rates for employment in services in recent years. Except in Italy, where industrial employment has been falling, this has been reflected in relatively buoyant overall employment advances. In contrast, in some European countries, such as Germany and France, employment in services, though still more buoyant than that in industry, has grown relatively slowly. By the same token, output per person in these countries has tended to rise rather more rapidly than in North America; the “employment intensiveness” of growth has been lower in Europe.

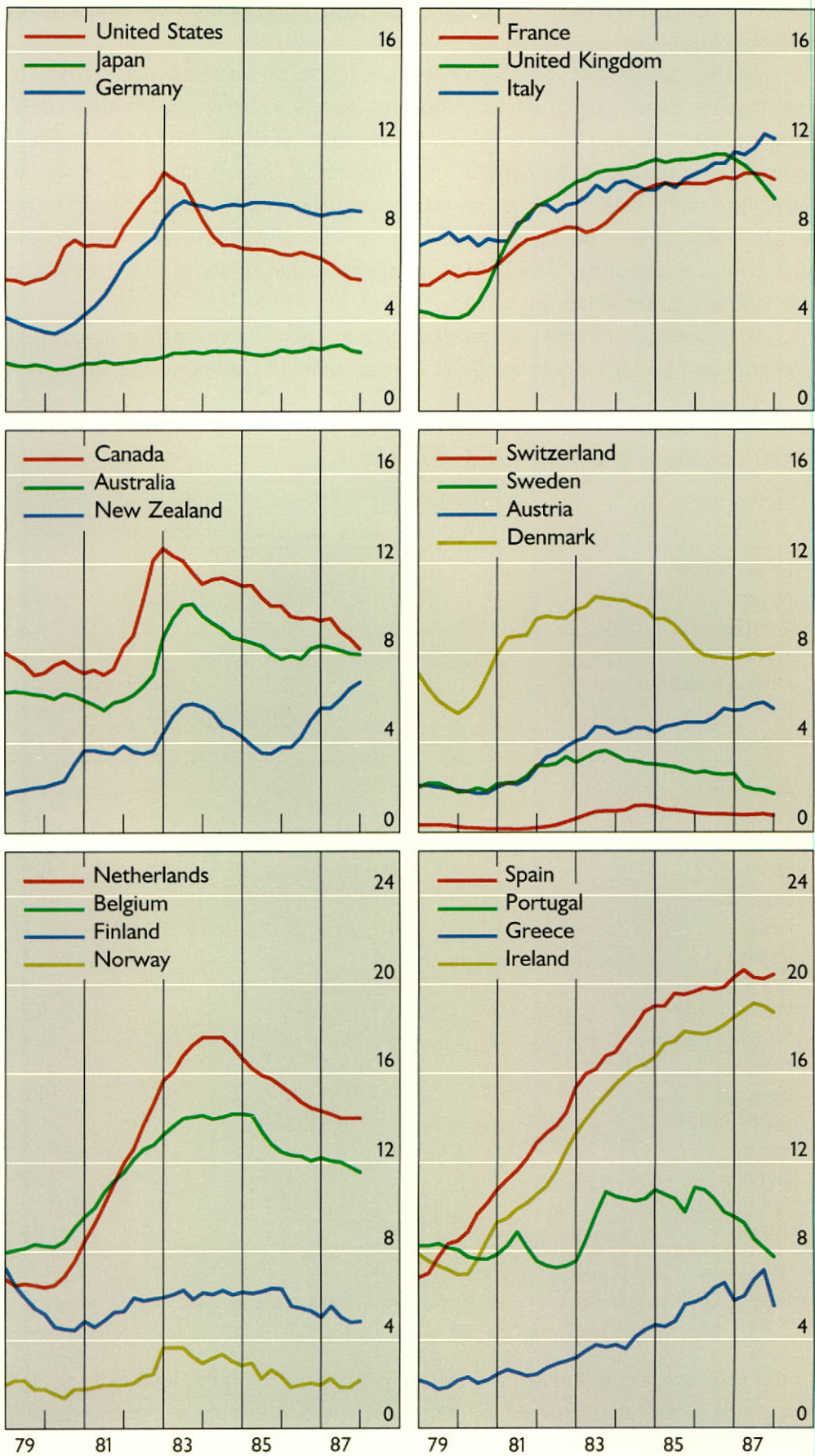
Employment
growth
concentrated
in services

For the United Kingdom, however, this phenomenon has not prevented a sharp fall in unemployment since the autumn of 1986. By early this year the rate was down from its peak by some 2½ percentage points. And while in the early months of the decline factors such as new training programmes, social security changes and statistical redefinition played a role, the extent of the rise in employment last year was proof that the underlying situation was improving quite sharply. Another factor is that the growth of the labour force has slowed down over the past two years. The final result has been achieved, moreover, without any fundamental compromise with the medium-term health of the public finances, although there was some tendency for the already high rate of wage inflation to accelerate later in the year.

Sharp fall in UK
unemployment

In France and Germany, however, employment growth decelerated last year so that unemployment edged up — in the former country even in the

Unemployment rates, 1979–87*



* National data and definitions.

context of zero labour force growth. In Italy, too, the continued, but slower, rise in employment was not sufficient to prevent a further upward drift in unemployment.

As the table shows, employment growth also slowed last year in many of the smaller European countries, implying, for example in the Netherlands, Belgium, Norway and Denmark, that earlier rates of decline in unemployment were not maintained. In Austria unemployment drifted upwards again; in Australia rapid labour force growth has prevented recent increases in employment from being reflected in lower unemployment, while the adjustment effort under way in New Zealand has led to some deterioration in the labour market situation.

Further unemployment increases in some countries

By contrast, in Spain in particular, but also in Portugal, employment growth was high and accelerating last year as demand continued to rise rapidly.

Employment growth, 1973–87				
Countries	1973–79	1979–85	1986	1987 ¹
	percentage changes per annum			
United States	2.5	1.4	2.3	2.7
Japan	0.7	1.0	0.8	1.0
Germany	–0.5	–0.3	1.0	0.6
France	0.3	–0.3	0.2	–0.1
United Kingdom	0.2	–0.7	0.5	1.6
Italy	0.9	0.4	0.8	0.4
Canada	2.9	1.4	2.9	2.8
Australia	0.8	1.6	4.0	2.4
Austria	0.5	–0.2	1.4	0.0
Belgium	0.0	–0.6	1.0	0.2
Denmark	0.4	0.6	2.0	0.5
Finland	0.7	1.3	–0.1	–0.3
Greece	0.6	1.3	0.6	–1.0
Ireland	1.1	–1.1	–0.4	–1.1
Israel	2.1	1.6	1.4	2.4
Netherlands ²	0.3	–0.7	1.7	0.9
New Zealand	1.7	0.8	–0.7	–0.8
Norway	2.1	1.2	3.6	1.9
Portugal	0.9	0.7	0.2	1.8
South Africa	1.6	0.8	0.5	0.7
Spain	–1.2	–1.6	2.4	3.5
Sweden	1.3	0.5	0.6	0.9 ³
Switzerland	–0.9	0.4	1.5	1.2
Turkey	1.4	0.8	2.0	1.9

¹ Preliminary. ² In man-years. ³ New series.
Sources: OECD Employment and Labour Force Statistics, OECD Economic Outlook, ILO Labour Statistics, and national data.

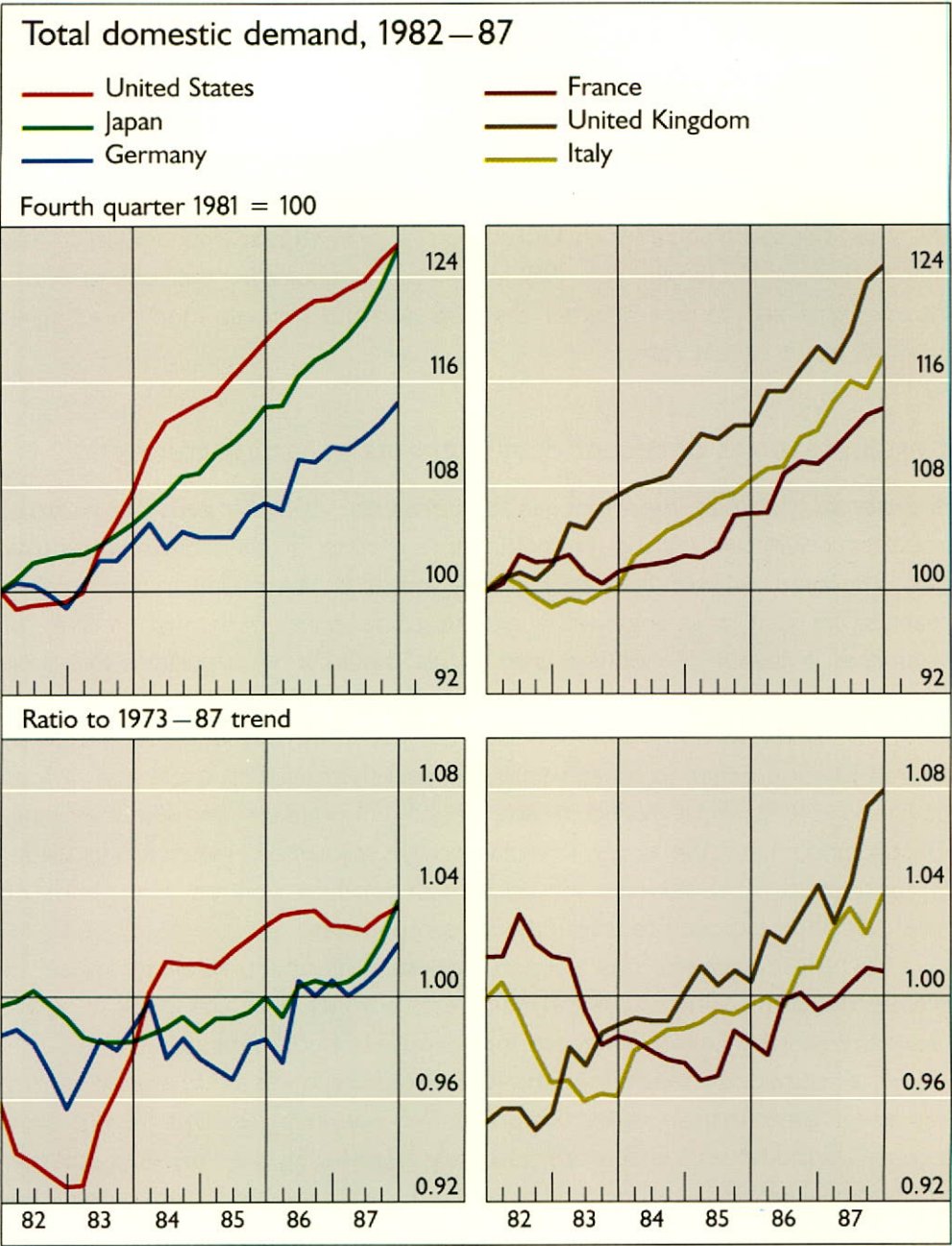
In the former case, however, this performance, which, in the light of very high unemployment, was assisted by employment promotion programmes and increases in public sector employment, did little more than stabilise the unemployment situation. Perhaps stimulated by the state of demand itself, the

growth of the labour force quickened. It did so also in Portugal, but less strongly, so that there the general strength of the conjuncture found a reflection in the unemployment figures.

Domestic demand and external adjustment

In the industrial world the growth of real domestic demand tended to slow down during the first half of last year in surplus and deficit countries alike. Although the quickening in the second half of the year was also seen in the United States to some degree, it was stronger in Japan. Thus, for the year as a whole, relative rates of domestic demand growth moved in the direction consistent with the promotion of better international balance. In the United States the growth rate slowed from nearly 4 to 2½%; in Japan it accelerated

Shifting demand
growth
differentials



from 4 to 5%, and to 6¾% between fourth quarters. In Germany, however, there was a slowdown from 3¾ to just under 3%, despite some pick-up in the second half of the year.

Another way of viewing these developments is shown in the lower panels of the graph on page 23, where the levels of domestic demand are expressed as a ratio of their medium-term trend growth paths as measured since 1973. The relative pick-up in domestic demand in Japan and Germany during the course of last year is clearly apparent, as is the fact that the contrary movement in the United States was much smaller and mainly confined to the first half of the year. Another feature, however, is that domestic demand in some other large — but non-surplus — countries has also been relatively buoyant recently, particularly in the United Kingdom, but also in Italy and, to a lesser extent, in France.

Not surprisingly, total (goods and services) import trends tended to follow these developments last year, as recorded in the tables on pages 12–13 above. The growth of imports accelerated sharply in Japan, so that by the fourth quarter their volume stood almost 15% higher than a year earlier. Over the same period German imports rose by 7¼%, compared with little more than half this figure in 1986 as a whole. In the United States import growth slowed, although, given the pick-up which occurred during the second half of the year, the fourth quarter to fourth quarter growth rate was not much less than that recorded for the year 1986. It will be important for the success of the international adjustment process that US demand growth moderates again from its more recent rates.

Certain features of recent developments in manufacturing

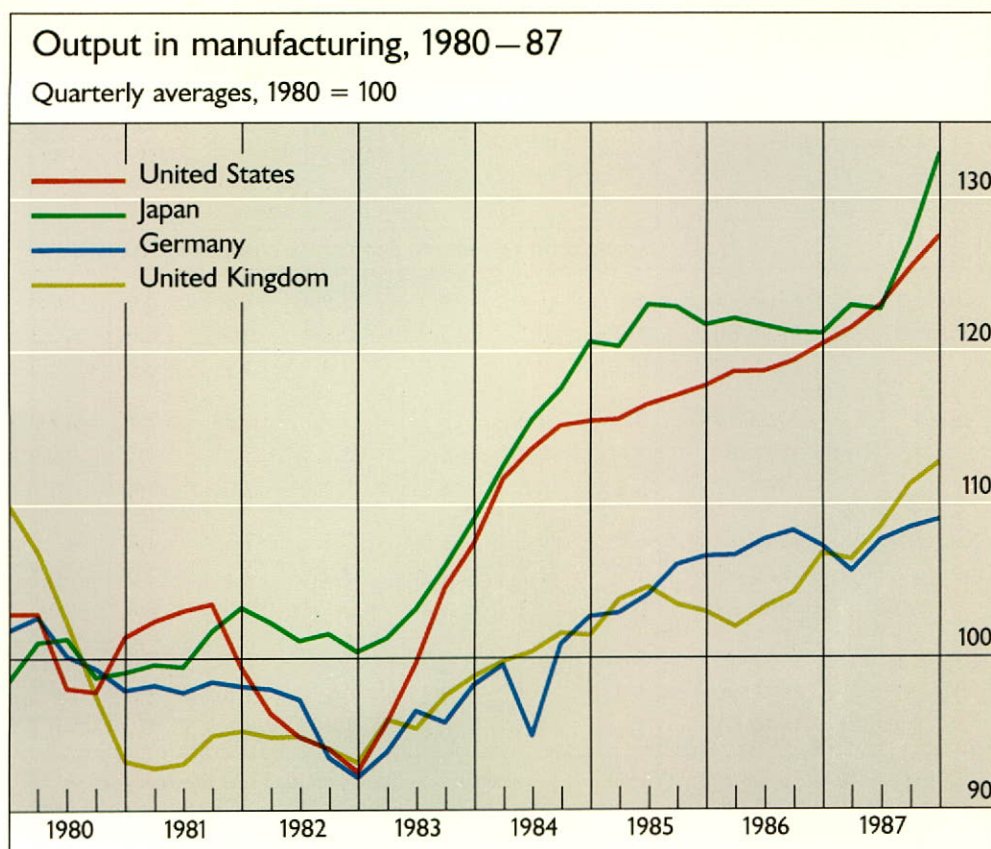
A sector of particular importance in evaluating the scope for reducing external imbalances without any loss of real income growth is manufacturing. Output per employed worker in manufacturing tends to be higher than in other sectors, so that a strengthening of the trade balance through a shift of resources in favour of manufactured goods should leave a positive effect on aggregate income growth. Secondly, even though the manufacturing sector in most countries accounts for less than 25% of total output, it is critical to overall developments, as other sectors (especially transport, trade and various business and financial services) are directly dependent on manufacturing. Thirdly, and most importantly, manufacturing is a source of international trade, in contrast to most services sectors, which produce non-tradable goods or have not been exposed to international competition.

For these reasons this section analyses the manufacturing sector in greater detail, focusing on US developments but including also those in Japan, Germany and the United Kingdom for purposes of comparison.

It is noteworthy that during the 1980s output growth in US manufacturing has been faster than in other Group of Ten countries (except Japan), even though US industries were more adversely affected by the 1981–82 recession than those in most other countries and subsequently faced a strongly appreciating currency. As shown in the graph opposite, manufacturing output

The manufacturing sector and the adjustment process

Strong output performance of US industry



in the United Kingdom also recovered in 1987, although this was partly reversed early this year. Manufacturing output growth has, however, been low in continental Europe, with 1987 output in Germany being less than 10% above the 1980 level.

Furthermore, the strong US output performance was accompanied by favourable productivity and labour cost developments. As shown in the table overleaf, the earlier slowdown in productivity was reversed in the 1980s as the growth of value added per worker accelerated to more than 4%, even though the contribution of factor substitution was no higher than in the 1970s. A turn-round in labour and total factor productivity growth can be observed for the United Kingdom as well, while output per worker in Japan has grown at a more or less constant rate since 1973. In Germany, on the other hand, labour productivity growth has fallen sharply as the contribution from both total factor productivity and the substitution of capital for labour has declined.

Another favourable feature of US developments has been the marked slowdown in hourly wage costs. Combined with the improved productivity growth, this has led to falling unit labour costs for the last two years. While the deceleration in hourly compensation between 1973–80 and 1980–85 was influenced by higher unemployment and lower consumer price increases, the development over the last two years is particularly impressive and can only be explained by an unusual degree of moderation on the part of wage earners. Indeed, last year, when unemployment fell to the lowest level recorded since 1979 and the rate of price increase was rising again, the growth of hourly compensation in manufacturing fell to only 1.3%. This compares with 3% for the whole business sector. Moreover, the moderate rise in unit labour costs

Favourable
US wage cost
developments . . .

Developments in real value added, factor inputs and productivity								
Countries	Period	Value added	Employment	Capital stock	Labour productivity ¹	"due to"		Capital productivity ²
		manufacturing sectors, percentage change, annual rates						
United States	1960-73	4.8	1.4	4.0	3.4	2.8	0.6	0.8
	1973-80	1.0	0.1	3.9	0.9	0.0	0.9	-2.8
	1980-87 ³	3.5	-0.9	2.5	4.4	3.5	0.9	1.0
Japan	1964-73	13.0	2.8	15.3	9.9	6.8	3.1	-2.0
	1973-80	4.4	-0.8	5.4	5.2	3.7	1.5	-0.9
	1980-87 ³	5.8	0.6	6.2	5.2	3.8	1.4	-0.4
Germany	1960-73	5.2	0.1	6.6	5.1	3.5	1.6	-1.0
	1973-80	1.5	-1.7	2.2	3.3	2.3	1.0	-0.7
	1980-87 ³	0.9	-1.2	1.4	2.1	1.5	0.6	-0.5
United Kingdom	1960-73	3.0	-0.5	3.7	3.5	2.5	1.0	-0.7
	1973-80	-1.9	-1.9	2.2	0.0	-1.0	1.0	-4.1
	1980-87 ³	1.3	-3.7	0.6	5.2	4.1	1.1	0.7

¹ Changes in labour productivity (Y/L%) can be calculated on the assumption that the change in value added (Y%) is a weighted sum of changes in labour and capital inputs (a L% + (1-a)K% with a = 0.75 for all countries) plus total factor productivity growth (r). Thereby (Y/L%) can be decomposed into changes in total factor productivity (r) and in the capital/labour ratio ((1-a)K/L%). ² Calculated as changes in output relative to the capital stock. ³ 1987 figures partly estimated.

Sources: OECD Flows and Stocks of Fixed Capital, OECD National Accounts, and national data.

has not been absorbed in higher profit margins. Instead, manufacturing output prices have fallen relative to the overall price level and thus helped to hold down the aggregate rate of inflation and improve the competitive position of US firms.

In this respect the US performance has also been far more favourable than those of the United Kingdom and Germany. In the former country nominal wage increases were "stuck" at around 7½% for several years, but started to rise last year in response to falling unemployment and sharply rising profits. In Germany unit labour cost growth has increased in spite of high unemployment and declining consumer price inflation. In Japan, on the other hand, the remarkably smooth absorption of the second oil price shock combined with continued wage moderation throughout the 1980–87 period has led to falling unit labour costs, thereby facilitating the adjustment of Japanese firms to the real appreciation of the yen since early 1985.

Against this background it also appears that earlier fears of "de-industrialisation" in the United States have been somewhat exaggerated. Indeed, the share of manufacturing value added in total GDP has been stable around 20% for the last twenty-five years. At the same time, the stability of the US output share raises some doubts about the scope for reducing the external deficit by expanding manufacturing output relative to other sectors. Moreover, certain other recent developments have been distinctly less encouraging than those discussed above.

... not matched in the United Kingdom or Germany

Stable output share of US manufacturing

Developments in labour costs and international competitiveness					
Countries	Years	Hourly compensa- tion	Real earnings	Unit labour costs	
		in national currency in US dollars			
manufacturing, percentage change, annual rate					
United States	1960-73	5.0	1.4	1.8	1.8
	1973-80	9.8	-0.6	8.5	8.5
	1980-85	5.9	0.1	2.1	2.1
	1985-87	2.3	-0.8	-1.2	-1.2
Japan	1960-73	15.0	8.3	4.3	6.6
	1973-80	11.8	2.1	5.8	8.6
	1980-85	4.7	1.9	-1.1	-2.2
	1985-87*	3.4	3.0	-1.8	26.1
Germany	1960-73	10.3	6.8	4.3	8.0
	1973-80	9.3	4.5	5.4	11.2
	1980-85	5.3	1.4	1.8	-7.6
	1985-87*	4.8	4.8	3.3	31.8
United Kingdom	1960-73	9.3	4.1	4.8	3.7
	1973-80	19.5	3.0	18.5	17.6
	1980-85	9.2	1.9	3.3	-8.1
	1985-87*	7.9	3.9	3.1	15.9

* Figures for 1987 are estimated.

Sources: US Bureau of Labor Statistics International Comparison of Manufacturing Productivity and Labor Cost Trends, and national data.

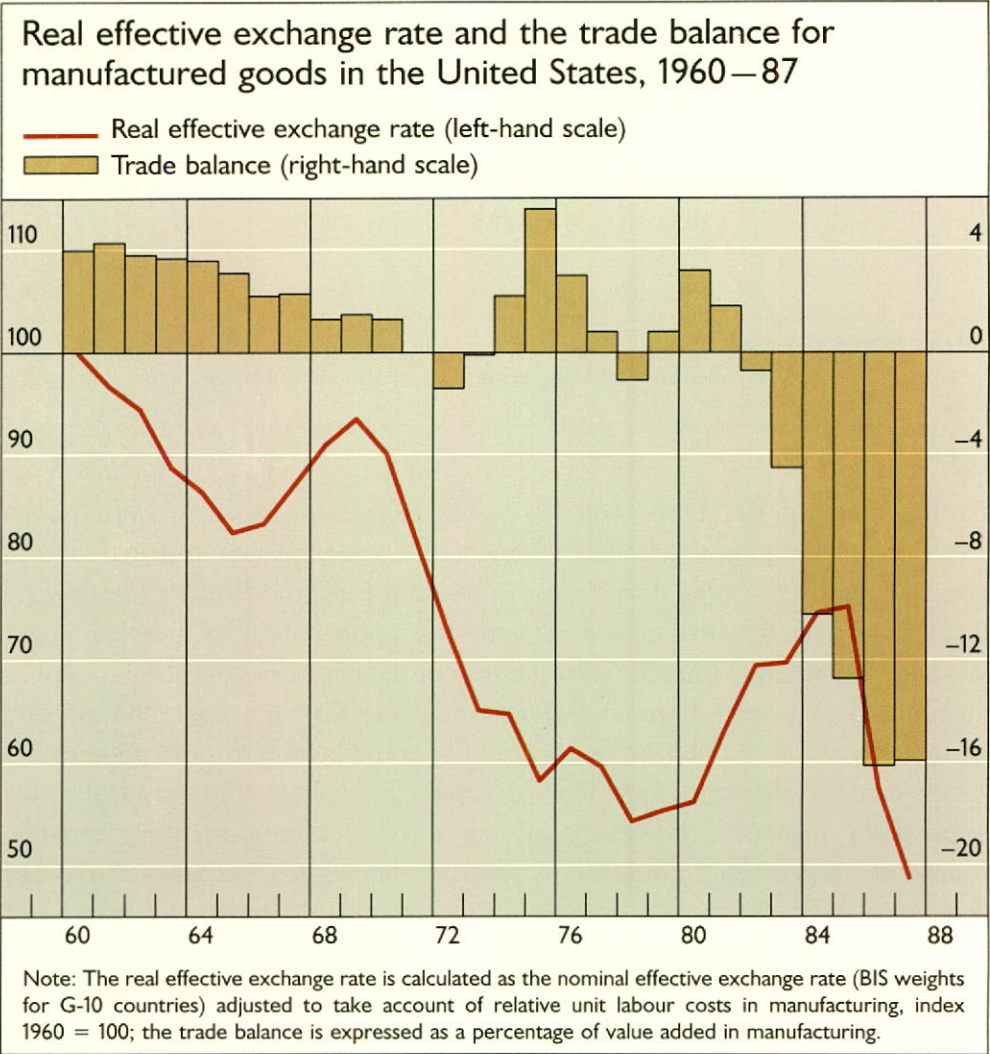
The US
manufactures
trade balance:
growing import
penetration

During most of the 1960s and 1970s US exports of manufactured goods exceeded imports. In the 1980s, however, the trade balance in manufactured goods has shown a large deficit. As can be seen from the following graph and table, this deterioration coincided with the appreciation of the US dollar starting in 1980 and resulted from the loss of export market shares as well as higher import penetration. Owing to trade liberalisation, specialisation and integration of production across borders, a trend rise in import penetration ratios can be observed for most countries. However, the increase in US imports of manufactured goods during the 1980s is particularly striking. Moreover, the import penetration ratio continued to rise after the dollar peaked in 1985, and by 1987 imports of manufactured goods were equivalent to about 35% of manufacturing value added, compared with only 8.9% for the aggregate economy (12.2% including services). Some improvement in the trade balance took place in the course of last year as manufactured exports increased sharply in real terms, following a decline in 1986. However, imports continued to rise at a rapid pace despite less buoyant domestic demand growth, but probably influenced by the surprisingly modest increase in import prices. Consequently, there is clear evidence that adjustments to the large changes in relative cost positions have been subject to unusually long lags. On the other hand, in assessing the scope for further adjustments certain features of US exports and imports are worth recalling. Historical evidence suggests that the income elasticity of US imports is considerably higher than that of

exports in relation to trading partners' income, so that, *ceteris paribus*, US income growth needs to be lower than that of its major trading partners to prevent a deterioration in the trade balance. This condition was satisfied during the 1960s and 1970s, when the annual growth of US GDP was some 1¼ percentage points below that of other OECD countries. Nevertheless, as can be seen from the graph, a gradual real depreciation of the US dollar was also required to prevent losses of market shares.

Long adjustment lags and adverse income elasticities

A second problem relating to the prospects for generating a sustainable improvement in the US trade balance for manufactured goods concerns the level of production capacities. By the end of last year the overall rate of capacity utilisation in US manufacturing had increased to 82.2%, compared with 79.8% at the end of 1986. It was still below the peak of 87.3% reached in



1973, but 1973 is generally considered to be a year of overheating, and several industries, particularly at the primary processing level, are now recording utilisation rates in excess of those reached in 1973. Moreover, because of large relative factor price changes and a sharp drop in the proportion of investment in buildings and plant as compared with machinery and equipment, there is a further risk that current capacity levels may be overstated. Reflecting the recent variability of exchange rates, fears of a future recession and especially

High US capacity utilisation a possible constraint

low expected rates of return, many firms have been reluctant to invest in new buildings and plant, with the result that the latter's share of total fixed investment has declined to only 20%, compared with 30% in earlier years. Instead, firms have chosen to place available funds in financial assets or to replace existing equipment with more modern and efficient facilities, thereby increasing the volume of machinery and equipment per employee within a given plant size. Consequently, much of the recent improvement in productivity growth may be explained by this shift towards investment with a shorter economic life and quicker pay-off. However, the improvement will probably not be sustainable unless it is followed by greater investment in buildings and plant and faster growth in capital/labour ratios.

Indicators of market shares for manufacturing										
Countries	1960	1973	1980	1985	1987 ¹	1960	1973	1980	1985	1987 ¹
	Imports of manufactured goods as a percentage of manufacturing value added at current prices					Exports of manufactured goods as a percentage of world exports of manufactured goods ² at current prices				
United States	4.6	13.8	21.5	31.0	35.1	22.3	14.8	15.6	15.2	12.7
Japan	7.5 ³	8.0	10.4	10.2	9.6	6.2	11.5	13.5	17.9	16.3
Germany	24.6 ⁴	25.1	39.0	47.1	43.0	17.4	19.9	18.1	16.9	19.5
United Kingdom	16.3	39.1	51.1	69.5	72.2	15.0	8.5	8.8	7.1	7.2

¹ Partly estimated. ² Excluding exports from LDCs and eastern Europe. ³ 1967. ⁴ 1970.
Sources: UN Monthly Bulletin of Statistics, OECD National Accounts, and national data.

In this context, it is interesting to note that in the United Kingdom, where output and productivity performance have also shown a remarkable improvement, fears of capacity shortages have grown as well. By the end of 1987 the rate of capacity utilisation was the highest recorded for the last thirty years, and the proportion of capital expenditure on buildings and plant had fallen to only 15%. Moreover, total manufacturing investment, even after some recovery last year, was only 75% of the peak rate reached as far back as 1970, and the growth of the capital stock, at an annual rate of 0.6% since 1980, was the lowest for the four countries.

All in all, recent developments in US manufacturing look encouraging from the point of view of reducing international imbalances: productivity growth is up, nominal wage increases are moderate, and falling unit labour costs, combined with a depreciating exchange rate, have produced a marked improvement in the competitive position of US firms. However, lack of capacity may pose a threat to further non-inflationary gains in output. Some of the recent productivity gains may also prove unsustainable unless supported by capacity-widening investments in buildings and plant.

Fiscal policy

Short-term developments

In general, fiscal policy in the industrial countries continued to be constrained last year by countries' attempts to adhere to medium-term budgetary

A favourable assessment, but more investment needed

Fiscal policy still constrained . . .

consolidation plans. The almost universal deterioration in public debt/GNP ratios since the mid-1970s has served to confirm policy-makers in their resolve to avoid the perceived pitfalls of fiscal fine-tuning. In addition, medium-term supply-side aims have played a prominent role in those fiscal actions which have been taken.

Nevertheless, the need to facilitate international adjustment without risking recession did lead last year to some modifying of medium-term fiscal plans — particularly in Japan but also to some extent in Germany. There was also a relatively large decline in the US budget deficit, though that, of course, was a change which was consistent with both domestic and international needs. It is unfortunate, however, that further progress in this direction seems likely to be delayed.

... but
medium-term
goals temporarily
modified in Japan

In May the Japanese Government announced a set of new fiscal measures designed to stimulate domestic demand and to promote imports during the fiscal years 1987 and 1988. These measures were later incorporated in a supplementary budget in July. The main element of the package was an addition to expenditure of some Yen 5,000 billion (about 1½% of GNP). In addition, public works spending was brought forward into the first half of the fiscal year and taxes were reduced by almost Yen 1,000 billion. In conjunction with revised spending guidelines for the fiscal year 1988, these measures would seem to involve a significant modification at least of the timing of earlier plans for medium-term fiscal consolidation. They were also accompanied in the second half of last year by strong output growth, as witnessed by the 11% increase in industrial production between May and December after two years of stagnation in this sector. Partly as a result, government revenues were much higher than originally expected, and, despite the stimulus package, the budget deficit for the year actually fell.

Stimulus in Japan

In Germany early in the year the Government agreed on new tax relief measures for 1990, of which a little over DM 5 billion was brought forward to 1st January 1988. Of the total annual relief of over DM 44 billion scheduled for 1990, less than half is to be financed by offsetting increases in other revenues. According to the five-year Finance Plan the Federal Government envisaged an increase in the Federal deficit from a revised DM 26.3 billion (1.3% of GNP) in 1987 to nearly DM 30 billion (1.4%) in 1988, before a reduction to 1.1% of GNP by 1991. The bulk of the stimulus to activity is thus expected to come from the supply-side effects of lower tax rates. In the meantime, however, the fiscal outlook has deteriorated. To the automatic effects of slow growth — which already affected the outturn in 1987 — and a decline in the Bundesbank's profits has now been added an expected increase in payments to the European Economic Community in 1989. Without further policy changes the deficit for the current year may rise to some DM 40 billion, and the Government is considering action at least to offset the higher EEC payments in 1989. This problem notwithstanding, the Government also announced at the end of 1987 certain further measures to stimulate growth, the direct impact of which on the deficit will be relatively small.

Fiscal policy in
Germany

The US Federal budget deficit fell sharply to \$150 billion in the fiscal year 1987 after registering a record of over \$220 billion in 1986. As a percentage of

General government budget balances ¹							
Countries	1973	1982	1983	1984	1985	1986	1987 ²
	as a percentage of GNP						
United States	0.6	- 3.5	- 3.8	- 2.8	- 3.3	- 3.5	- 2.4
Japan ³	0.5	- 3.6	- 3.7	- 2.1	- 0.8	- 1.1	- 0.3
	-2.7	- 6.9	- 6.8	- 5.8	- 4.1	- 4.2	- 1.4
Germany	1.2	- 3.3	- 2.5	- 1.9	- 1.1	- 1.2	- 1.7
France	0.9	- 2.8	- 3.2	- 2.7	- 2.9	- 2.9	- 2.3
United Kingdom	-2.6	- 2.4	- 3.4	- 3.8	- 2.8	- 2.6	- 1.4
Italy	-6.1	-11.3	-10.7	-11.5	-12.5	-11.4	-10.5
Canada	0.9	- 6.1	- 7.1	- 6.8	- 7.2	- 5.7	- 4.8
Australia	1.8	- 0.3	- 4.0	- 3.2	- 2.9	- 2.8	- 1.0
Austria	1.3	- 3.4	- 4.0	- 2.7	- 2.5	- 3.6	- 4.7
Belgium	-5.5	-14.4	-14.9	-12.0	-11.3	-11.0	- 9.3
Denmark	5.3	- 9.1	- 7.2	- 4.1	- 2.1	3.1	2.2
Finland	5.8	- 0.6	- 1.6	0.3	0.1	0.6	- 1.4
Greece	n.a.	- 7.6	- 8.1	- 9.9	-13.5	-10.7	-10.4
Ireland ⁴	-3.8	-15.7	-13.9	-12.4	-13.0	-13.0	-10.1
Israel ^{5, 6}	n.a.	- 7.8	- 6.2	-12.6	- 3.4	- 2.6	- 3.0
Netherlands ⁷	1.3	- 6.6	- 6.4	- 6.0	- 4.7	- 5.0	- 5.6
New Zealand ^{5, 8}	-2.5	- 6.9	- 9.1	- 7.2	- 4.2	- 3.7	0.8
Norway	5.8	4.4	4.2	7.5	10.4	5.9	4.2
Portugal	1.4	-11.8	-10.4	-13.4	-11.1	- 9.3	- 9.0
South Africa ⁸	-1.1	- 3.2	- 4.7	- 4.3	- 3.5	- 4.9	- 4.2
Spain	1.1	- 5.6	- 4.8	- 5.5	- 6.8	- 5.2	- 4.5
Sweden	4.1	- 6.5	- 5.0	- 2.6	- 3.8	- 0.7	3.9
Switzerland ⁷	-1.1	- 0.7	- 0.9	- 0.3	- 0.0	1.0	- 0.6 ⁹
Turkey ⁸	-1.8	- 1.8	- 3.3	- 5.3	- 2.8	- 3.6	- 4.4

¹ Including the social security sector but excluding capital transactions of a financial nature.
² Preliminary. ³ Figures in italics include nationalised industries (flow-of-funds basis). ⁴ Exchequer borrowing requirement. ⁵ Fiscal years. ⁶ Domestic government budget. ⁷ Excluding social security.
⁸ Central government only. ⁹ Budgeted outturn.

Sources: OECD Economic Outlook, IMF International Financial Statistics, EEC European Economy, and national data.

Sharp fall in US budget deficit partly due to temporary factors

GNP (3.4%) last year's deficit was the lowest recorded since 1981. The outcome was facilitated by continued growth in the economy, but also by the proceeds of various asset sales and by a temporary boost to revenues stemming from certain initial features of the 1987 tax reform. The likely absence, or even partial reversal, of some of these factors in 1988 complicated the process of drawing up the budget for the current fiscal year, even after the amendment to the Gramm-Rudman-Hollings deficit reduction targets in September. Under this, the date for ultimately achieving a balanced budget has been deferred for two years to 1993, and the deficit ceiling for the current fiscal year is set at \$144 billion, as compared with \$108 billion under the original legislation.

Even so, it was not until well into the current fiscal year — and after the stock market crash — that the Administration and Congress were able to agree on a package of measures for 1988 which avoided the automatic sequestration procedures of the law. Only a small further reduction in the

deficit — to \$146.7 billion — is envisaged this year. For the fiscal year 1989 a somewhat larger reduction to just under \$130 billion is officially foreseen in the latest budget proposals, which are based on a projected real growth rate of 3½%. It should be noted, however, that some observers — for example, the Congressional Budget Office — are less optimistic.

All the other four larger economies saw some decline in their budget deficit ratios last year. In France the improvement was in line with official objectives, at least at the central government level, although emergency measures were taken in May to deal with the growing deficit of the social security system. Privatisation receipts also played a role, as they did more noticeably in the United Kingdom. Indeed, with rapid growth and temporarily higher oil prices as well, the public sector borrowing requirement in that country became a debt repayment during the last financial year and is budgeted to remain so in the current fiscal year. In Canada, too, buoyant activity helped to reduce the deficit, but the opportunity was also taken to tighten the underlying stance of policy further. In Italy, on the other hand, strong domestic demand was accompanied by a threatened overshooting of the year's fiscal targets. And as pressure on the lira became evident during the summer, an emergency package of tax measures was put forward. Even so, and although the central government budget deficit ratio fell last year, it did not do so by as much as originally planned. Proposals for further urgent contraction of the deficit this year ran into political opposition during the winter but have now been passed in modified form.

Budget deficits
decline in other
major economies

Elsewhere, countries have for the most part continued to aim for budgetary consolidation, with varying degrees of success. In Australia and New Zealand further deficit reduction was achieved last year, in the latter case even resulting in a budget surplus. In Belgium the consolidation process was resumed, contributing to some slowdown in growth, and in Sweden the general government sector moved sharply into surplus, albeit partly because of a special temporary levy on insurance companies and pension funds. Against the background of external deficit, the Danish general government sector remained in surplus last year, the reduction probably being due in large part to the automatic effects of slower growth. In Spain, on the other hand, the planned degree of fiscal policy tightening was not achieved, though rapid demand growth did serve to reduce the actual deficit somewhat. In the face of falling oil revenues and a large current-account deficit, the Norwegian Government took restrictive action last year, but was nevertheless unable to prevent a further decline in the budget surplus. Under the influence of pressures stemming from a very large stock of outstanding government debt the Irish Government, by contrast, succeeded in reducing its deficit further.

Smaller industrial
countries
continue
attempts at fiscal
consolidation

Despite a decline in gas revenues in 1986, the authorities in the Netherlands scaled back somewhat the planned cuts in expenditure last year as a slowdown in growth began to emerge. In Greece the hoped-for degree of fiscal tightening did not materialise, while in Finland temporary tax refunds to households served to push the general government sector into deficit despite an acceleration of growth. Following the introduction of VAT and other measures in 1986, little further progress was seen last year in reducing the high

budget deficit in Portugal. In Austria the medium-term policy aim now is to halt the underlying deterioration in the deficit this year and to begin reversing it in 1989.

The debate over fiscal policy in the short term

International
imbalance
and high
unemployment
pose a policy
dilemma

Despite both strong arguments in favour of medium-term fiscal consolidation and firm commitment to such a stance in most countries, debate continued last year on the extent to which such policy orientations should be temporarily modified in order to deal with more immediate problems, viz. international imbalances and the high level of unemployment in Europe. Indeed, given the action taken by Japan last year (see page 30 above), the spotlight tended to turn on Europe under both headings. To the extent that both conditions apparently called for action in the same direction, there was no problem of potential inconsistency. There was, however, some question as to whether more action in the surplus countries was appropriate without yet greater reduction in the US budget deficit.

In Europe it became even more clear, however, that there was to be no "locomotive" role for the major surplus country, Germany, acting entirely alone. With about a quarter of the European Community's GNP, but only about 8% of that of the industrial world as a whole, the scope for such a country directly to influence demand growth and unemployment more widely is obviously rather limited. In addition, Germany being a highly open economy, much of any stimulus would in any case leak abroad. And while this would be the more helpful to other countries, it might also imply that the stimulus attempt would be limited by the extent to which a deterioration of the current external account would be acceptable to the German authorities. They could in any case point with some justice to the fact that German domestic demand has already been growing faster than output for over two years, as witnessed by the decline in the real net foreign balance by some 3⅓% of GNP between mid-1985 and the end of 1987.

A "co-operative
growth strategy"
for Europe?

Such considerations did not, however, settle the discussion, nor did they help noticeably to deflect the spotlight from Germany. For while the case for somewhat faster demand growth (or at a minimum the prevention of any further slowdown as correction of the US foreign balance drained demand from the rest of the world) was recognised to apply more widely in Europe, the argument was made that current or prospective external constraints prevented action by most other European countries in isolation. Thus, some countries with relatively fast growth rates, such as Spain and Portugal, faced the possibility of having to slow down as their external accounts deteriorated. Some others, already in deficit even with slow growth, appeared to be trapped. Part of the suggested solution — as set out, for example, in the European Commission's "co-operative growth strategy" — was for as many countries as possible to take (probably differentiated) mildly expansionary action, Germany included.

It is true, of course, that Europe is more of a closed economy than any of its individual members. It follows that any country taken by itself would (for any given increment to demand growth) experience a smaller deterioration in

its foreign balance under this strategy than if it were to act unilaterally. Similar reasoning leads to the same conclusion about its budget deficit and public debt/GNP ratio. Co-operative action is apparently less costly in terms of its effects on the balance of payments and the public finances.

This does not mean that there are no such costs, however. And, particularly in the case of public finance, a case can be made — in view of the secular rise in public debt ratios — that few or no such costs are affordable anywhere in present circumstances (see the following section). In addition, fears of triggering a revival of inflationary expectations have not been completely assuaged in all countries, while the argument as to which is the more damaging to investor confidence — continued slow growth or deviation from stable fiscal guidelines — is finely balanced. Not surprisingly, therefore, even the proponents of more action tended to stress the limited extent of the room for manoeuvre.

Limited room for manoeuvre

The public debt constraint

Ever since the first oil shock most countries have experienced difficulty in maintaining sound control over their public finances. Budget deficits have been both large and persistent; and far from stimulating growth performance, such deficits have been in part the result of slow growth. At the same time, this slow growth — especially in nominal terms in more recent years — has meant that the deficits actually incurred have tended to raise debt/GNP ratios more than might otherwise have been the case. Together with a rise in this ratio goes a tendency for the relative cost of debt servicing to rise, too, especially in periods when interest rates also increase. Given the manifest need to reduce the overall deficit in the medium term, such a development serves only to place greater potential pressure on the non-interest items in the budget.

Rising public debt/GNP ratios

Perhaps rather surprisingly, one of the countries experiencing a relatively large and rapid rise in its public debt ratio has been Japan — albeit beginning from a low base (see the graph on page 35). At the time of the first oil crisis the ratio of the central government's outstanding debt to GNP stood at around 10%; by late last year the ratio was about 55%. The portion of the budget devoted to debt servicing has risen even more steeply, given that other elements of expenditure were being tightly controlled. Part of the reason is that — especially in the early 1980s — nominal GNP growth has been much lower relative to interest rates than it was in the pre-1973 period. This fact, which has applied in most other countries as well, served to make interest payments a growing proportion of GNP.

The Japanese case

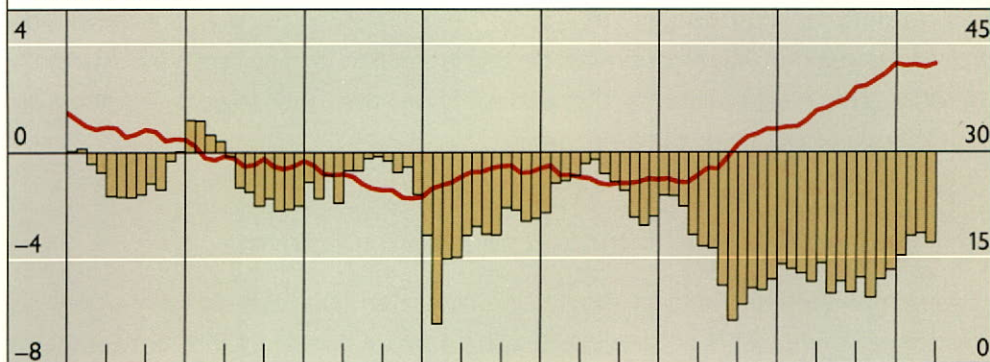
In Germany the central government deficit, though chronic since the mid-1970s, has not been as high as that in Japan. Nevertheless, the consolidation policy of recent years has succeeded in doing no more than halt the gradual upward trend in the public debt ratio since 1974 — albeit at an appreciably lower level than in many other countries. In addition, as the nominal GNP growth rate faltered last year, a positive interest/growth rate gap opened up again, suggesting that, if it is not reversed, debt servicing pressures might tend to increase further.

Central government deficits and debt, 1966–87*

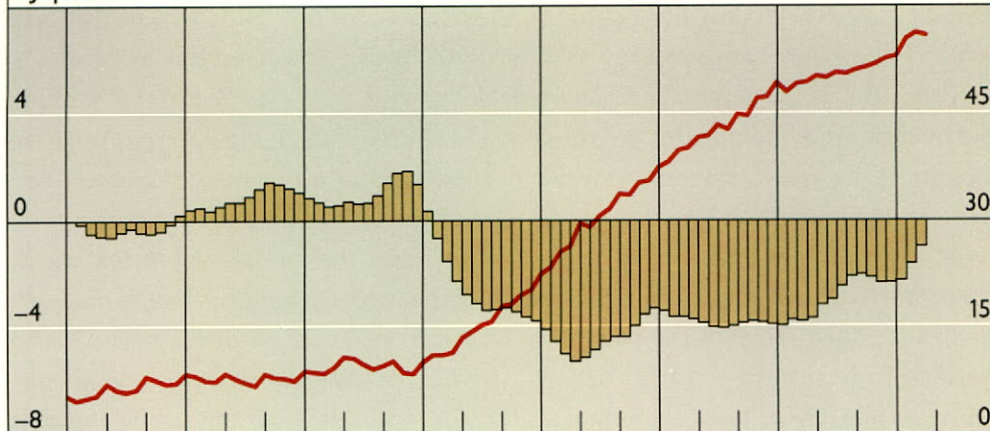
As a percentage of GNP

■ Budget deficit (left-hand scale)
— Government debt outstanding (right-hand scale)

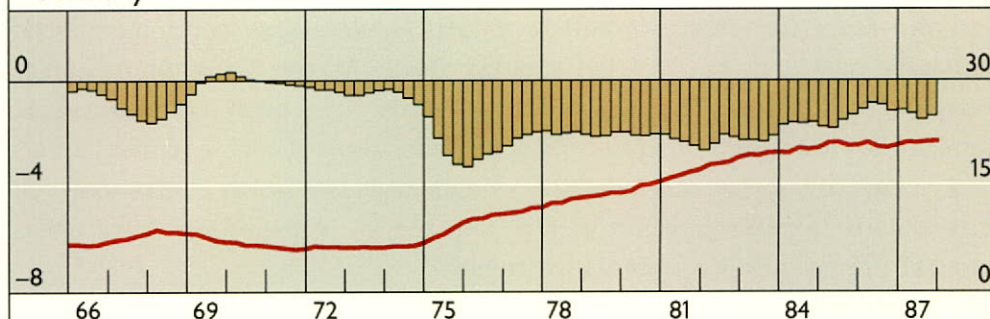
United States



Japan



Germany



* For Japan and Germany, budget deficits are expressed as uncentred four-quarter moving averages of seasonally unadjusted data.

Further cuts
in US deficit
required

The situation in the United States is less of a problem in some respects, though it is true that the political obstacles to pursuing an appropriate policy are at least as strong as those elsewhere. The main reason is that the level of US activity is high. Given also the possible further demand pressure from additional correction of the external balance, there is thus no major conflict between the needs of the economy and those of sounder public finance.

The United States is therefore one of the very few countries which does not face a fiscal constraint on the pursuit of a policy appropriate to the state of the economy. Elsewhere there is either a genuine dilemma or, in some cases, the public debt ratio is already so high that any expansionary action is felt to be ruled out altogether, regardless of the state of the economy. With monetary policy in principle earmarked for the medium-term control of inflation and thus not available to attempt any large-scale demand stimulus, it is not surprising that policy-makers have continued to see increased emphasis on measures to stimulate the supply side of the economy as the only logical — but also desirable — way out of their dilemma.

Other countries
face a policy
dilemma

Structural adjustment and micro-economic reform

In some contrast to the increasingly circumscribed role of budgetary policy on the demand side, fiscal actions are playing a prominent part in the attempt to revitalise economies' supply potential. Following considerable efforts to reduce the proportion of resources devoted to public expenditure (efforts which have been hampered by slow growth itself), emphasis has increasingly focused on tax reform. Broadly speaking, the aim has been to reduce distortions and inequalities in the tax structure with a view to stimulating incentives to work, save and invest. A subsidiary aim has in some cases also been to broaden the revenue base as part of the attack on budget deficits. The most noticeable feature of tax reform has been the reduction of tax rates, particularly of the higher marginal rates of personal taxation. There has also been a tendency to shift the burden of taxation onto consumption, partly in the hope of stimulating more saving. And, because increased saving unaccompanied by at least commensurately increased investment would tend, if anything, to depress demand and worsen budget deficits, corporate taxation has also been the object of reform efforts, lower rates being introduced alongside measures to broaden the tax base. At the same time, earlier measures targeted on specific investment areas have been scaled down or eliminated. However, as macro-economic policy alone is unable to guarantee a background of buoyant non-inflationary demand growth, it has been widely felt that actions in other areas are also required — especially actions which support the profitability of new investment.

The role of tax
reform in the
supply-side
approach

In particular, a wide range of reforms has been implemented with a view to promoting competition and flexibility in product markets and the better functioning of labour markets. Deregulation and privatisation have been important, as have the reduction of industrial subsidies and, in the labour market, adjustments to minimum wage and employment protection legislation and social security reform. Deregulation of financial markets has been particularly thoroughgoing, an important aim being the improvement of both the allocation of capital resources and the efficiency of the financial sector.

The wide scope
of structural
adjustment
policies

One general problem, which applies also to measures to improve the freedom of international trade, is that while the potential benefits of comprehensive micro-economic reform can be large, they are also widely spread across the population. By contrast, the costs imposed often tend to

impinge on a much narrower base. This sometimes gives rise to the view that, as with attempts to encourage private investment, micro-economic reform is the easier to introduce the less severe the aggregate demand climate. To the extent that this is so, one must be realistic as to how much can be achieved, and how quickly, by supply-side measures alone. Nevertheless, given the tight constraints on macro-economic policy to which this chapter has drawn attention, such measures would appear to offer the best hope both of improving growth performance directly and, perhaps, of reinstating some degree of usability of the traditional macro-economic instruments in the longer run.

The developing countries

1987 a
disappointing
year

As already mentioned, output growth in the less developed countries fell to 3% last year, with particularly low growth rates being recorded in Africa, the Middle East and the oil-producing countries. Output growth also declined in Latin America, while the Asian group was able to increase its average rate to 7% despite a marked deceleration in India owing to the effect of adverse weather conditions on the agricultural sector. Growth differentials thus widened last year, but, as seen in the table overleaf, large disparities in output performance have been typical of most of the 1980s.

Asian NICs the
outstanding
exception

The Asian countries have not only achieved the highest average growth rate among developing countries but also the most stable one. The 6½% average rise in the per capita income of the four NICs (Hong Kong, Singapore, South Korea and Taiwan) reflects a determined effort to strengthen the size and competitiveness of their manufacturing sectors and has been led by rapid export growth and large gains in export market shares, particularly in North America. By contrast, the even higher average growth rate achieved by China is mainly of domestic origin, and domestic forces have also dominated the uneven growth pattern of the Philippines.

Latin America

The Latin American countries have experienced a large slowdown in average growth compared with the 1976–81 period. They are also characterised by large fluctuations in the relative performance of individual countries. The slowdown last year was led by Brazil and Argentina, which together account for some 40% of the area's total GDP. Mexico, on the other hand, experienced a slight recovery, albeit not strong enough to raise per capita income, which has fallen by 2½% per year since 1981. Per capita income has also declined in Chile, mainly as the result of a steep fall in the early 1980s, whereas more recently GDP has grown at a high and steady rate.

Africa and the
Middle East

In Africa and the Middle East growth has been low as well as unstable. For the Middle Eastern group developments in the international oil market have been a dominating factor, and the same applies to Nigeria. However, with few exceptions, growth has been slow throughout the area, and the fall in per capita income has occurred in countries which were already among the poorest in the world.

To some extent, the slowdown in output growth compared with earlier periods can be related to external debt problems (discussed in greater detail in

Output growth in developing countries								
Countries and country groups	1976-81	1982	1983	1984	1985	1986	1987	Per capita output 1981-87
	percentage change, annual rate							
Africa	2.2	1.5	-1.7	0.3	2.7	1.0	0.4	-1.9
Nigeria	-0.2	-3.2	-6.3	-5.2	5.3	-3.3	1.2	-6.4
Sub-Saharan countries	2.8	1.6	-0.6	1.1	3.5	3.6	2.2	-1.1
Middle East	2.8	-0.4	0.0	0.4	-1.5	2.0	-1.0	-3.4
Egypt	8.1	5.5	9.0	-2.9	9.4	5.9	3.1	2.1
Asia	6.7	4.5	7.2	8.9	6.3	6.3	7.0	5.0
China	6.5	6.3	8.7	16.7	12.5	7.6	9.4	9.8
India	4.4	3.7	7.8	3.8	6.3	4.4	2.4	1.9
Philippines	5.5	1.9	1.0	-7.1	-4.2	2.0	4.9	-2.8
NICs	9.3	4.4	8.3	9.0	3.5	10.7	12.2	6.5
Latin America	4.3	-1.2	-2.4	3.7	3.4	3.7	2.6	-0.6
Brazil	4.5	0.9	-2.4	5.7	8.3	8.2	3.0	1.7
Mexico	7.4	-0.6	-4.2	3.6	2.6	-3.8	1.4	-2.6
Argentina	0.5	-5.3	2.4	2.3	-4.7	5.4	1.6	-1.1
Chile	7.9	-13.1	-0.5	6.0	2.4	5.7	5.7	-0.9
All developing countries	4.4	1.7	2.0	4.5	3.1	4.1	3.1	1.0
Sources: IMF World Economic Outlook, UN Commission for Latin America and the Caribbean, and national data.								

Chapter V), since heavily indebted countries were forced to adopt restrictive policies to reduce large external deficits. It is difficult to quantify the impact of policy measures, particularly that of monetary policy. It appears, however, that monetary policies have been rather expansionary in the Asian countries but restrictive in Latin America. As regards fiscal policy, government deficits relative to GDP have not been reduced in line with initial plans or prescriptions. Indeed, with the exception of the Asian countries government deficits are now higher than in 1982. Nonetheless, when the reduction in oil revenues, net public interest payments abroad and the influence of automatic stabilisers are taken into account, the discretionary effect of fiscal policy is likely to have been negative for most countries.

Policies, however, have not been the only influence on relative output performance and perhaps not even the most important one. External factors, such as developments in oil and non-oil commodity prices and changes in the demand for exports, have had a marked effect on real incomes. Their indirect effect via fluctuations in the amounts of foreign exchange available for imports may have been equally important, not least for domestic investment. Indeed, the strength of investment spending has significantly influenced the growth trends in developing countries, and together with changes in saving and financial balances it provides a measure of the extent to which countries have

The role of policy in the slowdown

Other influences on growth

adjusted to external or internal problems without compromising long-run growth potentials or encountering inflationary problems.

Commodity prices and other external influences

Commodity price developments have influenced income developments within the group of developing countries, strengthening real growth in countries with a high output share of manufactured goods, while reducing real incomes in those relying heavily on commodity exports. Non-oil commodity prices measured in US dollars continued their earlier decline during the first half of last year, but showed a spectacular recovery in the second half with particularly sharp price increases for metals and agricultural raw materials. This turn-round was influenced by the simultaneous pick-up in domestic demand growth in the industrial countries and by relatively low inventories, but it probably also reflected the lagged effect of the earlier depreciation of the US dollar. Nonetheless, owing to the steepness of the previous decline and despite a 30% rise in the spot price of crude oil, average commodity prices measured in SDRs fell by more than 5% for 1987 as a whole and by some 1½% excluding oil and energy products (see the table below). Moreover, in real terms non-oil commodity prices for developing countries fell by more than 6%, reaching the lowest level ever recorded, after having touched the previous trough of 1932 in 1986.

Another feature of developments in 1987 was that, because of an unfavourable commodity composition, prices in the developing countries fell more than average commodity prices. Moreover, owing to the unusually large divergences between price developments of different commodity groups, the distribution of gains and losses varied widely among the various groups of developing countries. The Latin American countries, for which food and tropical beverages constitute a large share of exports, suffered a price fall of

Non-oil commodity prices fall further before rebounding sharply

In real terms commodity prices remain low

Distribution of gains and losses from commodity price movements

Commodity price developments						
By major commodity groups	1983	1984	1985	1986	1987	1980-87 average
	percentage changes of prices measured in SDRs					
All commodities ¹	-5.4	2.2	- 2.9	-37.1	- 5.5	- 5.7
Energy products ¹	-8.5	1.0	- 1.1	-44.2	- 6.4	- 6.5
of which: Oil ²	-6.8	1.4	- 1.4	-57.1	14.4	-10.0
Non-oil commodities ³	9.7	6.6	-12.4	-16.7	- 1.5	- 3.2
of which: Food	12.3	3.5	-14.7	-23.9	- 7.1	- 5.4
Beverages	11.7	21.1	-10.9	- 0.2	-34.7	- 4.3
Agricultural raw materials	5.1	11.9	-14.2	-12.0	21.2	0.8
Metals	8.4	-1.2	- 5.1	-18.5	8.1	- 3.2
Developing countries ^{3,4}	10.5	8.5	-12.1	-14.3	- 6.2	- 3.5
Real ⁵	10.5	6.7	-12.4	-13.3	- 6.2	- 4.9

¹ HWWA index. ² Spot price of Arabian light crude. ³ IMF index. ⁴ Average, excluding oil.
⁵ Deflated by average price of industrial countries' manufactured exports.
 Sources: HWWA and IMF International Financial Statistics.

Commodity composition of non-oil exports					
Developing countries by region	Food and beverages	Agri- cultural raw materials	Metals	Average non-oil commodity prices in SDRs	
				1986–87	1980–87, average
		percentages of total non-oil exports based on 1985 data			percentage change
Africa and Middle East	32.2	15.0	4.1	2.8	–2.3
Asia	12.5	10.6	1.3	6.5	–3.7
Latin America	40.8	10.0	6.3	–16.3	–3.8
All developing countries	23.2	10.9	3.2	– 6.2	–3.5
Sources: UN Monthly Bulletin of Statistics and IMF World Economic Outlook.					

more than 16%, although countries such as Bolivia, Chile and Peru benefited from the sharp recovery in metal prices. Similarly, the small sub-Saharan African developing countries, where coffee and cocoa are major export items, suffered price declines and terms-of-trade losses, while the Asian group was helped by a large share of agricultural raw materials.

The average growth of export volumes in the developing countries fell from about 11% in 1986 to about 7% last year. Again the distribution among countries and regions was very uneven, reflecting the influence of real effective exchange rate movements, changes in output capacities available for exports and the geographical distribution of exports. Thus, the African countries were adversely affected by the slow growth in Europe (see the table on page 41). By contrast, Asia, a large proportion of whose exports goes to North America and Japan as well as to other Asian developing countries, was helped by the continued strong growth in these areas. However, some decline from the extremely rapid expansion of 1986 was recorded, owing mainly to the introduction of protective measures and to a less rapid decline in real effective exchange rates. The Latin American countries achieved the most spectacular improvement compared with 1986. The continued strong rise of imports into the United States was undoubtedly a positive influence in this respect, and several countries also saw a depreciation of their real effective exchange rates despite the marked acceleration in domestic inflation rates. However, the rise in export growth was very unevenly distributed, with most of the acceleration occurring in Brazil and Mexico. Together, these two countries account for more than half of Latin American exports, and in 1987 they experienced increases in the growth of export volumes of 33 and 10 percentage points respectively.

Despite the fall in real non-oil commodity prices, the terms of trade of the developing countries improved in 1987, following a cumulative loss of some 30% in 1980-86. The combined effect of changes in the terms of trade and export volumes in 1987 may be estimated at some 3½% of total output. This external influence was most favourable for the Middle Eastern and Asian countries, but for all groups the 1987 outcome was an improvement compared with the previous six years. While the external factors have been important in

Slower export growth for developing countries as a group, but large regional differences

Combined effects of external influences were positive

shaping the size and time pattern of GDP changes, they are clearly not the only influence. For instance, when analysing variations in 1980–87 output growth rates between seventeen Latin American countries, changes in export volumes and terms of trade can be identified as important causes. However, changes in real fixed investment are statistically even more important and have in many countries exerted a negative influence. Furthermore, these three components account for only 50% of the variation in GDP growth, leaving the other 50% to be explained by other domestic demand components and policies.

External influences on developing countries' output developments							
Developing countries by region	Terms of trade 1986–87 1980–87		Exports 1986–87 1980–87		Destination of developing countries' exports ¹		
	changes in export volumes and the terms of trade in percentages of GDP				North America and Japan	Europe	Developing countries
					in percentages		
Africa	0.5	– 8.1	–0.4	– 1.1	13.9	65.5	13.0
Middle East	5.2	–18.9	–0.4	–18.8	27.0	23.3	45.1
Asia	0.9	– 1.9	3.5	23.2	46.1	15.8	29.3
Latin America	0.4	– 2.3	0.8	5.1	43.9	21.4	22.9
All developing countries ²	2.3	– 8.7	1.2	2.0	35.7	26.0	29.1

¹ Based on 1985 trade flows including oil. ² Averages calculated using 1985 export weights and exchange rates.

Sources: UN Monthly Bulletin of Statistics, UN Commission for Latin America and the Caribbean, and IMF World Economic Outlook.

Capital formation

Low or negative investment growth has not been confined to Latin America, nor was its negative influence equally strong throughout the 1980–87 period. It was most pronounced in the early 1980s, when the output share of fixed investment fell by 2 percentage points for all developing countries (see the table below). Following some recovery in 1986, capital formation fell further last year, and in Africa and Latin America its share in output is now some 4–6 points below the average for all developing countries. The weak investment performance has not only affected output and aggregate demand growth. As in many industrial countries, several years of low investment growth have adversely affected output capacities and potential output growth. This was seen early last year when a recovery of domestic demand growth in several Latin American countries quickly encountered bottlenecks and led to inflationary pressures, even though per capita incomes were still well below earlier levels. Moreover, lower potential output growth narrows the scope for improving the external balance in the longer run without reducing the level of domestic absorption and for raising per capita income levels. In this respect, it

Investment performance has been poor during the 1980s

Investment: Output share and efficiency							
By major country groups	1976–81 ¹	1982	1983	1984	1985	1986	1987
	in percentages						
A. Investment/GDP							
Africa	24.0	24.1	21.3	19.0	18.3	19.7	18.6
Middle East	24.0	26.5	30.1	28.5	27.1	26.0	25.0
Asia	29.5	27.1	26.9	27.3	28.1	28.3	27.3
Latin America	23.4	20.7	17.0	17.1	17.6	18.3	17.5
All developing countries	25.7	24.8	24.2	23.7	23.8	24.0	23.0
Industrial countries	23.6	20.8	21.0	22.4	21.9	22.2	22.5
B. Efficiency of investment²							
Africa	10.0	5.0	3.8	3.2	3.3	8.2	10.0
Middle East	11.2	-4.1	-3.1	0.2	-0.2	0.9	2.0
Asia	22.0	24.0	24.9	25.2	25.3	24.5	23.8
Latin America	18.2	6.1	3.9	8.3	11.8	16.4	17.3
All developing countries	17.3	10.8	10.7	12.5	13.6	15.4	15.9
Oil producers	20.5	-3.0	-2.8	-0.2	-0.5	1.3	2.9
Non-oil producers	15.3	18.0	17.9	20.0	21.5	24.0	23.9
Industrial countries	11.8	9.3	11.3	11.6	15.0	14.4	11.4

¹ 1979 for investment share. ² Calculated as percentage change in GDP (five-year moving average) divided by the output share of fixed investment.

Sources: IMF World Economic Outlook and OECD National Accounts.

is particularly unfortunate that capital formation has been weakest in Africa and Latin America, where population growth is highest and per capita incomes are either the lowest or have fallen the most.

Another unfavourable feature in many developing countries has been the low or falling efficiency of investment. This may in part explain the lack of investment incentives, but it can also be seen as the outcome of slower growth and, in some cases, as the result of an inefficient allocation of scarce capital resources. The situation is particularly distressing in Africa, where the level of investment efficiency, even after some recovery in 1986–87, is less than half the level for all non-oil-producing developing countries, and thus offers little incentive to private capital inflows. In Latin America, on the other hand, efficiency is almost back to earlier levels, and the Asian countries have achieved efficiency levels which are almost twice as high as in industrial countries.

Low efficiency of investment, especially in Africa

Saving and financial balances

The unsatisfactory investment performance is also clearly related to the problem of high external debt. Faced with the need to improve their external accounts, highly indebted countries have had to increase national saving relative to investment or reduce investment relative to savings available from national sources. Obviously, reducing the external imbalance through higher saving would have been desirable from the point of view of maintaining investment and potential output growth. On the other hand, given close-to-subsistence income levels in many countries, the scope for increasing private

External adjustment at the expense of investment

saving has been limited. For the same reason, increasing government saving through higher taxes or cuts in current expenditure has often not been a realistic policy option. Given also the high import content of capital goods and the urgent need to reduce external deficits, it is perhaps not surprising that private investment spending has had to take a major share of the external adjustment burden and that government investment plans have been most severely cut in countries forced to reduce government deficits.

The extent to which external adjustment has been achieved without compromising domestic growth policies is illustrated in the table below. In addition to movements in the current external account, the table shows developments in two indicators of saving: private sector financial balances and gross national saving, measured as resources available for investment and net capital outflows. For all developing countries the current external account has improved by some 3% of GDP since 1982, and with government deficits rising on average this change is more than accounted for by an improvement in private financial balances. However, since the national saving rate has increased by only 1.1 points, more than half of the change in the external account can be ascribed to lower investment.

This outcome, however, is the result of very different adjustment patterns for the three country groups shown in the table. In Asia the rise in

Large differences
in adjustment
patterns

Saving and financial balances								
Selected country groups	1979	1982	1983	1984	1985	1986	1987	Change 1982-87
	as a percentage of GDP							
Latin America								
Current account	-3.7	-5.6	-1.5	-0.3	-0.6	-1.9	-1.1	4.5
Financial balance*	-3.0	0.7	4.3	3.7	3.0	3.2	4.6	3.9
National saving	19.7	15.1	15.5	16.8	17.0	16.4	16.4	1.3
Asia								
Current account	-1.4	-2.1	-1.7	-0.5	-1.5	0.5	2.1	4.2
Financial balance*	2.2	2.2	1.6	2.4	1.6	4.6	6.3	4.1
National saving	28.1	25.0	25.2	26.8	26.6	28.8	29.4	4.4
Africa								
Current account	-3.2	-7.3	-4.6	-2.4	-1.0	-4.7	-3.8	3.5
Financial balance*	2.8	1.0	4.6	3.4	3.9	1.5	5.2	4.2
National saving	20.8	16.8	16.7	16.6	17.3	15.0	14.8	-2.0
All developing countries								
Current account	1.4	-2.9	-2.4	-1.2	-0.9	-1.8	0.0	2.9
Financial balance	3.6	2.9	3.5	3.8	3.6	4.8	6.3	3.4
National saving	27.1	21.9	21.8	22.5	22.8	22.2	23.0	1.1
Memorandum item:								
Industrial countries								
National saving	23.2	20.4	20.8	21.7	21.3	22.0	22.1	1.7
* Private sector including state and local governments and nationalised firms.								
Source: IMF World Economic Outlook.								

national saving has been sufficient to “finance” the improvement in the external account, and the change in the (non-central government) financial balance suggests that most of the rise has come out of private savings. The Latin American countries have shown the largest improvement in the current external account, the bulk of the change being accounted for by a higher private financial balance. However, since the increase in national saving is far less than the change in the current account, most of the external adjustments have been at the expense of investment. In Africa the absence of any internal adjustment is even more pronounced. The rise in the private sector financial balance has exceeded the change in the external account by a large margin, entirely as the result of lower investment, since the gross saving rate declined over the period.

On balance, the developing countries have been able to cope with the debt problem in the very short run in the sense that the current-account deficits have been markedly reduced since 1982. However, except for the Asian group of countries, the external adjustment has been achieved at a high price in terms of lower domestic investment and potential future output growth.

Inflation and anti-inflation policies

One of the more unfavourable features of recent developments in the developing countries has been the sharp rekindling of inflation in 1987. As can be seen from the table opposite, the acceleration was mainly the result of developments in Latin America, although the rate of price increase was also higher in Africa and the Middle East. In Asia the rate of inflation has been relatively stable, below 9%, but excess demand and accelerating price increases are now becoming a concern to policy-makers in China. The resurgence of price increases in Latin America was very large and affected most of the countries in the region, although it was most pronounced in Brazil, Argentina and Mexico. It can to a large extent be related to the abolition of earlier counter-inflationary policy measures. In Argentina and Brazil the end of the Austral and Cruzado plans (see below) released inflationary forces that had accumulated in 1986 under the influence of price controls and expansionary demand policies. A further element putting upward pressures on prices, especially in Mexico and Brazil, has been the adjustments in subsidies and public tariffs as part of the effort to bring public sector deficits under control. Moreover, devaluation of the currency in an attempt to improve the competitiveness of export industries has been accompanied by higher import and consumer prices. In certain areas the scarcity of import goods may have added another boost to price inflation. Finally, in countries with a long history of high inflation, policies aimed at removing market distortions and changing relative prices in favour of a more efficient allocation of resources are likely to be accompanied by inflationary pressures, at least in their initial phase.

Inflation
rebounded
sharply in 1987

There are exceptions to this rather bleak picture. The most striking success story is that of Bolivia, where prices rose only 10% last year, having decelerated from a hyperinflation rate of almost 12,000% in 1985, thanks to the

Inflation in the developing countries							
Countries and country groups	1976-81	1982	1983	1984	1985	1986	1987
	percentage change in consumer prices, annual rate						
Africa and Middle East	15.6	12.6	15.2	17.7	12.3	12.0	16.3
Egypt	6.2	14.8	16.1	17.1	13.3	22.6	19.7
Nigeria	17.0	7.7	23.2	39.6	5.5	5.4	11.0 ¹
Asia	8.7	6.3	6.6	7.2	7.1	8.0	8.7
China	3.1	2.0	2.0	2.7	11.5	6.0	7.3
India	6.5	7.9	11.9	8.3	5.6	8.7	9.4 ²
Philippines	12.8	10.2	10.0	50.3	23.1	0.7	3.8
South Korea	18.4	7.3	3.4	2.3	2.5	2.3	3.2
Latin America	49.2	66.8	108.2	131.9	143.2	88.4	130.8
Argentina	132.5	164.8	343.8	626.7	672.0	90.0	131.0
Brazil	62.8	98.0	142.0	196.7	227.0	150.0	219.0
Mexico	23.7	58.9	101.8	65.5	57.7	86.2	131.8
Bolivia	21.9	133.3	269.0	1,281.4	11,750.0	276.0	10.0 ¹
All developing countries ³	22.4	25.5	38.2	46.0	47.4	32.1	45.8

¹ Second quarter. ² Third quarter. ³ Averages calculated using 1985 GDP weights and exchange rates.
Sources: IMF International Financial Statistics and World Economic Outlook.

Stabilisation
policies in
Bolivia, Argentina
and Brazil

shock therapy applied by the Government. The main component of the stabilisation programme was a currency reform backed up by an extremely restrictive fiscal policy, which eliminated a public sector deficit equal to almost 30% of GDP in three years. Other stabilisation programmes have been less successful. The Austral Plan in Argentina, helped by a total wage and price freeze, initially reduced the rate of inflation from more than 1,000% to the lowest level (82%) recorded this decade, but subsequent policy relaxations rekindled inflationary expectations and by the end of last year the rate of consumer price increase had reached 175%. The Cruzado Plan in Brazil, which temporarily abolished all forms of indexation, also reduced inflation in its early phase, but, owing to a substantial rise in real wages, excess demand pressures quickly developed. The Plan was officially abandoned in early 1987 when the authorities lifted all price controls in an attempt to "mop up" excess demand through a once-for-all price adjustment. However, with indexation back in force, a wage/price spiral was released, and by the end of 1987 the rate of inflation had reached 365%, the highest level recorded this decade and well above the rate prior to the Plan.

The latest attempt to control inflation using comprehensive incomes policies is the "economic solidarity pact" concluded in Mexico at the end of last year. Because the current rate of inflation is influenced by a temporary wage and price freeze, it is still too early to evaluate this new stabilisation programme. However, the inflation history of Latin America is not very encouraging. During the five years prior to the debt crisis, the average inflation rate for the Latin American countries was almost four times that of other

developing countries. Moreover, during 1982–87 the Latin American countries saw a doubling of their inflation and only in one year (1986) was the rate of price increase less than 100%. The Bolivian experience provides a ray of hope, although it remains to be seen how inflation will react once the austere policies are relaxed. Moreover, even though radical measures are required in conditions of hyperinflation, the social costs of the Bolivian programme — a fall in per capita income of almost 30% and a rise in unemployment to 21.5% — have been high and may not be socially or politically enforceable in other countries.

III. International trade and payments

Highlights

Last year substantial shifts occurred in the global pattern of aggregate current-account balances, involving a \$32 billion deterioration among the industrial countries and an even more pronounced improvement of \$41 billion in the developing world. For the first time since such statistics have been compiled the group of non-fuel-exporting developing countries registered a small current-account surplus. Within the group of industrial countries, however, the very large nominal external imbalances of the United States, Japan and Germany widened further. Moreover, a significant share of the counterpart to the strengthening of the developing world's external position was borne by other industrial countries.

This picture of a welcome shift of current-account deficits from the developing to the industrial countries and the apparent lack of external adjustment in the three major industrial countries needs, however, to be qualified. The improvement in the aggregate external position of the developing countries to a large extent reflected the recovery of oil prices, the benefit of which accrued primarily to the major oil producers, and the dynamic trade performance of newly industrialised countries in South-East Asia. The major debtor countries, some of which made commendable adjustment efforts last year, experienced as a group only a relatively modest improvement in their current account, and their external positions remained precarious. On the other hand, the persistence of large nominal imbalances in the United States, Japan and Germany tended to mask an underlying adjustment which manifested itself in a considerable reduction in trade imbalances measured at constant prices and became more clearly visible as the year went on. Indeed, there are reasons to believe that the process of adjustment in these countries will gain momentum in the current year.

The shifts in payments positions took place against the background of sustained world trade growth, which after an initial sluggish phase picked up appreciably towards the end of the year and which, in contrast to 1986, was more evenly supported by an expansion of foreign trade in most of the major groups of countries.

International capital movements and the financing of current-account imbalances in 1987 were strongly influenced by stepped-up exchange market interventions by a large number of central banks. The resultant additions to official reserve holdings implied a substantially larger role of official flows in the financing of external imbalances, especially the US current-account deficit. The improvements in the external positions of developing countries allowed sizable accumulations of official foreign exchange reserves. However, these accrued to only a small number of countries and the reserve gains of most countries

with debt problems were modest. With commercial creditors keen to reduce their exposure to the debtor countries, they became even more heavily dependent on official financing flows than in the past.

World trade

Preliminary estimates suggest that the growth in the volume of world trade in merchandise accelerated slightly last year, to around 4¾%. At the same time the rate of increase in average dollar prices of traded goods more than doubled to about 10%, so that the value of world trade in current dollars expanded by about 15% to a level of more than \$2,400 billion.

Trade in merchandise accelerates slightly . . .

Three features characterised world trade developments in 1987. Firstly, trade growth was on the whole more evenly distributed among the main groups of countries than in previous years; secondly, the growth of trade accelerated markedly in the course of the year; thirdly, the newly industrialised countries in South-East Asia, recording extraordinary rates of growth in trade volumes for the second successive year, established themselves as the leading trading nations in the developing world.

Although its growth slowed down from 9% in 1986 to 6% in 1987, import demand in the industrial countries remained the strongest force in support of world trade expansion. The decline chiefly reflected the sharp deceleration in import volume growth in the United States, from nearly 15% in 1986 to 5% in 1987, whereas real import demand in other industrial countries continued to grow on average by about 7%. However, these year-on-year changes mask a considerable acceleration in import growth in the second half of the year, as an upturn in real domestic demand in the industrial countries was quickly translated into an annualised rate of import growth of more than 10%.

. . . with import demand expanding in both industrial and developing countries

Following an unprecedented decline of over 5% in 1986, import demand in the developing countries grew by about 2½% in 1987 — only the second year of import expansion since 1981. Positive import growth was essentially confined to the group of non-fuel-exporting countries, whose import volume grew by an estimated 8%, compared with only a marginal increase in 1986. This average performance was, however, mainly a reflection of the buoyancy of import demand in South-East Asia. In other non-fuel-exporting countries, where imports had been cut back in volume terms in 1986, the easing of external constraints brought about by higher export earnings allowed only a very modest expansion of imports in 1987. In the fuel-exporting countries import restraint was maintained, but the cut in volume of about 12% was only about half that recorded in the preceding year.

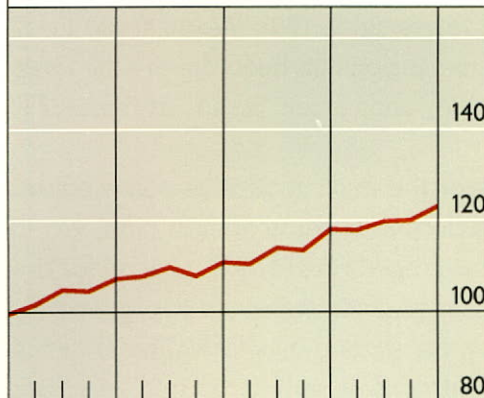
Turning to export developments, the volume of the industrial countries' exports expanded by about 4% in 1987, compared with 2½% in 1986. Much of this acceleration must be attributed to the United States, where export growth quickened from 8% in 1986 to 12% in 1987, by far the highest rate of all the major industrial countries. With the upturn in economic activity in the second half of the year, export growth became generally more vigorous, reflecting also a considerable pick-up in export growth in Europe. The developing countries were the main beneficiaries of import growth in the

Export growth quickens in the industrial countries . . .

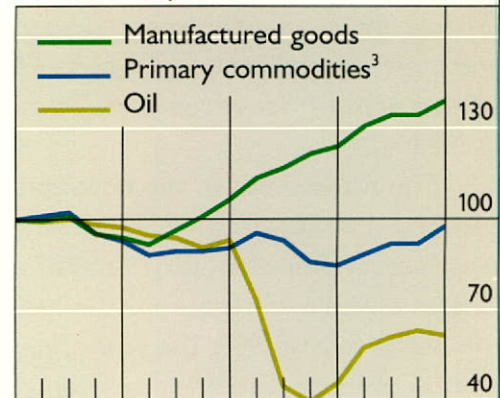
World trade, 1984 – 87¹

Fourth quarter 1983 = 100

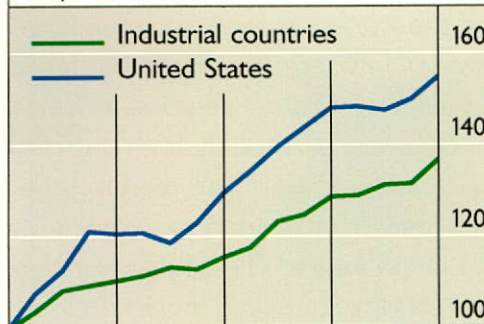
World trade volume



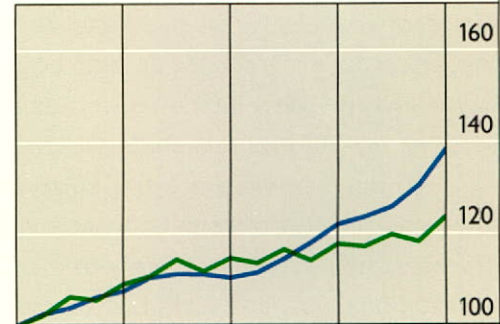
World trade prices²



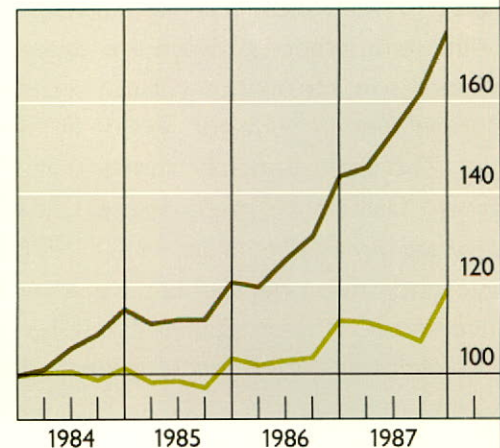
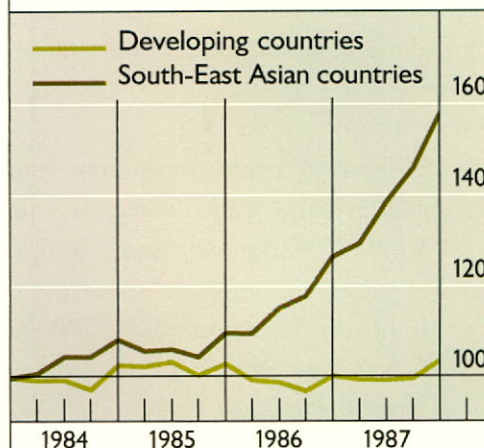
Import volume



Export volume



Developing countries
South-East Asian countries



¹ Volume data: uncentred three-quarter moving averages. ² In US dollar terms. ³ Excluding oil.

... but slows
in the developing
world

industrial countries, which take up 60% of their total foreign sales. While the aggregate export volume growth of developing countries is estimated to have slowed down, from around 11% in 1986 to 7% in 1987, this was entirely due to the weakness of demand for oil. In fact, while the fuel-exporting countries' export volume stagnated in 1987, that of the non-fuel-exporters rose by around 10% for the second consecutive year; a significant part of this growth reflected the dynamic export performance of South-East Asian economies.

Shifts in the
commodity
composition ...

The shifts in the geographical pattern of trade mirrored to a large extent the changes which occurred in the commodity composition of world trade

during the last two years. Growth in the volume of trade in manufactured products accelerated by about 1½ percentage points to 5% in 1987, with a marked pick-up in the course of the year. There was also a strong rebound in agricultural trade, which, after stagnating in 1986, grew by an estimated 4% in 1987 — the sharpest increase in volume terms since 1981. World trade in oil and other mineral products, whose 7½% expansion had been the driving force behind world trade volume growth in 1986, contracted by an estimated 1% in 1987.

The movements in the dollar prices of the main groups of commodities converged somewhat in 1987. Following a decline of some 50% in 1986, world oil prices recovered by 28½% in 1987 and averaged roughly \$17 a barrel for the year as a whole. In real terms the 1987 average price remained approximately 4% below that of 1978, the year preceding the second oil shock. The prices of non-oil primary commodities strengthened considerably after mid-year, but for the year as a whole the increase of 4½% fell far short of the 12% rise in the prices of manufactured products. Among the non-oil primary commodities, the prices of tropical foods and beverages, which are important for many lower-income developing countries, remained generally depressed, while those of agricultural raw materials and metals were particularly buoyant.

... and in the relative prices of traded goods

Although services are traded to a much lesser extent than merchandise, their role in international transactions and their contribution to balance-of-payments adjustment are likely to increase in the future. This applies not only to traditional services such as transport and tourism, but even more to a wide range of activities such as financial services, consultancy, computing and telecommunications, which are expanding rapidly in response to both major advances in information-related technologies and the growing trend towards deregulation in domestic service industries.

Growing importance of trade in services

The table opposite shows that since 1976 world trade in services has grown faster than merchandise trade, its share in total trade in goods and services having risen from 24% in 1976 to 30% in 1987. However, much of this buoyancy must be ascribed to a particularly steep increase in investment income which accompanied the surge in cross-border lending and the rise in interest rates during part of the past decade. Other services, by contrast, have so far expanded broadly in line with merchandise trade. This finding is, perhaps, surprising in view of the marked shift towards service activities in the more mature economies, which might have been expected to give rise to an acceleration in the growth of cross-border trade in other services. However, the aggregate data presented here may not fully capture underlying trends. Data on trade in services are notoriously weak, as is evidenced, for example, by the large discrepancy between total recorded exports and imports of services. There have also been considerable changes in prices, both among different types of services and relative to prices of merchandise, which may conceal divergent growth rates in the volume of trade in services and goods. Moreover, some of the technological changes conducive to cross-border trade in services are a relatively recent phenomenon, and their impact may thus only be felt more strongly in the future. In addition, as has been recognised with the inclusion of services — for the first time — in the current round of multilateral

trade negotiations (Uruguay Round), an agreement on rules governing trade and investment in services may provide further impetus to trade in such activities.

World trade in goods and services ¹				
Items	1976	1981	1986	1987 ²
	in billions of US dollars			
Total	1,185	2,592	2,777	3,218
Merchandise	903	1,820	1,928	2,251
Services	282	772	849	967
Investment income	79	350	374	n.a.
Other services	203	422	475	n.a.
<i>Shares in total trade in goods and services (in percentages)</i>				
All services	24	30	31	30
Services excluding investment income	17	16	17	n.a.
¹ Excluding eastern Europe. ² Preliminary estimates. Sources: IMF Balance of Payments Yearbook and World Economic Outlook, April 1988.				

Protectionist pressures continue

In 1987 there were no signs that protectionist pressures in the world economy were abating. In particular, the persistence of large trade imbalances and the continued difficulties faced in carrying out structural adjustments appeared to intensify the search for bilateral solutions to trade problems, thereby expanding the share of world trade which escaped the purview of multilateral rules and disciplines. Despite the commitment of contracting parties to a standstill during the course of the Uruguay Round, so-called "grey-area" measures comprising voluntary export restraints, market-sharing arrangements and other non-tariff barriers designed to circumvent GATT rules continued to proliferate, bringing to an estimated 50% the share of world merchandise trade that is in effect "managed" in one way or another. For instance, in the year to September 1987, the first of the Uruguay Round, GATT documented 251 new grey-area measures.

The continued preoccupation with bilateral trade imbalances has also been accompanied by a marked rise in so-called "process protectionism" — the increasing threat of, or actual recourse to, measures such as anti-dumping or countervailing duty investigations, designed to discourage imports or provoke export restraint. A further example of the trend towards bilateralism is the recent spate of regional trade agreements, the most notable example being the free trade agreement reached during the latter part of 1987 between the United States and Canada. The Canada-US agreement broke new ground in several areas that had traditionally not been covered by GATT regulations — namely in agriculture, services and trade-related investment, all of which are key agenda items in the Uruguay Round — and is likely on balance to be trade-creating. However, it also raised questions about the role of bilateral agreements in an open global trading system based on the principles of non-discrimination and most-favoured-nation treatment.

External adjustment in the three largest industrial countries

At first sight 1987 appears to have been a disappointing year in terms of external adjustment in the three largest industrial countries. External imbalances widened further, the US current-account deficit increasing by \$19.3 billion and the surpluses of Japan and Germany expanding by \$1.2 and 5.4 billion respectively. However, changes in current payments positions expressed in terms of US dollars tend to present a rather misleading picture, as may be seen from the table below: the external imbalances of Japan and Germany, measured in terms of national currencies or as a percentage of GNP, declined noticeably, but in the United States the current-account deficit increased further in 1987, both in absolute terms and in relation to GNP.

Widening imbalances in dollar terms mask underlying adjustment

Alternative measures of the current-account balances of the three largest industrial countries					
Current-account balances	1985	1986	year	1987 first half*	second half*
United States					
In billions of US dollars	-116.4	-141.4	-160.7	-156.5	-164.9
As a percentage of GNP	- 2.9	- 3.3	- 3.6	- 3.5	- 3.6
Japan					
In billions of US dollars	49.2	85.8	87.0	93.2	80.8
In thousand billions of yen	11.5	14.2	12.5	13.8	11.2
As a percentage of GNP	3.6	4.3	3.6	4.0	3.3
Germany					
In billions of US dollars	17.1	39.7	45.1	46.8	43.4
In billions of Deutsche Mark	48.4	85.0	80.5	85.0	76.2
As a percentage of GNP	2.6	4.4	4.0	4.2	3.8
* Seasonally adjusted at annual rates.					

Nonetheless, even if expressed in national currencies or as a percentage of GNP, nominal current-account balances are subject to various transitory influences and are therefore not particularly meaningful indicators of the degree of underlying adjustment. A first reason is that in the wake of persistent imbalances current payments positions increasingly reflect the legacy of earlier disequilibria in that concomitant changes in net international investment positions cause net investment income to add to surpluses and deficits on other transactions. Secondly, given the importance of oil imports, major fluctuations in oil prices can markedly affect the pattern of annual changes in nominal current-account balances. Thirdly, relative movements in the prices of traded goods (other than oil), which at times of large exchange rate adjustments are likely to be particularly pronounced, may mask changes in trade volumes of significant proportions.

Indeed, while the current-account deficit of the *United States* increased from \$141.4 billion in 1986 to \$160.7 billion in 1987, several factors combined to conceal the underlying and progressively strengthening tendency towards better external balance in the course of last year. Firstly, a significant part of

Adjustment in the United States . . .

the rise in the nominal current-account deficit was associated with a decline in net investment income, from \$20.8 billion to \$14.5 billion, essentially reflecting the deterioration in the US international investment position in recent years. Net earnings on investment income would, in fact, have fallen much more sharply if the depreciation of the US dollar had not boosted US direct investment receipts, because it both raised the dollar value of overseas earnings and generated substantial capital gains on the stock of US-owned foreign direct investment. The balance on other services and transfers, however, improved slightly and helped partly offset the decrease in net investment income. Secondly, more than one-half of the increase in the trade deficit, from \$144.3 billion in 1986 to \$159.2 billion in 1987, was attributable to higher imports of crude oil and petroleum products; although the volume of such imports rose by 3½%, the lion's share of the increased oil payments stemmed from higher prices. The non-oil trade deficit widened by only \$6.3 billion, with all of the rise taking place in the first half of the year. Thirdly, the worsening in the non-oil trade balance in 1987 was entirely due to a 4½% deterioration in the (non-oil) terms of trade, which more than counterbalanced a decline in the trade deficit calculated on the basis of constant 1982 trade unit values.

Changes in the non-oil trade balances of the three largest industrial countries			
Non-oil trade balances	1985	1986	1987
	in billions of US dollars		
United States			
In current dollars	-16.6	-38.8	- 6.3
In constant dollars ¹	-16	-21½	11½
Japan ²			
In current dollars	2.4	20.2	0.3
In constant dollars ¹	6	-20½	-14½
Germany ²			
In current dollars	6.4	18.3	14.7
In constant dollars ¹	5	- 6	- 5½

¹ Calculated at constant 1982 trade unit values in dollars. ² On the basis of customs data.

... owes most to strong export growth

The remarkable turn-round in the trend of the real non-oil trade deficit — from a \$21½ billion rise in 1986 to a \$11½ billion decline in 1987 — owed most to a very strong export performance. The volume of exports expanded for the year as a whole by 12.2%, or 4½ percentage points more than in 1986, with particularly sizable gains registered in the volume of foreign sales of both agricultural products and manufactured goods, the latter soaring by 16%, or two and a half times the estimated export market growth for US manufactured goods. The buoyancy of real exports must be ascribed predominantly to the exchange rate induced improvement in US exporters' international competitiveness, which on the basis of unit labour costs strengthened by over 25% between end-1985 and end-1987. Indeed, growing competitiveness not only enabled US exporters to progressively increase the rate of export volume growth, from 7.6% in the first quarter to 16.7% in the final quarter (compared

with the corresponding quarters in 1986), but also allowed them after the first quarter to substantially raise their dollar prices for non-agricultural exports. Moreover, US exporters fared well not only on the markets of those industrial countries against whose currencies the dollar has depreciated most strongly, but also on third markets in the developing world.

On the import side, however, evidence of external adjustment was more scattered: the growth in the volume of US non-oil imports slowed down from almost 13% in 1986, but, at about 5% last year, it remained relatively high. Moreover, the deceleration in real import growth occurred in the first half of 1987, when real domestic demand slackened; in the latter half, when US economic activity began to revive, import growth rebounded quite strongly. Non-oil import unit values continued to rise, by 6% as against 4% in 1986 — a rather modest increase in view of the dollar's effective depreciation of 29% over the past two years. By category of product, about three-quarters of the overall rise in the volume of imports was accounted for by additional purchases of capital goods, much of the increase reflecting imports from South-East Asian countries.

After jumping by \$36.6 billion in 1986 Japan's surplus on current account rose by only \$1.2 billion to \$87 billion in 1987. All of last year's increase in the surplus occurred in the first quarter, while in the final quarter the surplus fell by \$3.5 billion from its level in the corresponding period a year earlier, indicating that external adjustment was under way.

Continued
adjustment in
Japan . . .

The clearest signs of external adjustment can be found in the non-oil trade balance. Customs data show that the nominal non-oil trade surplus levelled off in 1987, after having risen by more than \$20 billion in the preceding year. More impressively, however, the slowdown in the growth of the nominal surplus took place despite a marked improvement in the terms of trade, with the result that, calculated at constant 1982 trade unit values, the trade surplus narrowed by \$20½ billion in 1986 and a further \$14½ billion in 1987. The apparent slowing of the underlying trend of adjustment between 1986 and 1987 can be explained by exceptional gold imports in the course of 1986. Leaving these out of account, the pace of adjustment quickened considerably in 1987.

The main driving force behind the reduction in Japan's real non-oil trade surplus was a cumulative 31% surge in the volume of non-oil imports over the last two years. Excluding the exceptional gold imports, which added about 3½ percentage points to import volume growth in 1986, the bulk of the expansion took place last year. Neighbouring South-East Asian countries seem to have been the main beneficiaries of the import demand, as purchases from this area increased in nominal terms by more than 30% in 1987, compared with an overall rise of 20% in the value of non-oil imports. On the export side, both the loss of international competitiveness, with a 50% increase in the yen's real effective exchange rate since mid-1985, and weakening demand growth in some of Japan's major export markets contributed to the external adjustment. However, while exchange rate and cyclical factors appear to have strongly restrained the performance of Japanese exporters in the US market, where nominal sales rose by only 4%, the much more limited loss of competitiveness in western Europe and booming South-East Asian markets allowed Japanese

. . . mainly arising
from a surge in
non-oil imports

exporters to raise their nominal sales in those areas by 27 and 22% respectively and to expand their share of these markets.

In Germany,
too, . . .

In Germany the current-account surplus widened, from \$39.7 billion in 1986 to \$45.1 billion in 1987, but registered a fall from the first half of the year to the second. However, this decline during the year owed much to the substantial increase in the traditional deficit on invisibles transactions, reflecting primarily higher net travel expenditures, and official transfer payments.

Despite a surge in the non-oil trade surplus (measured on the basis of customs data) to a record \$82.6 billion, underlying movements in trade prices and volumes indicated that in Germany, too, the external imbalance was in the process of adjusting. For the second consecutive year the increase in the nominal non-oil trade surplus was entirely attributable to terms-of-trade gains, of 4% in 1987 on top of a 6% improvement in 1986, which more than outweighed the contraction in the real surplus. Indeed, calculated at constant 1982 trade unit values in dollars, the non-oil trade surplus shrank by about \$6 billion in each of the last two years.

. . . non-oil
import growth
contributes to
adjustment

The main impetus to the underlying adjustment came from non-oil import volume growth of 6% in 1986 and 7% in 1987. Demand was particularly buoyant for imports of manufactured products, which have been growing since 1985 at an annual rate of 8%, or more than twice the rate of expansion of real domestic demand. Much of this development can be ascribed to the exchange rate induced loss of competitiveness of domestic producers of import substitutes, especially vis-à-vis suppliers whose currencies weakened against the Deutsche Mark. Estimates of changes in the volume of imports by origin, indeed, confirm that suppliers in the non-OPEC developing countries and non-EEC industrial countries made the biggest inroads into the German market. On the export side, however, adjustment was somewhat weaker. Export volume expanded modestly, by 1½% in 1986 and 3% in 1987, implying some loss of export market shares in each of the last two years. But in the course of 1987 volume growth began to rebound, and in the final quarter of the year real exports grew by 7½% in comparison with the corresponding quarter of 1986. For the year as a whole both cyclical and exchange rate factors influenced the pattern of export volume growth. With foreign demand being driven primarily by consumer spending, exports of consumer goods and food and beverages fared relatively well, whereas capital goods exports almost stagnated in volume terms. At the same time, exports to EEC partners and, from a low level, to Japan expanded strongly, while sales to countries with currencies linked to the dollar were rather depressed.

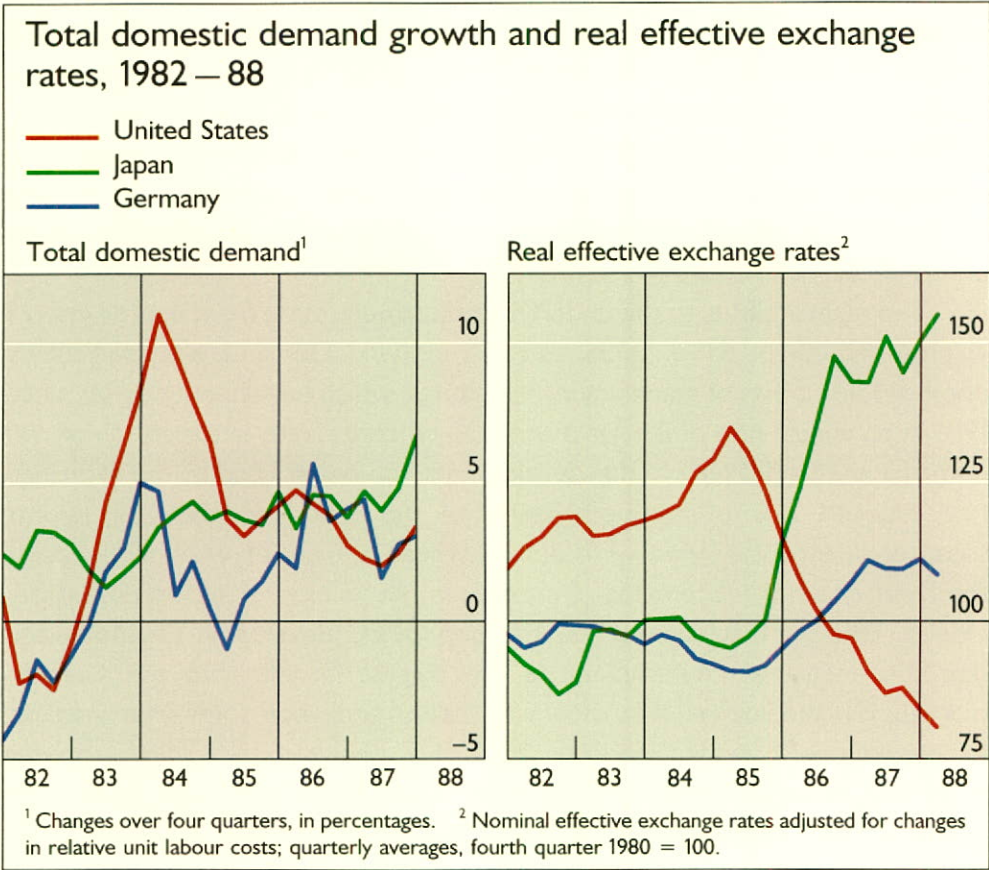
The persistence of imbalances and the outlook for adjustment in the three largest industrial countries

The slow pace of
adjustment
can be attributed
to . . .

While signs of an underlying adjustment in external positions in 1987 can be detected in all three major industrial countries, the pace of adjustment and, in particular, the speed with which the desired trade volume changes materialised have so far been rather slow. The persistence of the large nominal

external imbalances is, indeed, somewhat surprising, since most empirical studies would have predicted a more rapid and forceful adjustment to the changes in domestic demand growth and real effective exchange rates that have occurred since 1985 (see graph below).

Three broad sets of factors seem to have contributed to the stubbornness of the external imbalances. Firstly, and perhaps most importantly, the lags with which trade flows respond to exchange rate changes have apparently lengthened in recent years; secondly, a number of structural



factors primarily reflecting differences in the commodity composition and geographical orientation of trade may have hampered adjustment; and, thirdly, although relative real domestic demand growth has shifted considerably among the three major industrial countries, adjustment so far has not been sufficiently supported by the necessary changes in the pattern of domestic absorption.

Exchange rate changes affect trade flows by altering the relative prices of tradable goods. Normally, these relative price movements worsen the nominal trade imbalance in the short run — the J-curve effect — but should over time trigger volume responses which more than offset the price effects and thereby lead to the desired adjustment in the trade account. The speed with which this process will take place in practice hinges critically on the extent to which exchange rate changes are passed on in the prices of traded goods.

As illustrated in the graph opposite, the pricing behaviour of foreign suppliers appears to have differed significantly both over time and with respect to individual markets. The most striking feature is undoubtedly the sluggish

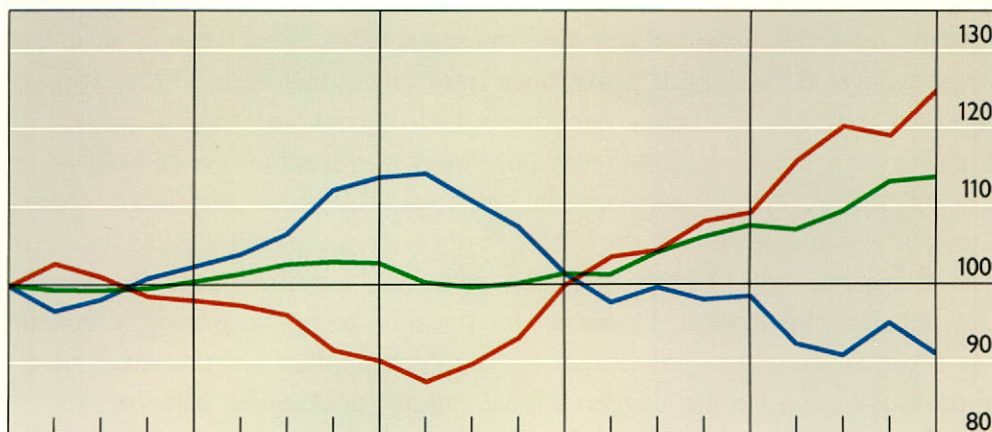
... lagged effects of exchange rate changes ...

Estimated production costs and profit margins of foreign suppliers to the markets of the United States, Japan and Germany, 1983 – 87

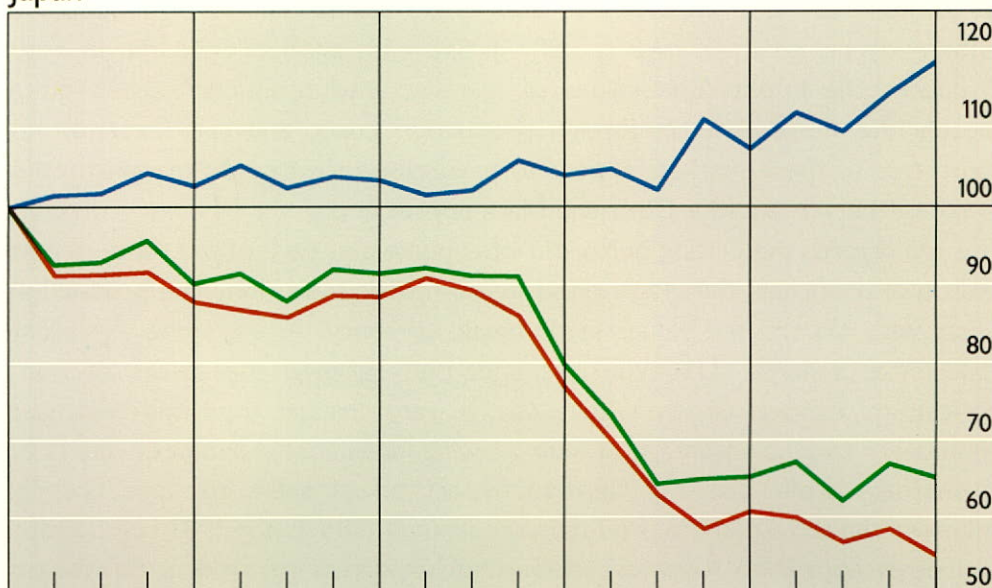
In the importing country's currency; fourth quarter 1982 = 100

- Foreign suppliers' production costs¹
- Import unit values²
- Profit margin³

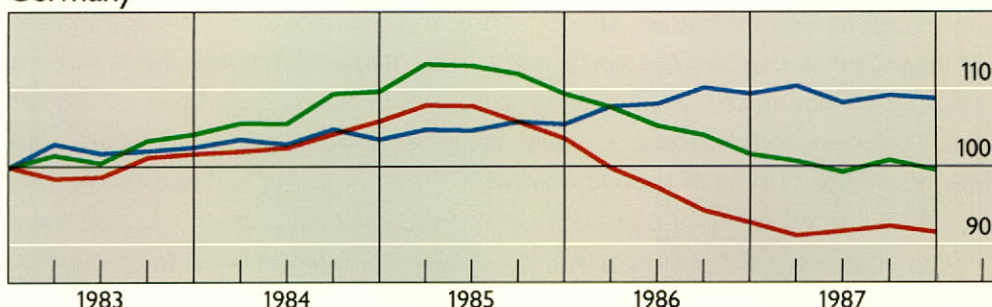
United States



Japan



Germany



¹ Estimated on the basis of an import-share-weighted average of unit labour costs (65%) and wholesale prices of raw materials (35%) in other major industrial countries. ² For the United States, all goods excluding petroleum; for Japan and Germany, manufactured goods. ³ Ratio of import unit values to production costs.

adjustment in US import unit values, despite the sharp depreciation of the dollar. Production costs (measured in terms of dollars) of foreign suppliers to the United States rose by an estimated 45% between early 1985 and end-1987, but US non-oil import unit values increased by only about 11% during that period. This would suggest that foreign suppliers were reluctant to mark up their dollar export prices and accepted instead a considerable squeezing of their profit margins in order to defend their shares in the US market. Two considerations may account for this behaviour. Firstly, as can be seen from the graph, a build-up of foreign suppliers' profit margins during the period of dollar strength may have provided a cushion in recent years. Secondly, in view of the large swings in the dollar's exchange rate since the early 1970s, foreign suppliers may have generally become more reluctant to respond quickly to exchange rate movements and may have increased their efforts to hold on to market shares, even if earnings do not cover fully total production costs. Obviously, in the longer run the influence of these factors will weaken and they can therefore only retard but not eliminate adjustment to a durable depreciation of the dollar. However, for the time being this pricing behaviour has certainly dampened and drawn out the J-curve effect and proved to be an important reason for the sluggish adjustment in the US trade balance.

By contrast, in Japan and Germany, where — as discussed earlier — adjustment on the import side has been substantial, foreign suppliers apparently priced their sales broadly in line with production costs. In both countries the import unit values of manufactured products tracked quite closely the movements in foreign production costs, and only recently do exporters to these markets appear to have raised their profit margins in the wake of the yen and the Deutsche Mark appreciation.

As regards the pricing behaviour of exporters in each of the three largest industrial countries, the graph opposite compares their domestic production costs with export unit values in domestic currency. Again, some significant differences emerge. US exporters apparently aligned the prices of non-agricultural exports largely with exchange rate changes until mid-1985, but then began to take advantage of their growing international competitiveness to raise their profit margins. German export prices seem to have broadly followed the movement in production costs until 1986, but in 1987 competitive pressures appear to have forced German exporters to make a downward adjustment of profit margins. By contrast, Japanese exporters have apparently been keen to defend market shares and therefore have been willing to grant significant price concessions since early 1986. In part, this may have been a response to strong competition from suppliers in South-East Asian countries, which offer to some extent a similar range of products and which are also heavily oriented towards the US market.

Both the commodity composition and the regional pattern of trade have influenced the adjustment response to changes in macro-economic conditions. Firstly, owing essentially to a relatively small share of manufactured goods in its total exports, the United States has been faced with a rather low export elasticity with respect to changes in foreign income and relative prices; on the other hand, US import elasticities are considerably higher than those of many

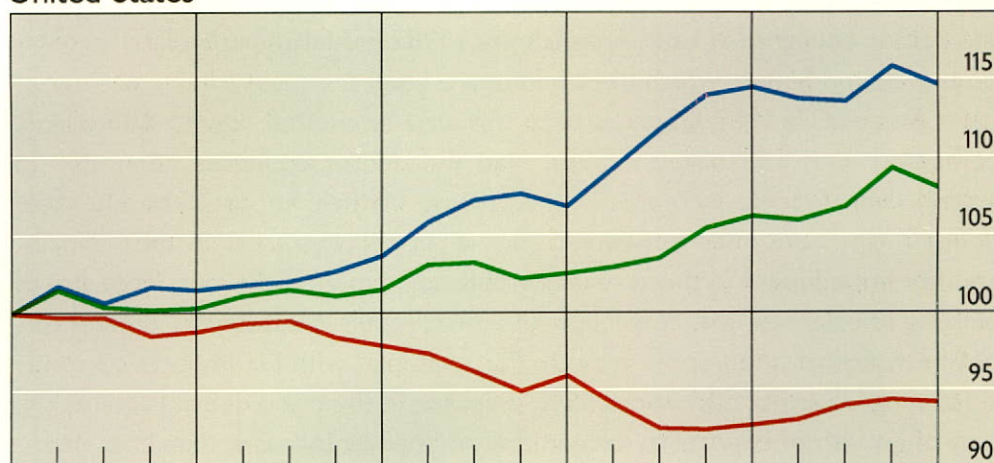
. . . structural
factors . . .

Estimated production costs and profit margins of exporters in the United States, Japan and Germany, 1983 – 87

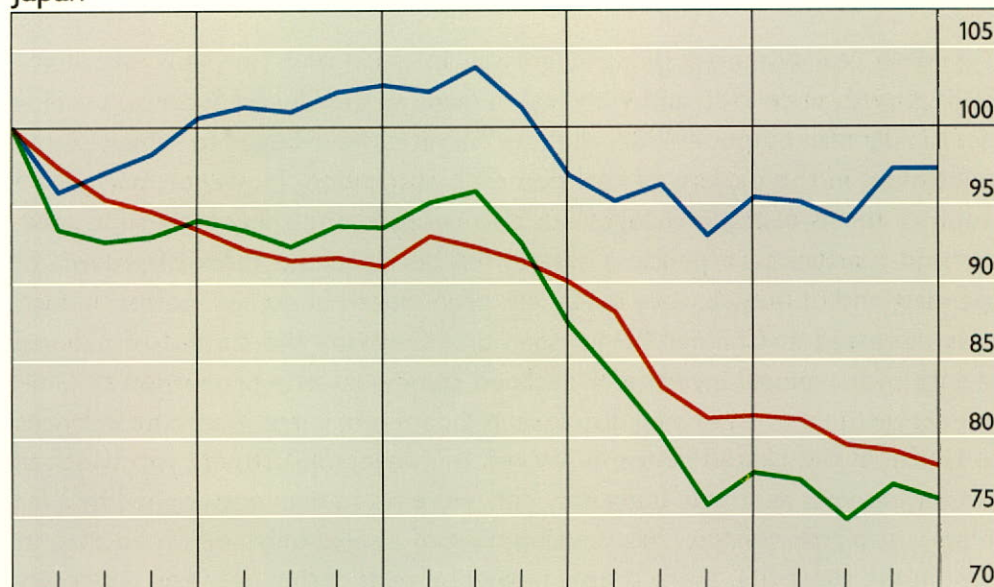
In domestic currency; fourth quarter 1982 = 100

- Exporters' production costs¹
- Export unit values²
- Profit margin³

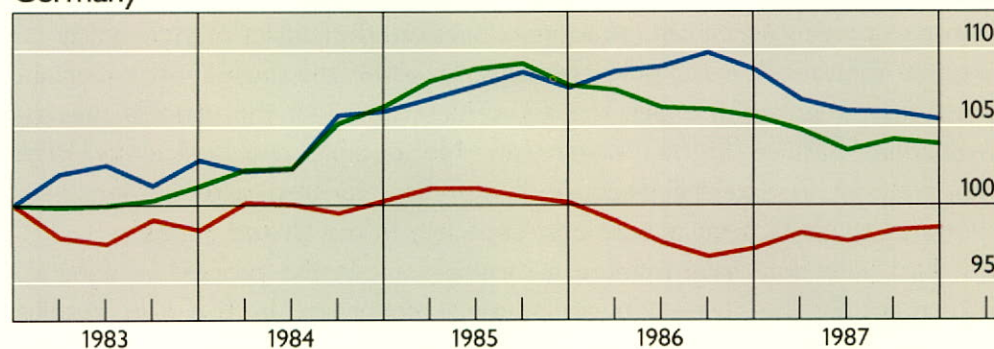
United States



Japan



Germany



¹ Estimated on the basis of an average of unit labour costs (65%) and wholesale prices of raw materials (35%). ² For the United States, non-agricultural goods; for Japan and Germany, manufactured goods.

³ Ratio of export unit values to production costs.

other industrial countries (see Chapter II). By contrast, in Japan, virtually all of whose exports but only 40% of whose imports are manufactured goods, the export elasticities have been comparatively high, but imports have been fairly insensitive to income and price changes. The existence of different trade elasticities meant that external adjustment in 1987 was relatively slow, since most of the change in the relative cyclical position between Japan and the United States reflected the accelerating expansion of demand in Japan rather than the slowdown in US demand growth. Secondly, the cutback of imports by the debtor countries in Latin America since 1982 has fallen particularly strongly on the United States, which has traditionally been the main trading partner of Latin America. In 1987 US exports to this area amounted only to \$35 billion, compared with \$43 billion in 1981. Had the debtor countries been able to sustain even modest increases in the volume of their imports, the US trade deficit might have been between \$20 and 25 billion smaller in 1987. Finally, another impediment to more readily visible adjustment is the very large size of existing imbalances, the correction of which requires substantial differentials between export and import growth. For example, with US imports currently surpassing US exports by about 65%, a decline in the trade deficit requires the rate of growth of exports to exceed that of imports by more than two-thirds. In 1987, however, the export and import values grew at virtually identical rates.

With real domestic demand growth in Japan and Germany exceeding GNP growth since 1986 and with real demand in the United States expanding less rapidly than output in 1987, all three countries have begun to achieve some adjustment in the pattern of real domestic absorption. However, partly as a result of terms-of-trade changes but also because of inadequately supportive demand management policies, differences between the rates of growth of spending and of output were much less pronounced in nominal terms. In fact, as is discussed in Chapter IV, in Japan and Germany the surplus of national savings over national investment declined somewhat as a proportion of GNP (mirroring the corresponding decrease in the ratio of current-account balances to GNP). In the United States, however, the savings/investment gap widened further last year as sizable budgetary cuts were more than outweighed by a fall in private sector savings. This development of course only confirmed that, at least in the short run, there is no unequivocal relationship between budgetary and external positions and that changes in the fiscal stance may trigger private sector responses which can reinforce or weaken the impact of fiscal policy on external imbalances. Fiscal policy remains, however, the single most important policy instrument with which the authorities can affect the national savings/investment balance in the longer run. No durable and sufficiently large improvement in external disequilibria can be expected without persistent efforts to adjust budgetary positions, especially in the United States.

Last year may have marked a turning-point in the process of external adjustment in the three largest industrial countries. In the two surplus countries the current-account imbalances began to decline in the course of the year, and in the United States the nominal deficit bottomed out towards the end of last year and apparently began to shrink in the first quarter of 1988.

... and inadequate shifts in the pattern of domestic absorption

More adjustment likely to occur in the near future

There is little doubt that on the basis of present policies and exchange rates more adjustment in external positions should become visible in 1988–89. However, it is difficult to forecast its likely extent or exact timing. Most empirical studies suggest that, despite a significant improvement in external imbalances in the medium term, a sizable US current-account deficit and rather large surpluses in Japan and Germany are likely to persist even after adjustments to both past exchange rate movements and policy changes have run their course.

Current-account developments in other industrial countries

Widespread
weakening of
current-account
positions . . .

In a large number of the other industrial countries the current-account position weakened in 1987, but in most instances the deterioration began from a rather comfortable external position and did not immediately necessitate corrective policy responses. In a few countries, however, where current-account deficits as a percentage of GNP had reached high and unsustainable levels, adjustment measures were introduced and deficits decreased. For all industrial countries (but excluding the United States, Japan and Germany) the aggregate current-account position shifted from balance in 1986 to a deficit of \$20 billion in 1987. This deterioration stemmed from a \$22½ billion widening of the trade deficit, tempered by a more favourable outturn on invisibles account. Whereas in 1986 large terms-of-trade gains had masked an underlying worsening in most countries' real trade balances, in 1987 the rise in the deficit on merchandise trade increasingly reflected movements in trade volumes.

. . . primarily
reflects cyclical
factors

As shown in the graph on page 63, there was a close relationship in 1987 between the strength of domestic demand growth in individual industrial countries and changes in their real trade balances, with the fastest-growing countries experiencing the most pronounced deteriorations in their trade balance. The speed with which differential demand conditions spilled over into external positions in 1987, even though somewhat dampened in most countries by relative trade price movements, points to the limitations that international linkages impose on demand management policies geared primarily to domestic objectives.

Next to the United States, *France* experienced the largest current-account deterioration of all industrial countries in 1987. Owing essentially to a substantial increase in the trade deficit, from \$2.3 billion in 1986 to \$9.3 billion in 1987, the current-account balance swung by \$7.5 billion to a deficit of \$4.5 billion. With the terms of trade improving slightly, the adverse trade development was caused mainly by a 7½% rise in real imports, twice the rate of export growth. While partly a reflection of cyclical conditions — for example, the difference in domestic demand growth vis-à-vis Germany, its principal trading partner, widened appreciably in the latter part of the year — France's trade performance still seems to suffer from structural weaknesses in some industrial sectors, possibly as a result of the relatively slow recovery of productive investment in recent years.

In *Italy*, too, the trade balance worsened considerably as a surplus of \$4.2 billion in 1986 vanished in 1987. The trade balance deterioration occurred

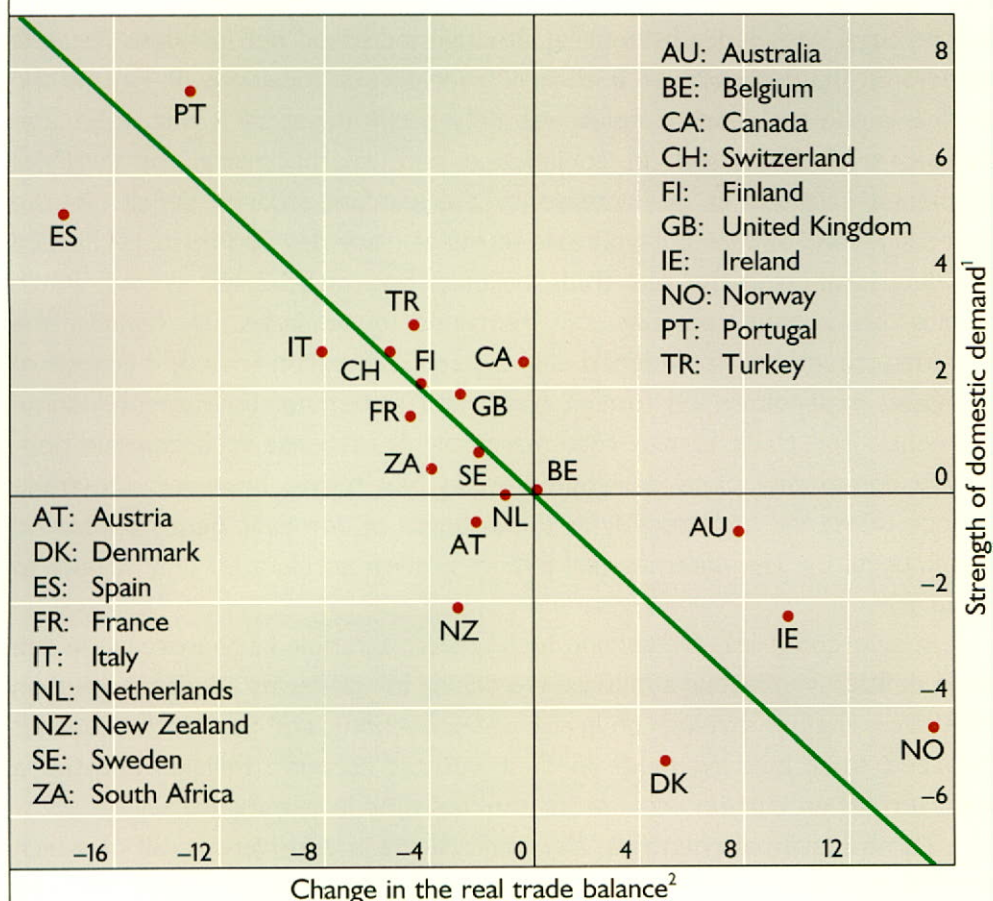
International current-account balances

Countries and areas	Trade balance			Invisibles balance			Current-account balance		
	1985	1986	1987	1985	1986	1987	1985	1986	1987
	in billions of US dollars								
Industrial countries	- 44	- 6	- 25	- 5	-10	-23	- 49	- 16	- 48
Major industrial countries	- 40.0	0.1	- 11.5	-10.1	-17.0	-33.0	- 50.1	- 16.9	- 44.5
Canada	12.4	7.5	7.8	-13.3	-14.2	-15.1	- 0.9	- 6.7	- 7.3
France	- 5.3	- 2.3	- 9.3	5.3	5.3	4.8	0.0	3.0	- 4.5
Germany	27.8	54.6	68.6	-10.7	-14.9	-23.5	17.1	39.7	45.1
Italy	- 6.1	4.2	0.1	2.6	- 1.6	- 1.2	- 3.5	2.6	- 1.1
Japan	56.0	92.8	96.4	- 6.8	- 7.0	- 9.4	49.2	85.8	87.0
United Kingdom	- 2.7	- 12.4	- 15.9	7.1	12.5	12.9	4.4	0.1	- 3.0
United States	-122.1	-144.3	-159.2	5.7	2.9	- 1.5	-116.4	-141.4	-160.7
Other industrial countries	- 4.4	- 5.7	- 13.7	5.2	6.5	10.2	0.8	0.8	- 3.5
Australia	- 1.3	- 2.1	- 0.5	- 7.4	- 7.6	- 8.2	- 8.7	- 9.7	- 8.7
Austria	- 4.3	- 4.5	- 4.5	4.1	4.6	4.4	- 0.2	0.1	- 0.1
BLEU ¹	- 0.5	0.7	0.4	1.2	2.3	2.4	0.7	3.0	2.8
Denmark	- 0.8	- 1.2	0.8	- 1.9	- 3.1	- 3.8	- 2.7	- 4.3	- 3.0
Finland	0.8	1.5	1.2	- 1.5	- 2.4	- 3.3	- 0.7	- 0.9	- 2.1
Greece	- 5.1	- 4.4	- 5.6	1.8	2.7	4.3	- 3.3	- 1.7	- 1.3
Iceland	0.0	0.1	0.1	- 0.1	- 0.1	- 0.1	- 0.1	0.0	0.0
Ireland	0.7	1.3	2.1	- 1.3	- 1.7	- 1.8	- 0.6	- 0.4	0.3
Netherlands	5.5	7.2	5.3	- 0.3	- 2.7	- 2.1	5.2	4.5	3.2
New Zealand	0.1	0.2	0.6	- 1.4	- 1.5	- 2.1	- 1.3	- 1.3	- 1.5
Norway	4.7	- 1.7	- 0.7	- 1.6	- 2.7	- 3.5	3.1	- 4.4	- 4.2
Portugal	- 1.5	- 1.7	- 3.4	1.9	2.9	4.1	0.4	1.2	0.7
South Africa	5.8	7.2	7.2	- 3.2	- 4.0	- 4.2	2.6	3.2	3.0
Spain	- 4.3	- 6.3	- 12.9	7.0	10.5	13.7	2.7	4.2	0.8
Sweden	2.5	5.3	4.4	- 3.7	- 4.3	- 5.3	- 1.2	1.0	- 0.9
Switzerland	- 3.2	- 3.5	- 5.0	8.3	10.2	12.0	5.1	6.7	7.0
Turkey	- 2.9	- 3.1	- 3.3	1.9	1.6	2.3	- 1.0	- 1.5	- 1.0
Yugoslavia	- 0.6	- 0.7	0.1	1.4	1.8	1.4	0.8	1.1	1.5
Eastern European countries ²	3	1	2	- 1	- 1	0	2	0	2
Developing countries	47	8	52	-71	-48	-51	- 24	- 40	1
Fuel-exporting countries ³	66	14	46	-63	-44	-47	3	- 30	- 1
Non-fuel-exporting countries	- 19	- 6	6	- 8	- 4	- 4	- 27	- 10	2
Exporters of manufactured goods ³	- 14	1	14	9	12	13	- 5	13	27
Exporters of primary products ³	14	10	9	-31	-28	-30	- 17	- 18	- 21
Other non-fuel-exporting countries	- 19	- 17	- 17	14	12	13	- 5	- 5	- 4
Total ⁴	6	3	29	-77	-59	-74	- 71	- 56	- 45

¹ Belgium-Luxembourg Economic Union. ² Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania and the USSR. ³ Countries whose exports of fuel, manufactured goods and primary products respectively accounted in 1980 for over 50% of their exports of goods and services. ⁴ Equals the world current-account discrepancy.

Sources: IMF, OECD, national sources and own estimates.

Relative cyclical positions and changes in trade balances in 1987



Note: The negatively sloped curve is obtained by regressing changes in the real trade balance on domestic demand growth.

¹ Measured as the percentage change in real domestic demand, scaled to make the regression line go through the origin. ² The change in the trade-account balance between 1986 and 1987, measured at constant 1986 prices, expressed as a percentage of 1986 merchandise exports.

entirely in the first half of the year, when domestic demand grew at an annual rate of 5½%, but a small surplus emerged in the second half when economic activity slowed down. For the year as a whole, however, real imports expanded by more than 10%, substantially exceeding the 3½% rise in export volume, which was hampered by both sluggish export market growth and the deteriorating international competitiveness of Italian producers.

A surge in domestic demand, reaching an annual rate of nearly 9% in the second half of 1987, was the principal reason for a \$3.5 billion increase in the trade deficit of the *United Kingdom*. This development was mirrored in a shift in the current account from balance in 1986 to a deficit of \$3 billion in 1987. However, in contrast to most other countries, the rise of 8½% in non-oil import volume was accompanied by a strong expansion of almost 7% in real non-oil exports, implying a considerable gain of market shares abroad. The growth in export volume must be ascribed in part to the lagged effects of exchange rate induced improvements in international competitiveness, but possibly also to the strengthened supply capabilities of UK industries.

Very strong demand pressures translated into steep increases in import demand also in *Spain*, *Portugal* and *Finland*, where real import growth accelerated in 1987 to 22, 18 and 9% respectively. The trade deficits of Spain and Portugal widened substantially, although increased net invisibles receipts moderated the deterioration in their current-account positions. In Finland the decline in the real trade surplus was only partly offset by a relatively large terms-of-trade gain, and, in conjunction with sharply rising net invisibles payments, resulted in an increase in the current-account deficit. In the *Netherlands* and *Sweden* unfavourable terms-of-trade developments reinforced the deterioration in the real trade balance, but, at \$3.2 billion, the Dutch surplus on current account still remained quite large. In *Canada* the current-account deficit widened slightly, to \$7.3 billion, mainly because of increased expenditure on foreign travel and higher net investment income payments. The trade surplus rose marginally in response to favourable non-energy commodity price developments. In real terms, however, the trade balance worsened considerably as the strength of domestic demand boosted real imports by 9%, whereas real export growth accelerated only slightly to about 6%.

In two countries, *Switzerland* and *Greece*, a rather large increase in the trade deficit — reflecting a marked worsening in real terms — was more than offset by rising net earnings on invisibles transactions, and thus both countries recorded small improvements in their current account. *Ireland* reported a small surplus on current account for the first time in twenty years.

Three industrial countries, *Denmark*, *Australia* and *Norway*, all of which had had very large current-account deficits in relation to GNP in 1986, adopted domestic adjustment measures in the course of last year. In all three countries the real trade balance improved markedly, in Denmark and Norway mainly because the volume of imports was cut by about 3½%, and in Australia because of an 8½% growth in real exports. However, while Norway and to a lesser extent Australia suffered terms-of-trade losses, Denmark's relative trade prices improved by 4% and helped turn the nominal trade balance from a \$1.2 billion deficit in 1986 into a surplus of \$0.8 billion in 1987. Most of this turnaround was mirrored in a reduction in the current-account deficit.

Improvements in countries with large deficits

Preliminary estimates suggest that the combined current-account surplus of *eastern European countries* increased moderately, from less than \$½ billion in 1986 to over \$1½ billion in 1987. About half of this improvement occurred in the USSR, where the surplus on current-account transactions in convertible currencies is estimated to have widened by \$½ billion to \$1½ billion. This development was entirely due to a significant decrease in the USSR's trade deficit with western industrial countries, which more than offset a decline in gold exports and a reduction in the surplus on trade with developing countries (excluding trade conducted under bilateral clearing arrangements). Among the other eastern European countries, increased export earnings helped Hungary and Bulgaria to reduce their current-account deficits in convertible currencies by roughly \$½ billion each, to \$0.8 and 0.5 billion respectively, and Romania appears to have expanded its surplus to more than \$2 billion. In Poland the deficit on current account narrowed marginally, to less than \$½ billion, and in

Developments in eastern Europe

the German Democratic Republic and Czechoslovakia, notwithstanding some deterioration in 1987, the current accounts were roughly in balance.

External developments in developing countries

A marked
strengthening in
the aggregate
current-account
position . . .

The external position of the developing countries as a group improved markedly in 1987 as their aggregate current account moved into a small surplus (see the table on page 62). Virtually all of the turn-round in the current-account position, from a deficit of \$40 billion in 1986 to a \$1 billion surplus in 1987, reflected an increase in the merchandise trade surplus arising from both favourable terms-of-trade developments and continuing growth in export volumes. The terms of trade of the developing countries as a group improved by 4% — a sharp reversal from the preceding year's loss of 23% — most of which was accounted for by the recovery of oil prices from their precipitous decline during 1986. The growth in export volume of 7% fell somewhat short of the rate achieved in 1986, but continued to exceed that of world trade by a considerable margin. The rise in export earnings last year helped to ease balance-of-payments constraints in many developing countries, allowing them as a group to increase their import demand by 2½% in volume terms, compared with a cumulative compression of real imports of nearly 6% in the preceding two years.

. . . masks
divergent
developments
in . . .

As in previous years, the overall picture of external developments in the developing world was made up of quite divergent movements in the external positions of individual countries, and differences between the countries grouped according to their export orientation, market concentration, product specialisation or access to financial markets became more accentuated last year. In fact, improvements in the current-account positions of fuel-exporting countries and exporters of manufactured products fully accounted for the change in the aggregate current payments position of the developing countries last year. By contrast, the group of countries relying predominantly on exports of primary products, which comprises over half of all developing countries, was faced with a further deterioration in its current-account position.

. . . the
fuel-exporting
countries . . .

While higher oil prices produced a considerable improvement, of 11½%, in the terms of trade of the fuel-exporting countries, the demand for oil fell off slightly in 1987 and their overall export volume growth stagnated. Both the fragility of external positions heavily dependent upon world oil market conditions and the need to curb persistent and large fiscal deficits continued to force many of the countries in this group to maintain adjustment efforts. Once again the volume of imports was cut, by 12%, representing the sixth consecutive annual compression. In combination with the terms-of-trade gain, the cutback in real imports substantially boosted their aggregate trade surplus, by \$32 billion, nearly all of which was reflected in a decline in their combined current-account deficit, from over \$30 billion in 1986 to \$1 billion in 1987.

. . . countries
exporting
manufactured
goods . . .

The exporters of manufactured goods — i.e. countries whose exports of manufactured products accounted in 1980 for more than 50% of total exports — recorded, for the second consecutive year, an export volume growth of

over 16% in 1987. This impressive performance owed much to these countries' strong competitive position, which enabled them to gain additional shares in the relatively buoyant market for manufactured products. At the same time, their terms of trade improved by 3% so that despite a remarkable rise in import volume, of 11%, these countries' trade surplus widened by \$13 billion. The surplus on current account more than doubled to \$27 billion.

As in the previous year, the external performance of the group of exporters of manufactured products was dominated by developments in four newly industrialised South-East Asian economies — Hong Kong, Singapore, South Korea and Taiwan. Although generating only about one-third of the total GDP of all developing countries classified as exporters of manufactured goods, the four economies account for roughly three-quarters of the group's total exports and more than two-thirds of its total imports. Within the last two years, these four countries have more than tripled their combined current-account surplus, to \$30.9 billion in 1987 (see table below). Nearly all of this increase resulted from an impressive expansion in net exports. In 1986 the growth of export volume of 21% exceeded that of real imports by 3 percentage points and the terms of trade strengthened by 5%; in 1987, when real export growth was sustained at the previous year's rate, real import growth accelerated to 24½%, but the resultant deterioration in the real trade balance was more than offset by the effects of a 3% terms-of-trade gain.

... among which four South-East Asian economies play a dominant role ...

South-East Asian economies: Current-account balances						
Items	Four economies*			Taiwan		
	1985	1986	1987	1985	1986	1987
	in billions of US dollars					
Trade balance	8.7	19.0	25.8	11.2	16.9	20.8
Exports	108.6	130.1	175.1	30.5	39.5	53.2
Imports	-99.9	-111.1	-149.3	-19.3	-22.6	-32.4
Services (net) including transfers	1.8	4.4	5.1	- 2.0	- 0.7	- 2.6
Current-account balance	10.5	23.4	30.9	9.2	16.2	18.2
<i>as a percentage of GDP</i>	5.3	10.4	10.9	15.5	22.7	19.2

* Hong Kong, Singapore, South Korea and Taiwan.

All four economies pursue a similar strategy of export-led growth, but they differ as regards the degree of control exercised over imports. As is shown in the table above, Taiwan accounted for the lion's share of the combined current-account surplus in 1987 and is, in fact, the only one of the four economies that has been in surplus for a number of years. These cumulative surpluses together with inflows of short-term capital sharply boosted Taiwan's foreign exchange reserves, which, at \$77 billion at end-1987, represented the largest stock of official foreign exchange holdings in the world. South Korea emerged as a major surplus country only after 1985, when its current account swung into surplus for the first time (\$4.6 and 9.8 billion in 1986 and 1987 respectively). Most of its net earnings on current account have been used to reduce South Korea's external bank debt. In both countries the recent

strength of the external position has owed much to their dynamic export performance on the basis of large productivity gains and, in recent years, to increasingly undervalued currencies. At the same time, Taiwan and South Korea have maintained exchange restrictions and import controls which have only recently begun to be liberalised. By contrast, Hong Kong and Singapore do not apply restrictions on trade, and their rapid export growth has been generally matched by equally high rates of import growth. As a result, both economies have traditionally run small trade deficits which, by and large, were counterbalanced by net service receipts.

... and
countries
exporting
primary products

The combined current-account deficit of exporters of primary products (i.e. countries which derived more than 50% of their export earnings in 1980 from sales of non-fuel primary products) widened for the second consecutive year, from \$18 billion in 1986 to \$21 billion in 1987. With the trade balance in real terms remaining virtually unchanged — both export and import volume growth accelerated slightly to around 5% — most of the deterioration in the external position must be ascribed to unfavourable price developments last year. Although primary product prices recovered on average during 1987, this improvement was more than outweighed by a much sharper increase in the prices of manufactured goods, which caused the terms of trade of exporters of primary products to worsen by about 3%.

The external situation of the major debtor countries: adjustment since 1982

In fifteen heavily
indebted
countries ...

Nearly six years have passed since Mexico's announcement of debt servicing difficulties signalled the outbreak of the international debt crisis. Until then the vulnerability of many developing countries to external shocks had been masked by buoyant economic growth in a highly inflationary environment, which had led both foreign creditors and the authorities in the borrowing countries to overestimate these countries' ability to service their external debt under less propitious circumstances. Unfavourable conditions in the early 1980s — with interest rates soaring, commodity prices falling and world economic growth slackening — certainly determined the timing of debt servicing problems. Yet, in the light of the adjustment difficulties experienced since 1982, there can be little doubt that the fundamental causes of debt problems lay, and continue to lie, in structural weakness and inadequate economic management in many of the debtor countries. Debt servicing difficulties therefore would have surfaced sooner or later in any event.

Debt problems have been encountered by a wide range of countries, but from a global point of view it is developments in the heavily indebted middle-income countries that are of particular relevance. This group of fifteen countries covered by the debt strategy outlined by the Secretary of the US Treasury, Mr. Baker, at the Annual Meeting of the International Monetary Fund and the World Bank in 1985, accounts for nearly one-third of all developing countries' GNP, for one-fifth of their total exports of goods and services, and, most importantly, for around 40% of the external debt incurred by the developing world. The group comprises a rather heterogeneous set of

countries, such as Mexico, Nigeria and Venezuela, which depend predominantly on oil exports; Argentina and the Philippines, which mainly export non-fuel primary products; and Brazil and Yugoslavia, which have achieved a considerable degree of export diversification.

Like many other developing countries, this group, too, recorded a significant improvement in its external position in 1987. The aggregate current-account deficit was halved to \$7.6 billion, mostly as a result of a modest pick-up in export volume growth and a 2% terms-of-trade gain, which raised the trade surplus from \$20.8 billion in 1986 to \$27.5 billion in 1987. The deficit on invisibles transactions and transfers changed little, as a marked drop in interest payments was virtually counterbalanced by increased payments for other services. Within the group the largest current-account improvements, of \$5½ and 3 billion, were recorded by Mexico and Brazil respectively, while, on balance, the other countries' external positions remained broadly unchanged.

Although last year's expansion of export earnings reduced the heavily indebted countries' ratio of external debt to exports of goods and services by 15 percentage points to 329%, the overall external situation of these countries not only remained precarious, but, when viewed against a debt ratio of 268% in 1982, appears to have significantly worsened since the eruption of the international debt crisis. This striking increase in the debt burden reflected, on the one hand, a rise in the stock of external debt, from \$380 billion in 1982 to \$466 billion in 1987, and, on the other hand, export earnings which were in both years at exactly the same level. More than one-quarter, or about \$24 billion, of the addition to external debt represented valuation changes, arising from the increase in the dollar value of debt denominated in currencies that appreciated between end-1982 and end-1987 against the dollar. Moreover, roughly another quarter of the addition to debt had a counterpart, of about \$20 billion, in official reserves accumulated over the five-year period by the heavily indebted countries.

However, the more fundamental reason behind the rise in the debt ratio lies in the heavily indebted countries' failure to boost their export earnings. Higher exports would not only have helped to lower the ratio directly, but would also have contributed to a stronger current-account adjustment and thus limited the need for recourse to foreign financing. The stagnation of nominal export earnings between 1982 and 1987 — a period during which imports of goods and services by the industrial countries expanded by over \$740 billion, or 44% — points to serious shortcomings in the heavily indebted countries' adjustment strategy. While part of the unsatisfactory export performance can be attributed to a cumulative decline in dollar export prices of around 18% (reflecting the preponderance of oil and primary products in their basket of export commodities), export volume growth averaged only about 3½% per annum and fell far short of that achieved by other major groups of developing countries. With nominal export earnings unchanged, virtually all of the decrease in the heavily indebted countries' aggregate current-account deficit, from \$50.7 billion in 1982 to \$7.6 billion last year, originated from a \$41.1 billion reduction in nominal imports of goods and services. A sizable share of that reflected a \$12.5 billion fall in interest

... the current-account position improves ...

... but the ratio of debt to exports of goods and services remains extremely high ...

... reflecting primarily these countries' failure to expand exports

Current-account balance and external debt of fifteen heavily indebted countries ¹		
Items	1982	1987
	in billions of US dollars	
Current-account balance	- 50.7	- 7.6
Merchandise exports	112.2	112.1
Services receipts	29.7	29.7
Merchandise imports	-108.2	-84.6
Services payments ²	- 43.2	-38.2
Interest payments	- 43.4	-30.9
Transfers	2.2	4.3
External debt	380	466
<i>as a percentage of exports</i>		
<i>of goods and services</i>	268	329
Memorandum items:		
Real trade balance ³	4	54
Real merchandise exports	112	136
Real merchandise imports	- 108	-82

¹ Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Ivory Coast, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela and Yugoslavia. ² Excludes interest payments on external debt. ³ Calculated at constant 1982 trade unit values.

payments, but the bulk represented reduced payments for merchandise imports and other services. Since import prices increased only marginally between 1982 and 1987, practically all of that decline was caused by a drastic cutback in the volume of imports.

As a result, despite a major adjustment effort — in real terms the trade balance strengthened by \$50 billion, implying a shift of real resources from the domestic to the external sector equivalent to 6% of 1982 GNP — little was achieved in laying the foundation for a sustainable external position and a more rapid growth of output. In essence, the weak export growth reflected the slow rate at which production capacity expanded, especially in manufacturing. Between the early 1980s and 1987 the share of these countries' GDP devoted to gross capital formation declined from almost one-quarter to 17%. To a certain extent, this mirrored insufficient efforts to mobilise domestic savings through supportive financial policies, as well as repeated attempts to protect consumption levels. In particular, stop-go policies in the fiscal and monetary areas frequently eroded the progress made during the initial phase of adjustment periods.

International capital movements and the financing of current-account imbalances in the industrial countries

Official financing flows play a much greater role . . .

In contrast to 1986, private capital flows were less effective last year in offsetting current-account imbalances, and official capital flows, reflecting large-scale exchange market interventions and concomitant changes in net official monetary positions, played a much more pronounced role in financing

payments disequilibria. This applied most of all to the three largest industrial countries: net private capital inflows into the United States were far from sufficient to cover the increased US current-account deficit; in Japan and Germany net outflows of private funds fell off considerably from their 1986 levels, and both countries recorded sizable additions to official reserve holdings. Substantial net inflows of capital were, however, also registered by a large number of industrial countries with relatively small surpluses or deficits on current account.

In the *United States* total net inflows of private capital (including the statistical discrepancy) amounted to \$104 billion in 1987, or only slightly less than in the previous year. However, the current-account deficit widened last year to \$160.7 billion, and thus the share of the deficit financed through official flows — viz. mainly a build-up of \$47.5 billion in liabilities to foreign official holders — increased to one-third, compared with less than one-quarter in 1986 and no official financing at all in 1985. Moreover, as is discussed in Chapter VII, the \$56.7 billion deterioration in the net official monetary position of the United States considerably understates the contribution that central banks actually made to the financing of the US current-account deficit in 1987.

... in particular
in the
United States ...

United States: Capital-account transactions							
Items	1985	1986	1987 ¹				
			year	first quarter	second quarter	third quarter	fourth quarter
			in billions of US dollars				
Capital-account balance ²	122.2	108.1	104.0	19.6	26.3	42.7	15.4
Non-resident capital	131.8	180.5	155.1	11.4	38.0	66.7	39.0
of which: Direct investment							
in the United States	19.0	25.1	40.6	7.7	9.5	12.3	11.1
US securities	71.4	79.1	36.0	16.9	13.7	9.8	- 4.4
US banks' liabilities	41.0	77.4	77.9	-13.6	14.8	44.4	32.3
Resident capital	-27.5	-96.3	-73.0	13.4	-18.5	-27.2	-40.7
of which: US direct invest-							
ment abroad	-17.3	-28.0	-38.2	-10.0	- 5.6	- 6.2	-16.4
Foreign securities	- 7.5	- 3.3	- 3.7	- 1.4	0.4	- 0.9	- 1.8
US banks' assets	- 1.3	-59.0	-33.4	25.7	-15.7	-20.1	-23.3
Unidentified capital ³	17.9	23.9	21.9	- 5.2	6.8	3.2	17.1
Changes in the net official monetary position ⁴	- 5.8	33.3	56.7	17.3	15.0	0.8	23.6
of which: Liabilities to foreign official holders	- 2.0	33.0	47.5	15.3	11.6	0.7	19.9

¹ Seasonally adjusted. ² Including unidentified capital. ³ The statistical discrepancies in the balance of payments. ⁴ Excluding valuation adjustments; a minus sign indicates an improvement.

¹ Seasonally adjusted. ² Including unidentified capital. ³ The statistical discrepancies in the balance of payments. ⁴ Excluding valuation adjustments; a minus sign indicates an improvement.

As can be seen from the table above, net inflows of private funds into the United States would have been considerably smaller had the decline in inflows of non-resident capital not been matched by a reduction of similar magnitude in residents' capital exports. The slowdown in identified resident capital outflows — from \$96.3 billion in 1986 to \$73 billion in 1987 — was primarily

... where
non-residents'
purchases of
US securities
decline

attributable to a marked cutback in US-owned banks' claims on unaffiliated foreign banks. In 1986 such claims had been increased by \$4.2 billion, but in 1987 they were reduced by \$13.4 billion, mainly because foreign banks' demand for dollar assets was met to an increasing extent by the depositing of official dollar reserves in the Euro-market and also by funds made available by Japanese banks. The decline in identified inflows of non-resident capital — from \$180.5 billion in 1986 to \$155.1 billion in 1987 — can be traced essentially to a sharp drop in purchases of US securities, which, at \$36 billion, were little more than half of those recorded in the two preceding years. While foreign demand for US stocks — at \$15.4 billion — was sustained at nearly the same level as in the preceding year, non-residents' interest in US bonds waned throughout 1987, resulting in net sales of \$6.1 billion of US Treasury securities (compared with net acquisitions of \$8.3 billion in 1986) and a \$27 billion reduction in new purchases of other US securities. The flagging foreign demand for US bonds appears to have been primarily associated with perceptions that a 1½–2 percentage point widening in the long-term interest rate advantage of the dollar vis-à-vis the yen and the Deutsche Mark did not suffice to compensate for the risk of a further depreciation of the dollar.

Substantial accumulation of claims on the United States in private portfolios since 1981

The growing reluctance of private investors to acquire claims on the United States in the course of 1987 was clearly a departure from the surge in demand for US assets observed in recent years. Some preliminary estimates suggest that on average nearly 30% of the growth of world cross-border assets (excluding official monetary reserves) between 1981 and 1986 represented new claims on the United States, the bulk apparently acquired by investors in other industrial countries. In fact, the share of claims on the United States in total financial assets held by the enterprise sector in the industrial countries rose considerably, but on the whole remained rather modest, amounting to perhaps little more than 3½% at the end of 1986. Although it is difficult to assess the significance of these changes in the composition of aggregate financial portfolios for the future financing of US current-account deficits, the rather low percentage of claims on the United States in relation to total financial assets might lend support to the view that the shift in private investors' behaviour in 1987 reflected rather a temporary response to the lack of a visible adjustment in the US external imbalance than a more fundamental change in investors' attitudes caused by saturation with US assets.

Large increases in official reserves in Japan . . .

In *Japan* net official reserves rose substantially, by \$42.3 billion, or three times the increase recorded in 1986. As a result, virtually one-half of Japan's surplus on current account was matched last year by the acquisition of net official reserve assets. Moreover, since the overwhelming part of the reserve additions is believed to have been in dollars, the Japanese authorities contributed significantly to the financing of the US deficit, thereby taking over part of the role that private residents, especially institutional investors, had played in previous years. Indeed, although total outflows of long-term resident funds, at \$132.8 billion, were practically at the same level as in the previous year, changes in the composition of the underlying transactions suggest some shifts in Japanese residents' investment behaviour.

While Japanese residents stepped up their overseas direct investment and

long-term lending abroad, their new investment in foreign securities declined by \$14.2 billion. This reduction was more than accounted for by a \$20.1 billion fall in new purchases of foreign currency bonds. At the same time net inflows of short-term capital soared, from \$59.4 billion in 1986 to a staggering \$91.8 billion in 1987. The bulk of these inflows represented net short-term foreign borrowing by the banks — to a considerable extent in foreign currency — and appear to have been partly related to resident investors' desire to cover the exchange risk on their foreign investment. The marked divergence between net long-term outflows and short-term inflows began in mid-1986, when expectations of capital gains in an environment of declining bond yields seem to have become balanced by growing fears of exchange rate losses. In 1987 exchange rate concerns abated temporarily, and high interest rate differentials appear to have supported the demand for foreign currency bonds until August. However, when the yen subsequently began to strengthen once more, demand for foreign currency bonds fell off sharply, despite a further widening of the differential between dollar and yen interest rates to 4½%.

Japan: Capital-account transactions							
Items	1985	1986	1987				
			year	first quarter	second quarter	third quarter	fourth quarter
	in billions of US dollars						
Long-term capital (net)	-64.5	-131.5	-136.5	-32.2	-44.3	-22.0	-38.0
Resident capital	-81.8	-132.1	-132.8	-37.5	-39.6	-33.1	-22.6
of which: Securities	-59.8	-102.0	- 87.8	-27.7	-30.6	-19.1	-10.3
Non-resident capital	17.3	0.6	- 3.7	5.3	- 4.7	11.1	-15.4
Short-term capital (net) ¹	13.9	59.4	91.8	28.3	34.4	4.2	24.9
of which: Banks	10.8	58.5	71.8	21.9	27.2	- 4.8	27.5
Non-banks	- 0.9	- 1.6	23.9	1.4	6.5	9.8	6.2
Changes in the net official monetary position ²	1.4	- 13.7	- 42.3	-17.0	-12.8	- 3.4	- 9.1

¹ Including errors and omissions. ² Excluding valuation changes; a minus sign indicates an improvement.

¹ Including errors and omissions. ² Excluding valuation changes; a minus sign indicates an improvement.

In Germany, too, the net official monetary position improved strongly last year, by \$23.4 billion, about one-half of which represented additions to dollar holdings, whereas the other half was attributable to Deutsche Mark sales within the framework of the EMS. The improvement in Germany's net official position occurred despite a marked reversal in the balance on long-term capital movements after the second quarter of 1987, when large-scale inflows of long-term non-resident funds gave way to outflows. This turn-round must be ascribed essentially to a rather sudden shift in foreign investors' sentiment towards Deutsche Mark securities: after making purchases of \$21.4 billion in the first six months, foreign investors appear to have reassessed the prospects of gains from exchange rate changes and long-term interest rate movements and began to sell off German securities. However, as a significant proportion of the earlier investment in German securities had been financed by short-term Deutsche Mark borrowing, the reversal of non-resident long-term capital

... Germany ...

Germany: Capital-account transactions							
Items	1985	1986	1987				
			year	first quarter	second quarter	third quarter	fourth quarter
	in billions of US dollars						
Long-term capital (net)	- 4.7	14.9	-13.7	9.3	1.0	-10.0	-14.0
Resident capital	-21.6	-25.6	-34.7	- 7.9	-8.2	-10.0	- 8.6
Non-resident capital	16.9	40.5	21.0	17.2	9.2	- 0.0	- 5.4
of which: Purchases of							
German securities ¹	13.1	34.0	17.9	13.5	7.9	0.5	- 4.0
Short-term capital (net) ²	-11.3	-51.5	- 8.0	-12.9	-8.5	1.6	11.8
of which: Banks	-10.0	-27.9	- 3.9	- 6.1	-7.0	5.1	4.1
Private non-banks	- 4.4	-23.6	- 5.7	- 3.3	-2.2	- 4.6	4.4
Changes in the net official monetary position ³	- 1.1	- 3.1	-23.4	- 7.7	-3.2	0.8	-13.3

¹ Including official domestic borrowers' notes. ² Including errors and omissions. ³ Excluding valuation changes; a minus sign indicates an improvement.

¹ Including official domestic borrowers' notes. ² Including errors and omissions. ³ Excluding valuation changes; a minus sign indicates an improvement.

transactions after mid-year was to a large extent mirrored by a reflux of short-term funds into Germany.

... and many other industrial countries

Among the other major industrial countries, the *United Kingdom*, *Italy* and *Canada* all recorded substantial net inflows of capital and improvements in their net official monetary positions in 1987. In the United Kingdom net inflows of capital more than tripled, to \$15.8 billion, and despite a deterioration in the current account the net official monetary position strengthened by \$13 billion. By far the most important factor behind the large net inflows of capital was a huge turn-round in the balance on securities transactions, from net outflows of \$27.5 billion in 1986 to net inflows of \$27.3 billion, 90% of this swing reflecting residents' transactions. After years of persistent and increasing outward portfolio investment — new purchases of foreign securities in fact reached a record level of \$34.7 billion in 1986 — UK investors last year sold a net amount of \$14.4 billion of their holdings of foreign securities, all of the sales taking place in the final quarter of the year. In Italy net inflows of capital amounted to \$6.5 billion in 1987, compared with a small net outflow in the previous year. Virtually all of that change was attributable to an increase, from \$3.3 billion in 1986 to \$9.4 billion, in foreign loans taken up by residents — nearly \$4 billion of which represented an increase in the Treasury's external indebtedness in foreign currency. In Canada net inflows of capital rose, by \$3.5 billion to \$10.7 billion, as a \$5 billion decline in net long-term inflows was much more than offset by the emergence of sizable net short-term inflows, in response to attractive interest rates and the Canadian dollar's strength after mid-year.

France was the only major exception to the general picture of sharply increased capital inflows. Aggregate net capital outflows rose from \$1.7 billion in 1986 to \$4.3 billion in 1987, which, in combination with the deterioration on current account, caused the net official monetary position to worsen by \$8.8 billion. The net outflows can be traced entirely to net exports of short-term capital through the banks amounting to \$10.7 billion.

Many smaller industrial countries, on the other hand, also recorded substantial net inflows of capital and strong improvements in net official monetary positions. In particular, *Spain, Denmark and Finland* experienced unprecedented spontaneous inflows of funds. In Spain the balance on total capital transactions swung from net outflows of \$1.6 billion in 1986 to net inflows of \$13.8 billion in 1987, virtually all of which was mirrored in a corresponding strengthening of the net official monetary position. The bulk of last year's inflows represented long-term foreign investment, suggesting that membership of the European Economic Community and, in particular, the prospect of a single market within the Community by 1992 have greatly enhanced Spain's attractiveness to foreign investors. In Denmark net inflows of capital increased threefold, to \$8 billion, as high interest rates and stable exchange rate expectations after the January realignment in the EMS induced large-scale net long-term inflows through the private sector. In Finland the relaxation of restrictions on foreign borrowing, giving rise to substantial inflows of short-term funds, was the principal factor behind the reversal of the balance on total capital transactions, from a net outflow of \$0.6 billion in 1986 to net inflows of \$5.7 billion.

External financing of the developing countries

In the developing countries the improvement in the combined current-account position in 1987 was fully mirrored in an increase of \$42 billion in their aggregate official reserve holdings (excluding valuation changes), by far the largest addition to reserves since 1980. However, the reserve gains were concentrated on only a few countries, whereas the large majority of developing countries continued to face severe external financing constraints. In fact, for most countries in the developing world the possibilities for tapping foreign savings in support of domestic growth were extremely limited and depended almost entirely on external financing provided through official channels. Access to borrowing from private creditors remained closed for most countries, but in certain instances the use of innovative financing techniques (see Chapter V) made modest contributions to lowering the burdens of external debt owed to bank creditors. While the overall picture in 1987 broadly resembled that of the previous year, there were two noteworthy developments last year. Firstly, capital flight continued to taper off, and in some countries residents seem to have begun repatriating foreign assets. Secondly, following a sharp increase in debt arrears in 1986, it appears that for the group as a whole arrears were reduced slightly in 1987, although a further accumulation occurred in some countries.

As can be seen from the following table, external financing constraints and the pattern of financing differed markedly between different groups of developing countries. The countries classified as exporters of manufactured products recorded a sizable current-account surplus for the second year in succession and were able to add strongly to official reserves. This reflected to a significant extent the surplus and reserve additions of Taiwan, but the other countries in this group also had no major external financing problems in 1987.

Overall financing picture remains broadly unchanged

Continuing external financing constraints in different groups of countries

Developing countries: Estimated external financing of the current-account imbalances of selected groups of countries¹

Items	Exporters of manufactured goods		Fuel-exporting countries		Exporters of primary products	
	1986	1987	1986	1987	1986	1987
	in billions of US dollars					
Current-account balance	13	27	-30	-1	-18	-21
Changes in foreign assets (- = increase)	-34	-40	16	-9	-3	1
Official reserves	-24	-32	20	-9	-4	-1
Other assets	-10	-8	-4	0	1	2
External financing ²	21	13	14	10	21	20
Borrowing from official creditors	2	2	11	10	16	17
Borrowing from private creditors	14	9	-3	-2	-3	-5
of which: Change in BIS reporting banks' claims	3 ³	8 ³	-1	0	2	-7
IMF credit	-1	-2	2	1	-1	-2
Other inflows (net)	6	4	4	1	9	10
Direct investment	2	3	4	5	2	3
Other, unclassified	4	1	0	-4	7	7

¹ Excluding those developing countries which derive most of their current-account receipts from services and transfers. ² Equals the sum of the current-account balance and changes in foreign assets, with the sign reversed. ³ Excluding bank lending to banks in Hong Kong and Singapore.

Sources: IMF World Economic Outlook, April 1988, and BIS International Banking and Financial Market Developments, May 1988.

Most of the financing was obtained from private creditors — reflected in a marked increase in inflows from banks — whereas recourse to borrowing from official creditors was rather modest. The fuel-exporting countries, too, benefited in 1987 from a substantial strengthening of their current-account position, which helped them to recoup some of the large reserve losses recorded in the preceding year. This group includes both creditor countries, which in the past had built up sizable net international investment positions, and several major debtor countries. Whereas creditor countries apparently financed current-account deficits mainly by drawing down foreign assets, the fuel-exporting debtor countries had to rely essentially on credits provided by official lenders. It appears that a number of countries in this group were able to reduce their debt arrears in 1987.

The most serious external financing difficulties continued to exist in those countries which derive most of their export earnings from the sale of primary products. Their combined current-account position weakened further in 1987 and there was virtually no change in their reserve holdings. By far the greatest share of external financing consisted of borrowing from official creditors, whereas debt owed to private creditors was reduced, there being a particularly strong decline in liabilities to banks reporting to the BIS. A significant part of the reduction in indebtedness to banks must be ascribed to innovations in financing techniques which helped to remove debt from the banks' balance sheets. At the same time, however, it appears that some countries in this group continued to accumulate debt arrears.

IV. Developments in domestic financial markets

Highlights

Financial markets went through a particularly turbulent period in 1987 as the prolonged bull markets in bonds and equities came to an abrupt halt. The unprecedented worldwide collapse of equity prices in October was the most outstanding shock during the year. Even before October, however, considerable volatility was displayed in long-term bond yields. The turmoil in financial markets presented a sharp contrast to the generally moderate rates of economic growth and inflation in the major economies.

The volatility of financial asset prices was in part a reflection of uncertainty over the resolution of continued international payments imbalances, in particular the US current-account deficit. The sharp decline in the private financing of this deficit, as evidenced by significant central bank intervention, called into question its sustainability at prevailing asset prices. While the Louvre Accord imparted a degree of stability to exchange markets during part of the year, its durability was at times questioned, as was the resolve of the large economies to co-ordinate policies. In this context, asset prices appeared to be strongly influenced by expectations of shifts in monetary and fiscal policy, aggregate growth prospects and the outlook for inflation and seemed to respond at times in an exaggerated manner to the "news" contained in recently released economic statistics.

The worldwide equity market crash in October can probably be best explained as the result of the combination of three factors: a change in fundamental valuation brought on by a revision of expectations regarding world economic growth, the sudden reaction of equity markets to perceived earlier overvaluation — a so-called speculative bubble — and temporary "market failure", that is, the inability of institutions to accommodate smoothly a sudden large drop in equity prices and major increases in selling volumes. The nature of this failure has been extensively studied in some countries, most notably the United States and the United Kingdom. There are major disagreements amongst the reports published to date, however, in terms both of analysis and of recommendations. Regarding the latter, there is a general consensus only on the need to increase equity trading capacity, to raise the capital requirements of market-makers and, less specifically, to improve co-ordination across exchanges.

Central banks responded to the rapid fall in equity prices in October by ensuring an adequate supply of liquidity to the markets, so that short-run liquidity constraints would not develop into solvency problems. In the event, these actions appear to have averted major financial panic. Some markets, notably the two largest ones, have recovered since the crash-week lows;

others, especially in continental Europe, have declined further; most, however, tended to drift upwards during the early months of 1988.

Financial deregulation and restructuring continued last year. The increased liberalisation of the activities of both banks and non-bank financial institutions has heightened the need for greater consistency within and across countries in national banking and securities market supervision and regulation. A concrete step towards greater harmonisation in banking supervision last year took the form of a proposal by the banking supervisors of the major industrial countries to introduce a common, risk-based capital standard for banks. Extension of the permissible activities of financial institutions in domestic and foreign markets has also fostered increased competition, challenging efforts to boost supervisory standards. Further competition in banking may lead to increased risk-taking, or exacerbate the difficulties of already weak institutions. At the same time, increased competition intensifies the difficult problem of balancing public involvement in ensuring the soundness of the financial system with preservation of its competitive nature.

The persistence of saving/investment imbalances

On the surface financial markets appeared orderly during the early months of 1987. Long-term interest rates declined in Germany, Japan and the United Kingdom and rose only modestly in the United States. In addition, the Louvre Accord of February at times imparted calm to the foreign exchange markets. However, the continuation of the 1986 pattern of international imbalances loomed large in the background throughout the year. These imbalances reflected a disappointing adjustment in saving/investment decisions, as the US shortfall of domestic saving relative to domestic investment continued to coexist with surpluses in Japan and Germany. Concerns raised by the absence of sufficiently visible signs of improvement, scepticism about the actual and prospective fiscal policy responses, and renewed pessimism about the responsiveness of the imbalances to asset price movements, all contributed to unease amongst financial market participants. This prompted what at times appeared to be exaggerated financial asset price reactions to relatively minor individual events.

In 1987 the gap between national saving and investment widened further in the United States, both in absolute terms and relative to GNP. As a proportion of income it narrowed somewhat in Germany and markedly in Japan. In the United States, despite a significant reduction in the net borrowing needs of the public sector (admittedly partly the result of temporary revenue increases), the current-account deficit grew to \$161 billion, in part because of a sharp contraction in the net financial surplus of the personal sector. This contraction was probably related to the rise in equity prices, which remained significantly above their end-1986 level until the October crisis. Thus, confirming evidence reviewed in last year's Report, 1987 witnessed a negative relationship between capital gains on equities and the US personal saving rate, which troughed at below 3% in the third quarter before jumping back to

The evolution
of the
imbalances . . .

around 5% since then. As a proportion of GNP, net public sector borrowing rose in Germany but declined in Japan, despite the adoption of an expansionary fiscal package.

Sectoral financial balances*			
Countries and items	1980-85	1986	1987
	as a percentage of GNP		
United States			
Public sector	-3.9	-5.2	-4.1
Non-residents	0.9	3.4	3.5
Non-financial corporations	-0.7	0.3	-0.3
Households	4.0	2.6	1.6
Japan			
Public sector	-6.3	-4.2	-1.4
Non-residents	-1.4	-4.3	-3.6
Non-financial corporations	-2.8	-1.3	-2.2
Households	9.8	10.2	7.9
Germany			
Public sector	-2.6	-1.2	-1.7
Non-residents	-0.2	-4.0	-3.8
Non-financial enterprises	-2.0	-0.6	-0.7
Households	3.7	5.1	5.2

* For Japan, the public sector includes public enterprises and 1987 figures are BIS estimates. For Germany, the financial balance of the housing sector is included in the household sector.
Sources: National flow-of-funds data.

The general uneasiness in financial markets in the light of the evolution of international imbalances showed little sign of abating until the end of the year. It was only then that some visible indications of improvement in the US nominal current account could be discerned and concrete fiscal policy actions conducive to a resolution of the imbalances were announced in the United States. The sizable shift from private to official financing of the US external deficit in the early part of the year heightened doubts about the viability of the prevailing configuration of asset prices in the absence of direct corrective actions on government dissaving. These doubts were at times compounded by a lack of clear and consistent policy signals, which exacerbated the markets' anxiety regarding the major countries' resolve to co-operate.

Last year's turbulence was clearly related to the continuing process of international financial market integration and growing capital mobility experienced in recent years. There are good grounds for believing that greater international financial integration may sometimes retard, rather than help, the process of adjustment of international imbalances. In principle, greater capital mobility permits the achievement of a preferred temporal pattern of consumption by increasing countries' external financing possibilities and/or reducing their cost. By the same token, however, it may also make it possible to delay needed internal adjustments.

... contributes to unease in financial markets

Greater capital mobility can delay adjustment

More importantly, high capital mobility may lead to pressures on asset prices which work against external adjustment. In response to international interest rate differentials, capital flows may be the major short-run determinant of exchange rate movements quite independently of the existing current-account position, as exemplified by the appreciation of the US currency in the early 1980s and, more recently, of the pound sterling. Over time, however, views about the sustainability of the external imbalance and its implications for the expected future exchange rate tend to become dominant and determine the premium required by foreigners to hold assets denominated in the domestic currency. When that occurs, doubts about the sustainability of the imbalance may contribute to periods of considerable volatility in the premium and hence asset prices, as suggested by last year's experience in foreign exchange, bond and equity markets.

Disappointing
saving behaviour

In this context of uncertainty, the failure of private saving behaviour to assist external adjustment has warranted special concern. In particular, a number of observers have pointed to the disconcerting possibility that saving patterns, especially in the United States and Japan, are largely responding to long-run or structural factors, and are relatively insensitive to asset price changes. It has been argued that the apparent declining trend of the private saving ratio in the United States has originated from developments such as the rising consumption level of the elderly, improvements in private and public insurance schemes and the relaxation of liquidity constraints associated with wider and less costly access to borrowing facilities. On the other hand, the relatively high private saving ratio in Japan, even if partly overstated by accounting conventions, has been attributed to factors such as the country's high growth rate, the combination of high housing and land prices with limited access to credit, a strong bequest motive and, until their recent abolition, sizable tax-related saving incentives. These arguments, to the extent that they are empirically valid, may help to explain why asset price movements alone cannot be relied upon to correct the existing large payments imbalances and why significant "overshooting" of asset prices may take place in the absence of major adjustments in governments' net financial positions.

Interest rates

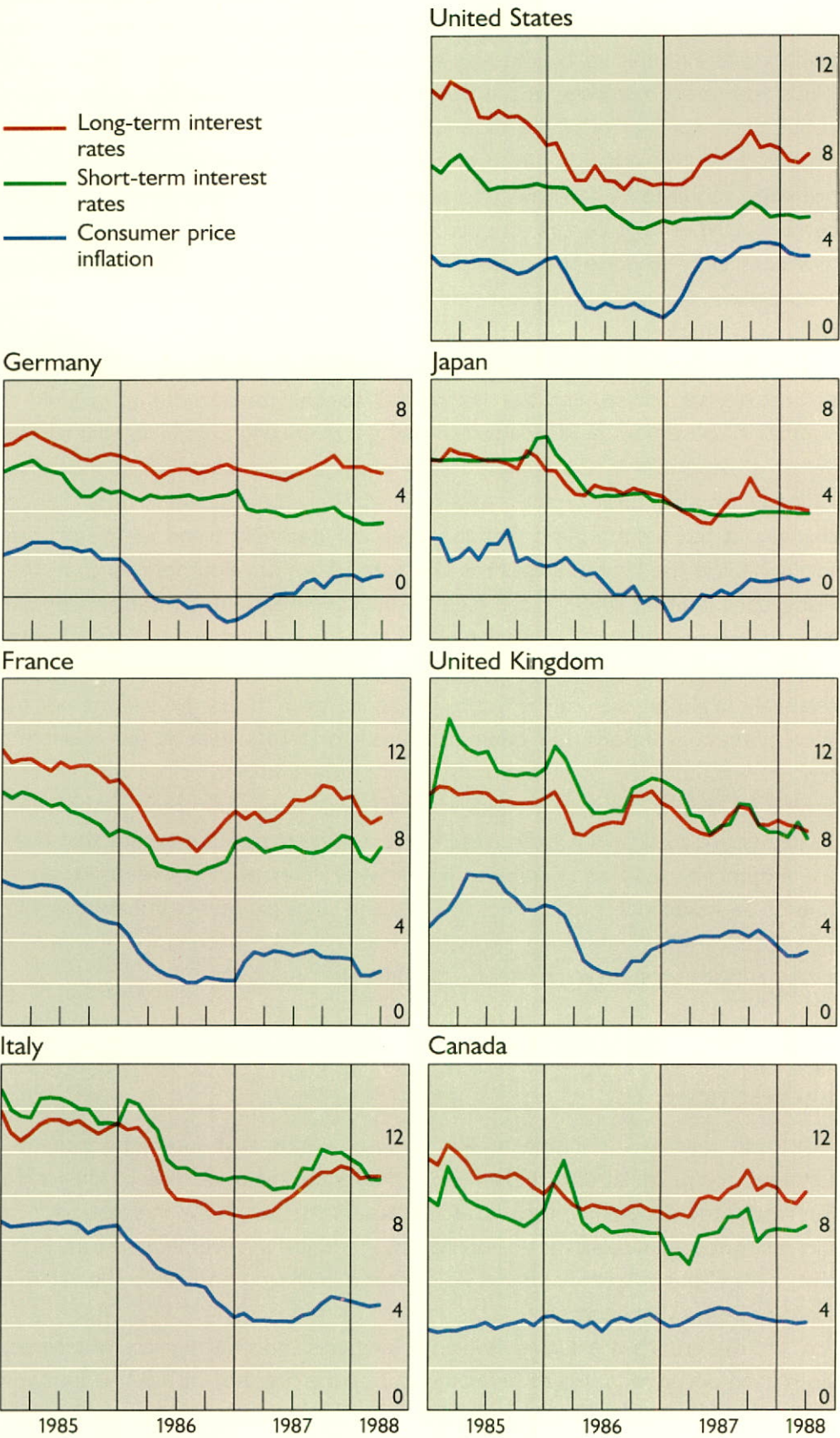
Two favourable
trends broken

The past year saw decisive breaks in two trends that interest rates had followed for much of the 1980s. Firstly, a long period of decline in long-term interest rates ended in most industrial countries. Secondly, the volatility of interest rates, particularly yields on bonds, increased in several countries. Both the rise and the volatility of bond yields stood in sharp contrast to the relative stability in the real economy.

As the graphs overleaf show, both long and short-term rates of interest bottomed out in most major countries during the first half of 1987 — in many cases at the lowest levels since the mid-1970s. In the United States and Canada rates were at their lowest near the start of the year. In other large countries, except France, the lows occurred in April or May, at a time when rates surged

Nominal interest rates and inflation, 1985—88*

Monthly figures, in percentages



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

in Canada and the United States. The second half of 1987 was notable for a roughly parallel movement of rates in the countries considered: a rise throughout the summer, a sharp peak just before the stock market crash in October, and a decline which extended into early 1988. Only in the United Kingdom, however, were bond yields much lower in the first quarter of 1988 than a year earlier. In April and May interest rates in most countries tended to firm again.

Given the continuation of low to moderate inflation in many economies, inflation-adjusted bond yields remained high in historical perspective. Short-term rates, by contrast, rose less than bond yields or even declined, leading to some reductions in real terms, particularly in Germany and Japan.

Yield curves, as shown in the following table, generally steepened with the rise in rates in the third quarter of 1987. Some of this steepening was reversed later in the year, though bond yields in all the major industrial countries maintained a significantly greater margin over money market rates in early 1988 than they had in 1986 and early 1987. Last year, and more markedly in the first quarter of 1988, there was a sharp contrast between the relatively flat yield curve in Japan and the much steeper pattern in Germany.

Yield curves
steepened

Bond yields less short-term interest rates*							
Periods	United States	Japan	Germany	France	United Kingdom	Italy	Canada
1985	3.14	-0.13	1.43	1.97	-1.71	-0.78	1.61
1986	1.70	-0.03	1.32	1.43	-1.10	-1.37	0.55
1987 Q I	1.66	-0.09	1.55	1.26	-0.93	-1.65	1.90
Q II	2.68	-0.23	1.72	1.72	-0.31	-0.67	1.65
Q III	2.83	1.08	2.08	2.68	0.04	-0.79	1.50
Q IV	3.26	0.59	2.07	2.08	0.33	-0.65	2.16
1988 Q I	2.69	0.21	2.46	1.69	0.24	-0.11	1.42

* In percentage points. Representative rates: for the United States, ten-year Treasury bond and three-month Treasury bill; for Japan, long-term government bond and three-month Gensaki; for Germany, long-term public bond and three-month interbank; for France, long-term public bond and three-month interbank; for the United Kingdom, twenty-year government bond and three-month interbank; for Italy, long-term public bond and three-month Treasury bill; for Canada, over ten-year government bond and three-month Treasury bill.

Changes in
expectations
were particularly
important for
bond yields

The behaviour of bond yields is shaped both by current macro-economic developments — output, inflation and monetary and fiscal policy — and by investor expectations of future conditions. The importance of foreign investors in many national bond markets has made expectations of exchange rate movements a major factor as well. Expectational factors seem to have been particularly influential last year, as the rise and increased volatility of bond yields cannot clearly be associated with surprises in real growth or inflation rates. Although expectations are not directly observable, it is possible to identify quite clearly periods over the past year when changes in investor sentiment led to changes in interest rates. Two such episodes, the fall of the dollar in March 1987 and the collapse of equity prices in October, struck investors simultaneously around the globe, causing closely linked price changes in most bond markets.

Expectations of exchange rate movements were particularly influential in the first half of 1987. Bond yields in the United States moved inversely with the value of the dollar; in other major countries yields fell with appreciation against the dollar and rose with depreciation. This pattern was dramatised by the fall in the dollar, particularly in March and April, which was accompanied by a sharp divergence of bond yields in the United States from those in Japan and Europe. While the dollar stabilised in the exchange markets in May and June, the impact of the earlier dollar decline on long-term rates was notable. Long-term rates on US government securities rose by almost 150 basis points between January and May, while those on Japanese government securities fell by almost a full percentage point. Long-term rates in Germany declined by about 50 basis points.

Expectations of
exchange rates

These developments suggest that the weakness of the dollar at times caused international investors to revise their views about its future value. Investors required an increased premium in dollar interest rates over rates on other currencies to compensate for expectations of further depreciation and for the greater risk of holding dollar assets in a less certain environment. The sizable increase in yield spreads during the course of the year, particularly in the long-term sector, can be seen in the following table. By the second quarter

Premium on dollar instruments: Short-term interest rates and government bond yields*				
Periods	Japan		Germany	
	short-term	long-term	short-term	long-term
1985	1.00	4.28	2.04	3.76
1986	1.01	2.74	1.38	1.77
1987 Q I	1.47	3.21	1.39	1.49
Q II	1.86	4.77	1.81	2.84
Q III	2.30	4.05	2.12	2.87
Q IV	1.98	4.65	1.77	2.96
1988 Q I	1.88	4.37	2.35	2.58

* Rates in the United States less corresponding rates in Japan and Germany, in percentage points. See the footnote to the table on page 81 for the rates used.

of 1987 long-term interest rate spreads of dollar assets over yields in Japan and Germany had risen by 100 basis points or more compared with 1986.

These spreads did narrow somewhat from mid-May to mid-August, a period during which the dollar was stable and little intervention took place, suggesting greater confidence in the Louvre Accord. Nevertheless, following bouts of dollar weakness, initially prompted by the publication of disappointing US trade figures, they widened again and persisted into early 1988. The premium on dollar assets, particularly in the short-term sector, suggests that the recovery and subsequent stability of the dollar exchange rate early this year may owe more to policy-maintained differentials in interest rates than to a more fundamental change in sentiment about the currency. The persistence of the premium, given a reluctance in Japan and Germany to further reduce short-term rates already at post-war lows, could introduce a certain rigidity

into the world structure of interest rates, with a rise in rates in the United States the only clearly available "degree of freedom".

In the second half of 1987 inflation and monetary policies became the focal concerns of bond markets. Bond yields in most major currencies became sensitive to increases in the prices of gold, oil and industrial raw materials. The US Federal funds rate rose from about 6.4% in April to 7.2% in September, indicating a tightening of policy, and bond yields in Japan surged in the late spring when the Bank of Japan failed to reduce its discount rate further. These disturbances were transmitted rapidly among national bond markets.

Both interest rate and inflation expectations were significantly altered by the worldwide plunge in equity prices in October 1987. Interest rates on government obligations fell swiftly in response to central bank easing and as investors sought refuge in safer assets. The decline in interest rates spread to most other investment-grade obligations as investors saw recession and deflation as more probable than inflation. Rates stayed on a declining trend in most countries into early 1988, as expectations increased that economic growth would slow and inflation remain low to moderate in the major industrial countries. By the spring of this year, signs of unexpectedly robust growth and reawakening concerns about inflation had reversed some of the decline.

Volatility of government bond yields in the United States, Japan, Germany and the United Kingdom*						
Years	Range in basis points (maximum less minimum)	Range as a percentage of annual average	Change from January to December in basis points	Range in basis points (maximum less minimum)	Range as a percentage of annual average	Change from January to December in basis points
	United States			Japan		
1980	306	26.7	204	180	19.5	91
1981	275	19.8	115	122	14.1	- 88
1982	406	31.2	-406	103	12.8	- 36
1983	147	13.2	137	84	11.3	- 84
1984	207	16.6	- 19	97	14.3	- 64
1985	260	24.5	-212	97	15.3	- 46
1986	208	27.1	-208	120	24.3	-120
1987	244	29.1	190	210	49.9	3
	Germany			United Kingdom		
1980	160	18.8	80	166	11.9	- 48
1981	210	20.2	60	291	19.5	232
1982	200	22.3	-200	488	37.9	-399
1983	90	11.1	60	163	14.5	-153
1984	120	15.4	-120	200	17.7	38
1985	130	18.9	- 60	109	9.9	- 72
1986	80	13.5	- 40	261	26.1	- 70
1987	110	18.8	20	166	17.4	- 63
* Based on monthly figures of the rates given in the footnote to the table on page 81.						

Long-term interest rates appear to have been particularly volatile during the past year. The table on page 83 offers evidence for four countries on the extent to which volatility in bond yields increased last year. The table shows the range (maximum less minimum) of bond yields over the year, that range as a percentage of the average yield, and the change in yield over the year. In forming their opinions on volatility, market participants probably weigh both absolute and proportional changes in interest rates, as well as their speed and direction. The proportional range should capture in a rough way investors' perception of the size of rate movements; it also has merit as a technical measure of the "width" of the distribution of interest rates. Bond yields traversed a wide range in 1987, with higher volatility in three of the four countries. The increase in volatility in the Japanese bond market is especially dramatic, with the range of interest rates equal to 50% of the average annual yield. It is also significant that, in contrast with 1982 or 1986, the heightened volatility in 1987 was usually accompanied by rising yields, presumably amplifying its effect on investors' decisions.

Increased
volatility of bond
yields

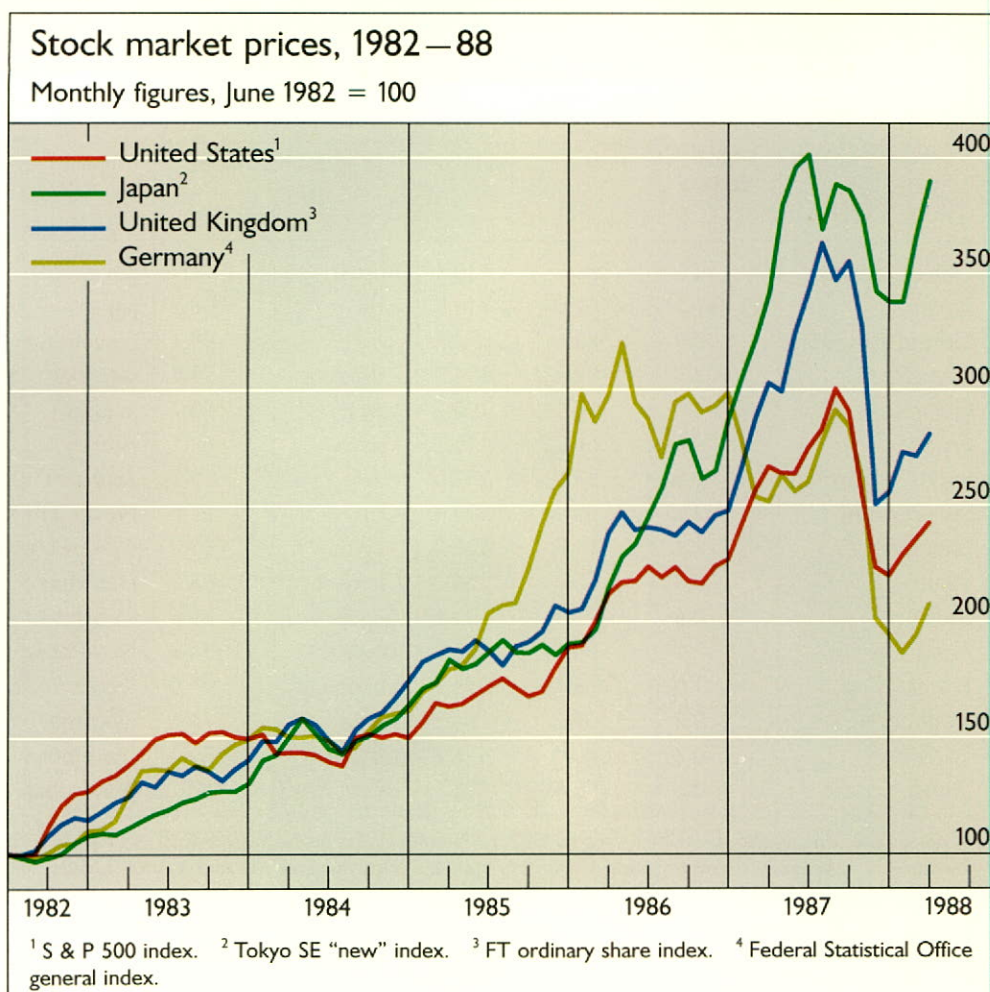
Equity prices: fundamental valuation, speculative bubbles or market failure?

The simultaneous collapse of equity prices on the world's stock markets was the most striking feature of financial market developments in 1987. Equity prices were by no means the only vehicle through which financial strains made themselves felt, as bond and foreign exchange markets also experienced major shocks during the year. But their behaviour stood out particularly sharply when compared with the prolonged international bull market of the preceding five years, a period during which equity markets appeared relatively impervious to economic tensions.

A key question raised by the events of October 1987 is whether the fall in share prices reflected a justified shift in market expectations regarding the outlook for the world economy, a correction of previous overvaluation, which had been fuelled by speculative bubbles and excessive optimism regarding the economic fundamentals, or a case of temporary "market failure". In practice, it is probable that all these factors played a part.

Although the overall picture during the first half of 1987 was one of a continuing global bull market, there were notable differences between countries. The table of nominal stock price indices on page 86 shows that four of the five largest markets (the United States, the United Kingdom, Japan and Canada) and a group of small ones spanning Europe and the Far East experienced accelerated price increases during the first half of 1987 and in some cases through to October. By contrast, in the main continental European markets (Germany, France, Italy and Switzerland) equity prices rose relatively modestly or not at all. Nonetheless, regardless of earlier performance, almost all countries were affected by the crash, with subsequent lows reflecting losses of between 25 and 50% compared with 1987 highs. Similarly, by mid-May 1988

Nominal stock
prices in 1987



all markets had recovered some ground since their post-crash lows, though Germany and Switzerland had recovered less than most. The Tokyo market stands out as having experienced one of the largest rises during the first half of 1987, the smallest loss relative to its 1987 high, and proportionately one of the strongest recoveries after the crash.

Real stock prices
recover in the
1980s

The rise in nominal stock price indices since the early 1980s is exceptional; however, for most countries much of this increase reflected a recovery in real stock values to the level of the early 1970s following a prolonged weakness, which generally spanned the period 1973–82 (see the graph on page 87). The reasons for the behaviour of real equity prices during the 1970s are somewhat puzzling, given the generally low level of real interest rates. A plausible explanation is that low real equity values reflected a mixture of economic fundamentals, such as poor growth prospects, high risk and reduced returns on installed capital equipment following the first oil price shock, together with inflation-related valuation errors which on balance led investors to undervalue equities.

From 1982 the resumption of real growth, declining inflation and interest rates, and moderation in wage claims all contributed to a sharp improvement in the outlook for real profits in the industrialised countries. At the same time, it is likely that lower inflation served to eliminate equity valuation errors, while in some countries fiscal measures designed to encourage equity investment

Stock market indices (beginning of 1987 = 100)								
Countries	Relative market capitalisation ¹	Beginning of 1986	High 1987		Post-crash low		11th May 1988	
		Index	Index	Month	Index	Month	Index	Relative extent of recovery ²
United States	38.5	86.5	138.3	August	91.9	December	104.0	26
Japan	31.3	67.0	144.5	June	108.2	January ³	138.9	84
United Kingdom	8.9	86.6	147.2	June	94.1	November	107.5	25
Canada	3.2	94.9	134.9	August	93.1	October	105.9	31
Germany	4.0	96.1	100.2	January	58.7	January ³	62.7	10
France	2.6	66.3	115.6	March	63.1	January ³	78.6	30
Italy	2.5	64.2	107.0	April	59.1	February ³	69.4	21
Switzerland	2.2	93.9	108.4	October	67.0	November	71.1	10
Netherlands	1.4	91.8	120.0	August	69.0	November	85.1	32
Spain	0.8	65.0	156.2	October	96.5	December	129.2	55
Belgium	0.6	71.9	132.1	August	85.6	December	115.0	63
Australia	2.1	68.1	156.8	September	78.3	November	95.6	22
Hong Kong	1.0	68.5	154.3	October	74.0	December	99.0	31
Singapore	0.3	69.6	168.9	August	78.6	December	108.4	33
Taiwan	0.3	80.4	449.7	October	221.1	December	448.0 ⁴	99
South Korea	0.2	59.9	192.6	December	167.2	November	240.4 ⁴	— ⁵

¹ Capitalisation (measured at the beginning of 1987 in US dollars) as a percentage of total capitalisation of the countries shown in the table. ² Change in the index since post-crash low as a percentage of the change in the index from the 1987 high to the post-crash low. ³ 1988. ⁴ 13th May 1988. ⁵ Not applicable, since the 1987 high followed the October crash.

Sources: For the United States, S & P 500 index; for the United Kingdom, FT ordinary share index; for Japan, Tokyo SE "new" index; for Germany, FAZ general index; and representative indices for other countries.

were introduced. Taken together, these factors more than compensated for the parallel rise in required rates of return that resulted from the increase in real interest rates, and hence real stock prices rose rapidly on all the major markets. The divergent real stock price behaviour which began to emerge in 1986 might in part be explained by the effects of real exchange rate shifts (tending to boost the expected profitability of the tradable goods sectors in the United States, Canada and the United Kingdom relative to those in continental Europe) and different rates of domestic growth (again tending to enhance relative profitability in Canada and the United Kingdom). However, it is notable that rapid real price increases in the Japanese stock market continued during 1986–87 despite exporters' falling profit margins.

Causes of the market crash

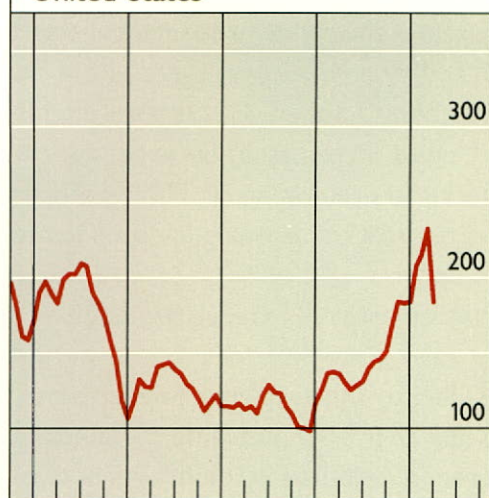
Three probable causes of last autumn's precipitous fall in equity prices can be identified. Firstly, there was the uncertainty over how international payments imbalances would be resolved. During October the markets' expectations were undoubtedly depressed by growing concern that efforts to stimulate domestic demand in some countries and to reduce the Federal budget deficit in the United States were proving inadequate, and by evidence that nominal current-account imbalances were responding less than had been expected to

Lack of progress on payments imbalances may have triggered fears of recession . . .

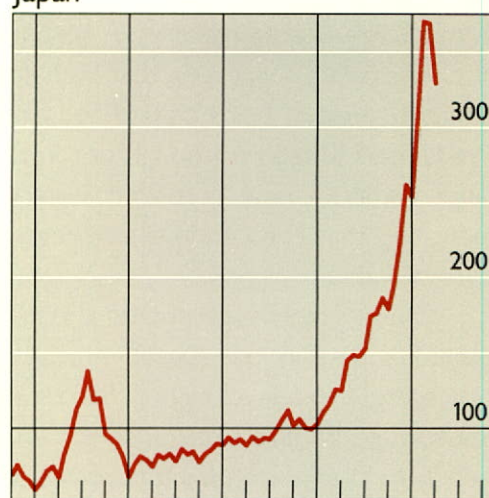
Real stock market prices, 1970–87*

Quarterly averages, second quarter 1982 = 100

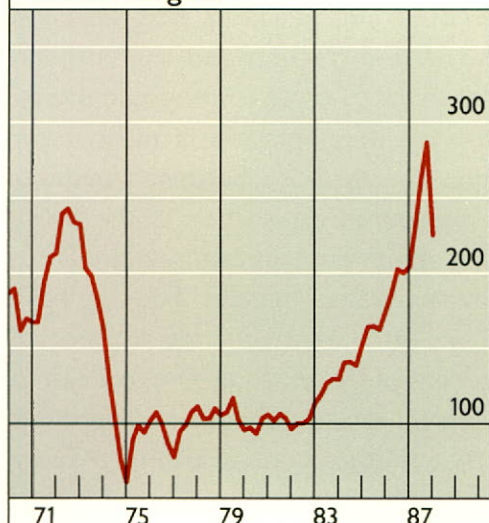
United States



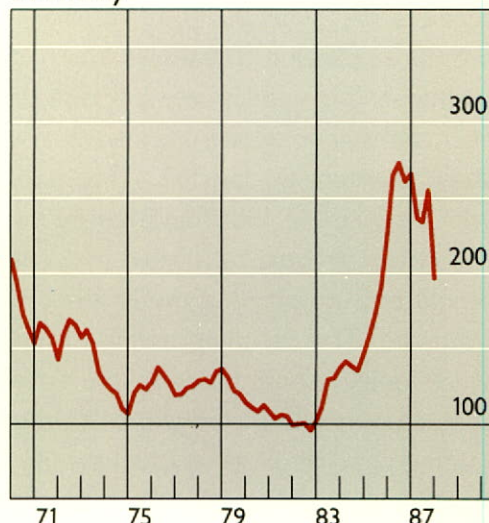
Japan



United Kingdom



Germany



* Stock market indices (as described on page 85) adjusted by the GDP deflator.

the earlier depreciation of the dollar. These developments in turn could have led to fears of recession and hence of lower real corporate earnings growth, either as a result of an immediate rise in US real interest rates designed to defend the dollar, or of a belated tightening in the wake of inflation following a dollar free-fall. The manner in which the question of trade imbalances suddenly came to dominate market thinking may have been related to increasing frustration with its apparent intractability, awareness of the earlier switch in the financing of the US deficit from private to official sources and the continuing threat of US protectionist measures. These concerns highlighted the need for policy co-ordination and exacerbated financial market anxiety over any evidence that co-ordination might be lacking. Moreover, the deterioration in the international debt climate seen during the first half of 1987 probably added to the general uncertainty over future economic prospects.

The above analysis nonetheless leaves a number of puzzles. The first is the exceptional size and global reach of the October break, which implies a unique uniformity in the way expectations suddenly changed across a wide range of countries and at the same time seems out of all proportion to the weight of immediately preceding news. A second puzzle is the survey evidence collected after the crash, suggesting that both small and large investors regarded the US equity market as being overvalued prior to 19th October. This is paralleled in the United Kingdom (though not in the United States itself) by exceptionally large issues of new corporate equity during the summer of 1987, perhaps indicating that corporations also regarded the market as being in some sense overvalued.

... but this cannot provide a full explanation

These points suggest that a second factor, namely "speculative bubbles", played a part in the October crash by raising stock prices in the period preceding it to a level higher than that justified by the economic fundamentals. Speculative bubbles may arise if a sharp upward price movement generates widely held expectations that prices will continue to rise in the future, at least in the short run, triggering a self-fulfilling process of continuous and possibly accelerating overvaluation. As the degree of overvaluation increases, the pressures tending towards a sharp downward correction also increase and ultimately it may take only a small external shock to cause a collapse in prices. Such behaviour appears consistent with price developments in most major stock markets during 1987 (the exceptions being those European markets which peaked in 1986) and has become a favoured explanation of the crash. Moreover, it could be argued that institutional developments during the 1980s would tend to prolong the lifespan of any speculative bubbles that may have occurred. The rapidly growing turnover in cash markets, the introduction of stock index futures markets, the development of dynamic hedging techniques such as portfolio insurance, and most recently the establishment of 24-hour trading in some large stocks have all contributed to a perception of growing liquidity in stock markets. Such perceptions may lead investors who recognise the existence of persistent overvaluation nonetheless to continue to participate in the market if they assume that they can get out quickly at the time the bubble bursts.

Speculative bubbles are a popular explanation ...

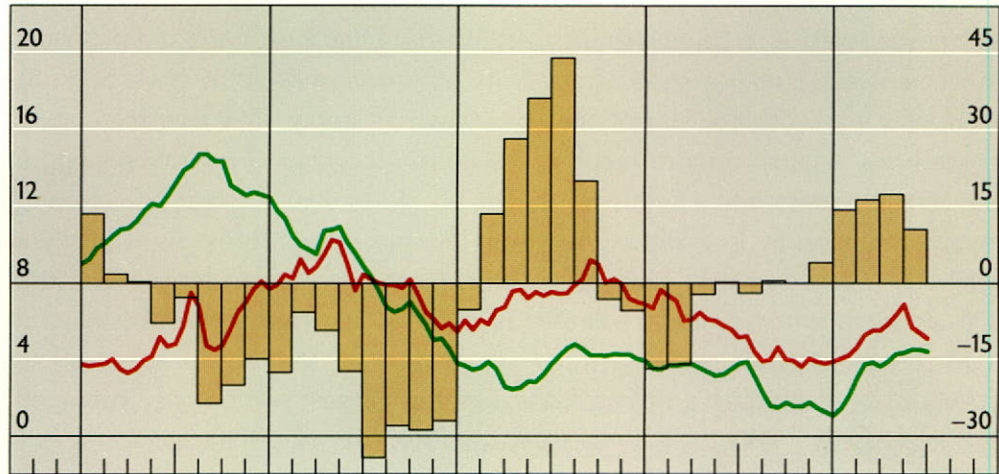
There is a risk, however, in attributing too much significance to the role of speculative bubbles, both because the empirical evidence for their existence in financial markets is far from definitive, and because an examination of the behaviour of yield relationships during the 1980s does not provide conclusive evidence that markets were markedly overvalued prior to the crash. The "yield gap" shown in the graphs opposite is equivalent to the nominal long-term bond yield minus the dividend yield on stocks. The gap has been positive for many years. Theoretically, its size can be shown to be positively related to expectations of inflation and real earnings growth, and negatively related to the perceived relative riskiness of equities. Measurement differences make a cross-country comparison of yield gaps inappropriate; however, historical comparisons for individual countries can throw some light on the overvaluation question. In all the countries shown there was some widening of the yield gap prior to the October crash, but one cannot confidently conclude that the

... but evidence of overvaluation is mixed

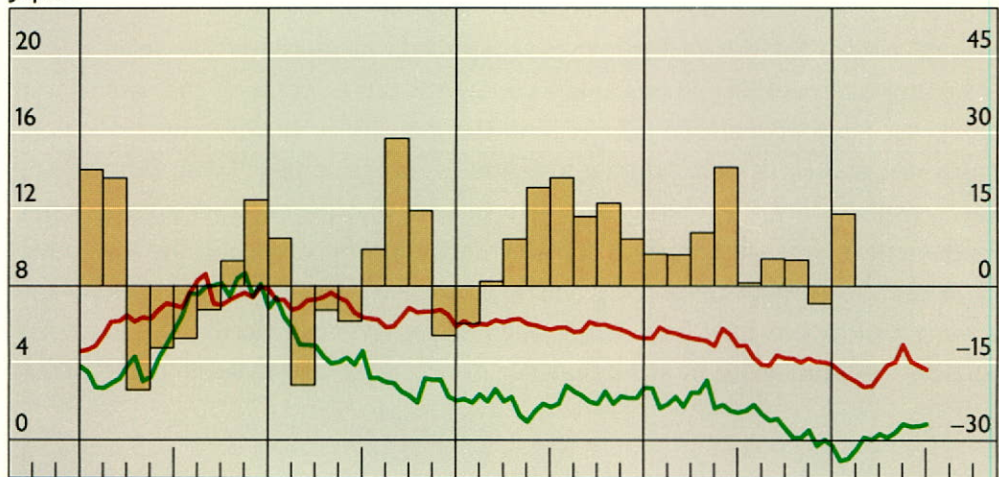
Equity valuation indicators, 1979–87

- Yield gap, in percentage points¹ (left-hand scale)
- Inflation, in percentages² (left-hand scale)
- Real profit growth, in percentages³ (right-hand scale)

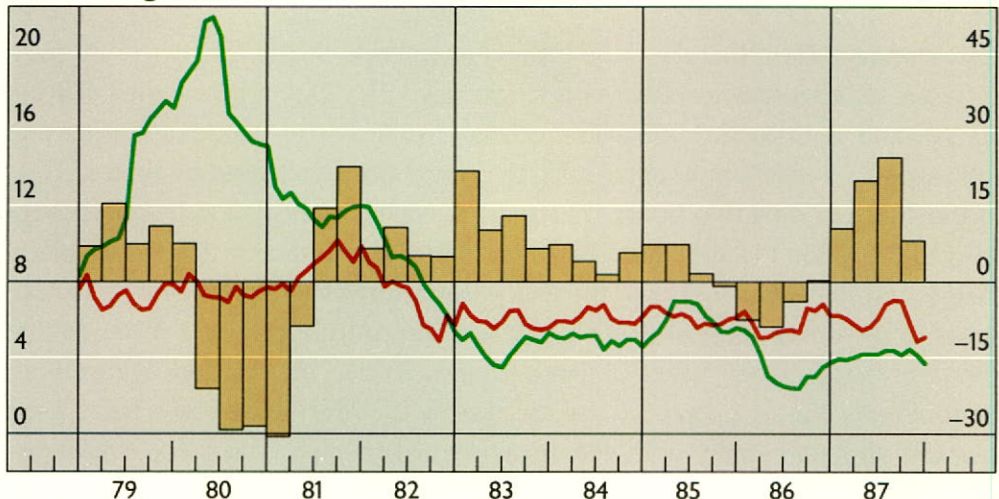
United States



Japan



United Kingdom



¹ Nominal long-term bond yield minus the dividend yield. ² Changes over twelve months in consumer prices. ³ Changes over four quarters in nominal pre-tax corporate profits (for the United Kingdom, pre-tax profits of all enterprises and public corporations) deflated by the GDP deflator.

implied expectations regarding real earnings growth were excessive, especially if part of the widening reflected a rise in inflation expectations which was properly incorporated in equity prices.

The pre-crash price/earnings ratio of more than 70 for the Japanese market (compared with 22 for the United States and 17 for the United Kingdom) has often been cited as evidence of overvaluation, both in absolute terms and relative to other markets. Although the Japanese ratio did probably reflect some degree of overvaluation, its extent is unlikely to have been as great as a bare comparison of the figures would imply. Tax and accounting procedures in Japan tend to result in the underrecording of operating income and in the accumulation of hidden assets via the holding at cost of land and equity investments. In addition, relatively low Japanese interest rates justify a relatively low earnings yield (high price/earnings ratio). Moreover, the prevalence of intercompany shareholdings tends to amplify the rise in total market capitalisation resulting from an increase in the equity value of an individual firm. Insofar as this increase is not associated with higher reported earnings, the net effect is a further boost to the market price/earnings ratio.

The third probable contributory factor to the crash was a temporary failure of certain market mechanisms triggered by an initial price decline. Several causes for this failure can be identified: value-insensitive selling, false price signals resulting from unprecedented turnover and the associated equipment and procedural failures, and the inability or unwillingness of value-motivated investors to act during a period of market crisis. These factors may have resulted in prices falling to levels so low that perceptions of economic fundamentals were themselves transformed, thereby validating the new level of prices. Somewhat perversely, vastly improved communication speeds and trading techniques may have made such an event more likely. The following section considers institutional behaviour during the crash week in more detail.

Temporary market failure probably played a part

The October equity market break

On Monday, 19th October 1987 the New York Stock Exchange (NYSE) suffered its largest-ever drop in a single day. The Dow Jones index fell by 22.6% and over US\$ 500 billion in share values was wiped out. On the following day, after a brief initial rally, the share index collapsed by around 12% in the space of only two hours. The market finally recovered in the afternoon to gain 5.9% for the day, but not without first narrowly avoiding a complete shutdown and, in the words of the Brady Report, raising the risk of a "full-scale financial system breakdown". This risk was dispelled largely as a result of the monetary authorities' forceful intervention. While the United States was undoubtedly the epicentre of the collapse, with very few exceptions equity markets were affected worldwide, many recording historically steep single-day price declines.

Unprecedented price collapse

The unprecedentedly disruptive nature and global dimension of the equity price collapse make it important to analyse what institutional factors may have contributed to a market failure, thereby exacerbating the speed and, in many

cases, the overshooting of the price fall on those critical dates. In this context, the recent developments which have warranted special attention are the interaction of the stock market with that for stock index futures and the growing institutionalisation of equity holdings and trading.

The US break

The role of futures markets in stock indices has come under close scrutiny for at least three reasons. Firstly, by mid-1987 the daily nominal trading volume in stock futures had reached one and a half times that in the NYSE. Secondly, futures markets had become indispensable for the execution of new trading strategies, known under the umbrella term of program trading, such as portfolio insurance and index arbitrage. Thirdly, while allowing trading in assets which are very good substitutes for stocks, these markets are characterised by markedly different leverage and trading arrangements from those prevailing in the cash (i.e. stock) market, raising serious questions about their interaction.

The potential of portfolio insurance to amplify price movements, especially in conjunction with the relatively high leverage in futures markets, has received special attention, as the strategy calls for automatic purchases in a rising, and sales in a falling, market regardless of the underlying value of the stocks. This potential, minimised in the Commodities Futures Trading Commission (CFTC) Report, was regarded as significant in the reports by the NYSE, the Securities and Exchange Commission (SEC) and the Brady Commission. The evidence suggests that portfolio insurance was an important factor behind the speed, and probably the size, of the price decline. Uncommonly large and concentrated portfolio insurance sales took place in the futures market on both 19th and 20th October (see the table overleaf). These sales helped to generate a record drop in the futures price and hence a destabilising discount of the futures on the cash index. The discount in turn diverted unprecedented portfolio insurance sales to the cash market. The large losses incurred on outstanding long positions in futures contracts, of the order of US\$ 6 billion on the Monday, coupled with the immediate need to meet (variation) margins because of the daily cash settlement rule (marking-to-market), may have exacerbated forced selling in the stock exchange. In addition, the evidence indicates that a number of traders sold stock in anticipation of downward pressure on prices from portfolio insurance sales, as would be especially likely if they perceived the market as overvalued. It has been estimated that, given the price decline during the previous week, the "overhang" of unexecuted portfolio insurance programs was between US\$ 8 and 14 billion at the Monday opening.

The role of index arbitrage during the crash has given rise to considerable controversy. By taking offsetting positions in the two markets, index arbitrageurs normally ensure that the difference between the futures and the cash indices equals the carrying costs of the stocks — the short-term interest rate minus the dividend yield. During the crash, however, index arbitrage failed to prevent the formation of a persistent and sizable discount of the futures on the cash index. On the Monday, this resulted from delays in the execution of

Portfolio
insurance sales
help to
overwhelm
markets . . .

. . . and index
arbitrage
transmits selling
pressure to the
NYSE

Program trading sales during the break						
Items	New York Stock Exchange			Chicago Mercantile Exchange		
	Total sales	Peak sales during the day ¹	Total sales relative to normal pre-crash volume ²	Total sales	Peak sales during the day ¹	Total sales relative to normal pre-crash volume ²
	as a percentage of S & P 500 volume ³					
	19th October 1987					
Portfolio insurance ⁴	9	31	32	16–26	44	32–53
Index arbitrage ⁵	9	27	30	–6 ⁶	1 ⁶	–12 ⁶
Total	18	43	62	10–20	28	21–41
	20th October 1987					
Portfolio insurance ⁴	2	14	8	25–31	41	35–44
Index arbitrage ⁵	1	2	3	0 ⁶	0 ⁶	–1 ⁶
Total	3	15	11	25–31	42	34–43

¹ Peak sales calculated from data for half-hourly periods. ² For the New York Stock Exchange, normal pre-crash volume is the average daily volume in September (estimate); for the Chicago Mercantile Exchange, the average daily volume in January–September. ³ Number of shares for the New York Stock Exchange and number of contracts for the Chicago Mercantile Exchange. The futures volume includes both market-makers' and customers' volume. ⁴ When a range is indicated, the first figure refers to SEC estimates and the second to institutional hedging sales' estimates in the Chicago Mercantile Exchange Report. Peak sales are also calculated on the basis of SEC estimates. ⁵ Including index substitution. ⁶ Net sales. When the futures index exceeds the cash index by less than the carrying cost, arbitrageurs buy futures and sell the underlying stocks.

Sources: US Securities and Exchange Commission, The October Market Break; Commodities Futures Trading Commission, Final Report on Stock Index and Cash Market Activity during October 1987; preliminary Report of the Committee of Enquiry appointed by the Chicago Mercantile Exchange; and BIS estimates.

trades, restrictions on short selling and generally heightened risk; and on the Tuesday, from restrictions on NYSE members' use of the strategy. The NYSE Report blames part of Monday's fall on the particularly large index arbitrage sales which did take place, despite the implementation difficulties (see the table above). By contrast, the Brady Report argues that it was precisely the failure of index arbitrage to close the discount which precipitated the fall. It stresses the destabilising expectational effect of the discount on other investors, either in indicating the future value of the cash index or in generating expectations of further arbitrage selling. The SEC Report, on the other hand, remains non-committal on this issue. More generally, it would appear unreasonable to assign much responsibility for the crash to index arbitrage, since the strategy was passively transmitting selling pressure from the futures to the cash market. Rather, attention should be focused on the origin of hedging sales in futures markets — predominantly portfolio insurance — and on those mechanisms which artificially magnified the futures discount.

One such mechanism is the interaction of sharply different market-making arrangements in cash and futures markets. Market-makers reacted very differently to the large order imbalances at the opening on the Monday. The NYSE "specialists" (market-makers) delayed the opening, as they have the obligation to smooth out price fluctuations. Meanwhile, in Chicago, the

Institutional arrangements compound informational failures

continuous-outcry competitive market-maker system allowed prices to drop immediately. Such divergent behaviour in the two markets magnified the discount, overburdened index arbitrage, added to the overall climate of uncertainty and, more generally, raised the potential for disruptive trading flows across markets.

Besides differing in market-making arrangements, the cash and futures markets have no common clearing mechanism and impose separate margin requirements on market participants. The Brady Report, in particular, concludes that this institutional set-up created unnecessary demand for credit and obscured the underlying creditworthiness of would-be borrowers, thereby exacerbating liquidity constraints, making it more difficult for market-makers to take open positions, increasing market volatility and calling for greater intervention by the monetary authorities.

The October crash also vividly demonstrated the potential destabilising influence of the increasing concentration of decision-making implied by the growing institutionalisation of equity holding and trading. Between 1981 and the third quarter of 1987 the proportion of the total outstanding stock of equities held by pension and mutual funds rose from less than 20% to around 27%. This trend was associated with a rise in block trading (large transactions) from around 30% to about 50% of NYSE volume. The Reports show that the large order imbalances on the Monday were due to sales by surprisingly few institutions, while buying power was much more dispersed (see the table below). Market-making systems were thus put under considerable strain. These institutions are also the ultimate users of portfolio insurance and were a key channel through which the crash spread worldwide.

Institutional sales
are particularly
heavy

Trading concentration during the October break				
Top ten traders	New York Stock Exchange		Chicago Mercantile Exchange	
	sales	purchases	sales	purchases
	as a percentage of the value of NYSE transactions			
19th October 1987	15.2*	8.7	26.7	18.7
20th October 1987	7.1	9.7	25.3	25.7
* The top four traders accounted for 14% of total sales.				
Source: Report of the Presidential Task Force on Market Mechanisms (Brady Report).				

The global break

The global dimension of the break is reflected in the large, in most cases record, price falls suffered by stock markets worldwide on 19th and 20th October. An analysis of the time pattern of the break across countries leaves little doubt that the equity price collapse originated in the United States. The main transmission mechanisms to other financial centres include sales by US and other non-resident investors, mainly financial institutions, in foreign markets, common responses of international financial intermediaries, notably market-makers, operating in more than one centre, and the revision of views on equity prospects by residents in their own markets prompted by the size

The collapse
spreads . . .

The global equity market break

Countries	Change during				
	pre-crash week	19th October 1987	20th October 1987	21st October 1987	crash week
	close-to-close percentage changes				
United States	- 9.1	-20.4	5.3	9.1	-12.2
Japan	- 0.2	- 5.3	-12.1	9.4	-12.0
United Kingdom	- 2.4	-10.1	-11.7	6.1	-23.0
Canada	- 4.8	- 9.1	0.0	-0.4	-14.4
Germany	- 2.8	- 7.1	- 5.1	6.8	-11.7
France	- 8.3	- 4.7	- 5.8	5.4	- 9.2
Italy	- 1.0	- 5.7	- 4.4	3.7	-10.4
Switzerland	- 2.4	-10.8	- 4.6	5.7	-16.6
Netherlands	- 4.6	- 7.8	- 8.4	4.2	-15.0
Spain	- 5.0	- 1.6	- 5.7	-1.7	-12.3
Belgium	- 4.9	-10.5	- 0.5	8.5	- 6.1
Australia	- 3.4	- 3.7	-25.0	1.2	-29.3
Hong Kong*	- 2.6	- 2.3	closed	closed	closed
Singapore	- 4.3	-12.1	-20.9	holiday	-30.8
Taiwan	-10.6	3.2	- 4.7	-4.5	-18.5
South Korea	0.9	0.6	- 2.4	0.4	0.5

* When the Hong Kong market reopened on 26th October 1987, the price index fell by 33.3% relative to the previous close.

Sources: See the table on page 86.

and speed of the New York market decline, reputedly the world's most liquid equity market.

In contrast to experience in the United States, reports suggest that heavy selling by non-residents was an important factor in the break in a number of other countries. This mainly consisted of sales by institutional investors who experienced liquidity problems in their domestic market or preferred to liquidate peripheral holdings, particularly in countries where substantial exchange rate gains could be realised. Reports point to sales by US mutual funds in London on the Monday morning ahead of the New York opening. In October net sales of foreign shares by US residents amounted to US\$ 2 billion, compared with average net monthly purchases of US\$ 0.2 billion between January and September. Given their large foreign equity exposure, UK-based institutions were also particularly prominent sellers.

... partly
through sales by
non-residents

The price of the shares of the few funds for non-residents' investment in South Korea and Taiwan, whose markets are otherwise closed to foreigners, reportedly fell by much more than the domestic market indices. Indeed, in sharp contrast to the performance of Hong Kong and Singapore, the price index of the South Korean market actually rose during the crash week. Similarly, foreigners' perceptions of overvaluation may explain why they were the only net sellers in Japan in October, to the tune of Yen 2,000 billion, or four and a half times the monthly average for January to September. Sales worth over Yen 1 billion took place during the crash week alone. The precautionary need for cash would partly account for the reportedly large non-

resident sales in strong-currency countries with efficient clearing mechanisms and short settlement periods, such as Germany, the Netherlands and Switzerland, in contrast to Italy and even the United Kingdom, given the latter's two-week settlement period. In Germany non-resident sales amounted to DM 3.6 billion in October, compared with average net monthly purchases of DM 0.5 billion in the previous nine months.

Circuit breakers
affect market
performance . . .

Trading systems were put under strain worldwide, and the relative difficulties in carrying out transactions seem to have partly determined the distribution of selling across markets. The closure of Hong Kong reportedly diverted sizable sales to Australia and Singapore. The increase in sales was smallest where formal circuit breakers — price limits and trading halts — were important and strictly applied, such as in Japan, France and Spain. At the other extreme, volume trebled in some auction markets not providing for lengthy trading halts or price limits, notably Germany and the Netherlands. By comparison, the rise in volume was not particularly large in dealers' markets, like London or NASDAQ in the United States, in which there were difficulties in contacting market-makers by telephone to conclude trades, and automatic trade execution facilities were interrupted because of rapidly changing quotes (NASDAQ).

. . . as does the
presence of
futures markets

The international experience also suggests that futures markets may have potentially destabilising effects on the cash market during crises — even in the absence of program trading techniques, which are not much used outside the United States. Hong Kong is the only other country where stock index futures markets are well developed, with pre-crash volume about double that in the underlying stocks. And it was precisely there that the crisis reached systemic proportions, with unprecedented losses associated with high leverage positions raising the spectre of massive default and prompting a prolonged closure of both stock and futures markets. In the United Kingdom, Singapore (Nikkei Tokyo index) and Australia, where futures markets are still in their infancy, the destabilising effect was far less important and probably limited to the adverse expectational impact of the often sizable discount at which futures were trading.

Crisis
management

The management of the crisis by exchange and monetary authorities varied somewhat across countries. A common policy of the monetary authorities was to ensure the provision of the necessary liquidity to the system in an attempt to prevent short-run liquidity constraints from resulting in chain bankruptcies (see Chapter VI). This need appears to have been more acute in countries with non-universal banking systems (e.g. the United States) and developed futures markets (e.g. the United States and Hong Kong). Exchange authorities in most countries raised futures margin requirements in an attempt to reassure markets with regard to credit risk. However, in Japan, in order to reduce "forced" selling prompted by margin calls, the authorities cut cash margin requirements and relaxed lending limits on equity portfolios serving as collateral. The latter measures seem to have been taken as part of a broader support plan involving concertation between the Ministry of Finance and the big four securities houses. Through such actions, the need for the direct provision of liquidity may have been reduced at source.

Lessons and regulatory implications

The national and international experiences during the October break point to a number of lessons. Firstly, the gains from the international diversification of portfolios had probably been overestimated. The process of internationalisation of equity markets may have reduced the country-specific elements behind share valuations, while at critical times the need for liquidity may call for across-the-board sales, mainly by financial intermediaries operating in more than one market. Secondly, markedly different sets of trading, regulatory and institutional arrangements across markets for highly substitutable instruments may be disruptive during crises. They can exacerbate uncontrollable inter-market trading flows, distort price and/or quantity signals, make it more difficult to distinguish liquidity from solvency problems and, more broadly, heighten uncertainty and reduce the financial system's ability to respond to adverse shocks. These problems were apparent both at a national level (e.g. the interaction between cash and futures markets) and at an international level (e.g. the concentration of non-residents' selling in a number of centres and the diversion of sales consequent on the Hong Kong closure). Thirdly, the potential concentration of trading activity in the hands of a limited number of institutions, even in broad markets such as the NYSE, can put excessive stress on market-making arrangements, increase short-run volatility and have a disproportionate effect on price movements. Fourthly, the widespread adoption of mechanistic investment strategies, insensitive to fundamental value, may contribute to amplifying price fluctuations. Finally, the crash brought home the message that liquidity is only in part a property associated with market arrangements (e.g. market-making systems, communication facilities), as it ultimately rests on perceptions of asset values. In this context, the proliferation of new risk-transfer instruments, by obscuring the link between individual and system-wide risk, may tend to lull market participants into a false sense of security.

Five lessons from the crash

Some common ground can be found in the reports on the October crash with regard to its causes. All the factors discussed above are mentioned, albeit with major differences in emphasis. Far less agreement can be discerned, however, in the recommendations for reform. The only two areas of complete agreement are the need to raise the trading capacity of the system and the capital adequacy requirements of market-makers. Beyond that, there is a consensus on the need for more co-ordination in clearing and supervisory arrangements as between cash and futures markets, but no agreement as to its desirable extent or possible implementation. So-called circuit breakers, such as price limits and trading halts, elicit markedly conflicting responses. Some regard them as destabilising to the extent that they may precipitate selling before the bounds are reached (price limits) and prevent hedging when it is most needed (price limits and trading halts). Others consider them preferable to the inevitable chaos that unrestricted massive volume can produce during crises. There is agreement that, if adopted at all, changes should be co-ordinated across markets, both nationally and, ideally, internationally. It is in this spirit that the Presidential Working Group has recently proposed very

Disagreements on recommendations are substantial . . .

broad price limits across cash and futures markets as triggers for temporary generalised trading halts. Though notably absent in the CFTC, Chicago Mercantile Exchange (CME) and UK Stock Exchange Reports, there have been some calls for greater consistency in the level of leverage as between stocks and derivative instruments. Attention has been devoted to achieving “consistent” margin requirements across markets, by raising those on derivative instruments and by introducing cross-market margin requirements reflecting the net exposure of economic agents across these markets. But there is little consensus on the precise meaning of “consistency” or on the feasibility of the proposals, in particular those relating to cross-market margins. France’s exploratory attempt to introduce them across futures and options markets may serve as a useful point of departure.

With regard to new trading strategies, proposals relating to index arbitrage range from outright banning in critical situations (NYSE) to making it more effective (e.g. Brady and UK Stock Exchange Reports). By contrast, while it is generally recognised that portfolio insurance was a contributory factor to the October events, it has been argued that since it can be carried out in a variety of ways and markets it can only be discouraged indirectly, by raising implementation costs (e.g. higher futures margin requirements).

... adding to the
risk of
inappropriate
responses

The wide spectrum of recommendations advanced makes it unclear at this stage what proposals will ultimately be adopted. It also raises the risk of competition across exchanges, with financial centres attempting to capitalise on any restrictions which might be imposed on rival markets. Much as in 1929, the perception of the need for action will probably depend on the future course of the real economy. Nevertheless, the risks of inaction, or of unco-ordinated responses, should not be underestimated.

Since the crash, a number of steps have been taken unilaterally by the exchange authorities. Some measures seem indeed consistent with the outcome of a co-ordinated approach, including the upgrading of trading capacity on the NYSE and, probably, the increase in margin requirements in futures markets. Others, however, widen the gulf between arrangements across markets, a clear example being the introduction of price limits in the futures, but not in the cash, market in the United States. Yet others appear to tackle symptoms rather than ultimate causes, like the introduction of restrictions on index arbitrage without devoting much attention to the desirability of greater convergence of market-making mechanisms between stocks and futures markets.

Financial markets and finance in a turbulent period

Institutions and market activity

The recent turbulence in currency, bond and equity markets has resulted in significant losses for many market participants, notably financial intermediaries in the securities industry. The abrupt halt to the period of rising bond prices triggered the beginning of a process of generalised retrenchment amongst financial institutions. Withdrawals from, or reductions of activity in, a number of markets then gathered pace with the collapse in equity markets. This

retrenchment was probably all the greater because of the previous prolonged period of rapid expansion, national and international, encouraged by the bull market and deregulation. This period had resulted in fierce competition, excessive overheads, excess capacity in a number of markets and, in some cases, inadequate risk-control procedures. An example of these trends was the overcrowding in the UK gilt-edged market in the wake of the Big Bang, where the number of market-makers had risen initially from five to twenty-seven, a number widely viewed as unsustainable in the long run.

Retrenchment
among financial
institutions

The incidence of securities-related losses amongst financial institutions depended on their exposure to hard-hit markets. Mutual funds suffered the largest portfolio losses; also, the value, and in some cases the volume, of their sales was sharply reduced in the wake of the market shocks. More importantly, losses were particularly severe among securities firms, especially in the United States and among those active in underwriting, equity market-making and risk arbitrage at the time of the crash. Among banks, portfolio losses are believed to have been sizable in countries such as Germany, Switzerland and Japan where banks have large equity investments. Their immediate impact, however, was rather limited, because of previous cumulated unrealised gains. In addition, in some cases they were partly offset by capital gains on bond holdings after the October break and/or trading profits in bond and currency markets. In the United Kingdom, where banks have moved into the securities business since the Big Bang, some heavy losses were incurred in equity underwriting and market-making. By contrast, in the United States, equity-free portfolios protected banks.

Losses resulting
from market
turbulence . . .

The losses incurred last year during the market turbulence weakened financial firms, notably market-makers. In combination with losses sustained by ultimate investors and with widespread perceptions of higher price volatility, they resulted in a marked reduction in the depth, liquidity and activity levels of a number of markets. By April activity in some markets appeared to have returned to its pre-turbulence level. But even then commission revenues were often markedly lower as a result of lower asset prices. Furthermore, it still remains unclear whether the previous growth trend in revenue will resume. Thus, to the extent that the continuation of this trend was the basis for earlier investment and strategic decisions by firms, further retrenchment in the industry may be in store. At the same time, the need to find revenue in a relatively less favourable environment may exacerbate competitive pressures in certain risky areas perceived as potentially more profitable.

. . . have so far
had a mixed
impact on
activity

Financial market shocks have had a varied impact on turnover in secondary asset markets (see the table opposite). In the Japanese bond markets turnover has been sharply down since the bond price collapse in May 1987. Elsewhere bond market turnover was boosted during the month of the stock market crash and in the United Kingdom and Germany reached similar levels in the first quarter of 1988. By contrast, turnover in the US bond market was sharply lower in November and December and continued to show relative weakness in the first quarter of 1988. After seeing relatively high volumes in October, equity markets were depressed in the last two months of the year. This was paralleled by reports of a cutback in block trading facilities

Bond and equity
markets

Turnover in major secondary asset markets, 1986–88

Period	Bonds ¹				Equities ²			
	United States	Japan	United Kingdom	Germany	United States	Japan	United Kingdom	Germany
	monthly averages (1987 = 100)							
Year 1986	87	52	36	n.a.	75	75	52	n.a.
January–May 1987	108	151	102	101	97	122	93	89
June–September 1987	94	75	92	88	95	96	112	117
October 1987	127	54	108	147	147	113	113	133
November–December 1987	78	46	109	99	94	45	86	77
January–March 1988	92	60 ³	107	156 ⁴	95	91	72	105

¹ Value of turnover in government securities in local currency (for Japan, turnover in corporate bonds is also included). ² Number of shares traded for the United States, Japan and the United Kingdom (customer business only); local currency value of turnover deflated by stock price index for Germany. ³ January–February 1988 only. ⁴ Redefinition of turnover since the beginning of 1988 accounts for a rise of approximately 5% above 1987 levels.

Sources: National data.

in the United States and a marked deterioration in measures of market quality in the United Kingdom (e.g. bid-ask spreads and size of quotes). With the exception of the United Kingdom (where pre-crash turnover was probably inflated by fierce competition for market shares), equity turnover in the first quarter of 1988 was close to the average for 1987. Similarly, the volatility of equity prices (expressed in terms of the frequency of large daily price changes) had broadly returned to pre-crash levels (see the graph overleaf). Nevertheless, other measures of market quality in both London and the United States suggested continuing market fragility.

Derivative
instruments

Activity in markets for derivative financial instruments appears to have been relatively depressed following the market shocks, in sharp contrast to the previous growth. However, the only evidence of a lasting reduction in activity relates to stock index futures and options markets in the United States and Hong Kong. In the case of the United States, in the first quarter of 1988 turnover in leading examples of these products was running at only about half its September level, while Hong Kong futures trading was down by no less than 98%. This marked fall reflects the severe losses incurred by both hedgers and speculators in all markets during the October break, subsequent increases in margin requirements and, in the United States, the cutback in the use of program trading strategies, especially portfolio insurance. Dissatisfaction with the performance of derivative markets compared with expectations formed during the bull market was particularly acute in the case of equity options, with the discovery that some of the ultimate retail option writers supporting the market were in fact not fully aware of the risks involved.

Corporate
restructurings
resume in
earnest

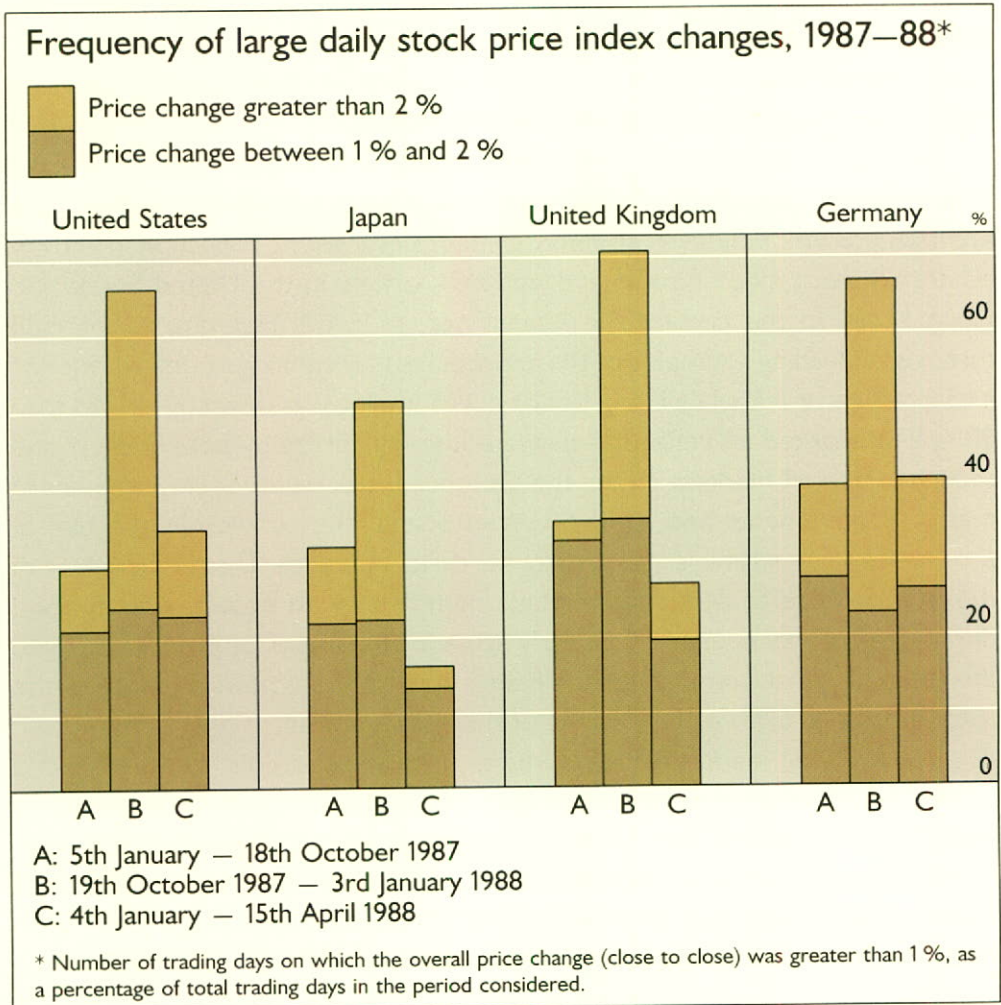
An area of market activity where turbulence seems to have had a surprisingly short-lived dampening impact is corporate restructurings, including highly leveraged deals. After a brief lull in November and December, the wave of mergers and acquisitions resumed. In the United States in January and February deals for a total of over US\$ 70 billion were announced, compared with less than US\$ 50 billion in the same period in 1987. This revival reflects in part the relatively more attractive prices of stocks, as suggested by the timing

of hostile take-over attempts in continental Europe, notably Belgium and France, where they had previously been rare. More importantly, however, it has been encouraged by the availability and lower cost of finance. Investors appear to have returned to the junk bond (high-yield, low-quality) market. The spread of junk bond yields over Treasury bond yields rose sharply immediately after the crash, but since then seems to have fallen back to levels in line with those prevailing at the beginning of 1987. Securities firms and commercial banks have provided an ample supply of bridge finance, attracted by the high expected returns of these operations and pushed by the need to boost revenue. Increased exposure in this area may be a cause for concern, given the high risks involved.

Finance flows and indebtedness

In most countries new equity issues mirrored the stock markets' fortunes, increasing during the upward phase and falling off drastically since the October break as a result of markedly less attractive prices and/or perceptions of higher illiquidity. In addition, privatisation plans were temporarily postponed in a number of countries, notably France and Germany. The main exception to the general pattern was the United States, where, during the first three quarters,

Equity issues mirror equity price movements



a moderate rise in gross equity issues was swamped by the continuation of the previous trend in equity retirements associated with leveraged buy-outs.

Securitisation
continues

In contrast to the marked shift from bond finance to bank lending in the international financial markets (see Chapter V), the secular trend towards securitisation of borrowing in domestic markets appears to have continued last year. In the United States the share of bond issues in the total external funding of the corporate sector rose further in 1987. Moreover, as mentioned earlier, even the high-risk and low-quality junk bond market segment seems to have recovered surprisingly quickly from the market turbulence. Japanese companies, on the other hand, have been particularly active issuers of equity-related bonds, although the flows were temporarily cut back sharply in the light of the October events. In addition, the opening of the Japanese commercial paper market in November 1987 has given further impetus to the securitisation process.

Risks of
excessive debt
accumulation
may have
increased

Last year's Report highlighted the risks inherent in the relatively fast rate of growth of debt in several of the major industrial countries. In particular, increases in private sector debt/income ratios, when not accompanied by offsetting rises in the value and liquidity of balance-sheet assets, normally imply greater vulnerability to adverse movements in cash flows and asset prices. Such vulnerability tends to be all the greater if the growth of private sector debt ratios coexists with growth in public debt ratios. On balance, in 1987 the risks associated with debt accumulation appear to have worsened as a result of the combination of borrowing trends with falling equity prices.

The picture regarding public sector debt ratios has not changed significantly since 1986. They continued to fall in the United Kingdom and France, remained stable in Germany and Canada, and rose further in the United States and Italy. Preliminary figures suggest that the ratio may have declined in Japan. Similarly, debt/income ratios in the private sector showed little sign of falling, and in many cases rose, from their relatively high levels, notably in the US corporate sector. Some concern has been expressed about the particularly rapid growth of credit to the personal sector in the United Kingdom, both for housing and for consumption. Personal credit likewise expanded significantly in Canada, Italy and Japan. Concern has also been voiced about the apparent use of credit to finance purely speculative activities, especially in equities and land. These worries were strongest in Japan, prompting the intervention of the central bank and the Ministry of Finance to urge financial institutions not to lend for speculative land-related investments.

Against this background, and with the exception of Japan, the reduced value of equities since the crash acquires particular significance. Although its impact has been cushioned in a number of countries, including the United States and the United Kingdom, by the substantial rise which preceded it, the equity price collapse has implied a deterioration in the balance-sheet position of both households and firms. For those agents who are equity investors it has entailed a weakening of their ability to finance cuts in their cash flows by running down assets, a problem compounded by the increased perception of volatility and illiquidity of equity markets. The problem could be particularly acute in the case of highly leveraged corporate restructurings.

Financial regulation: trends and implications of the past year

Financial liberalisation

Deregulation and restructuring of financial activity have continued in all major countries. Controls over financial activity, such as ceilings on interest rates, limits on capital flows and bans on specific instruments, remain in only a few major countries, and their significance was reduced last year. In Japan the minimum denomination for bank deposits with market-linked interest rates was lowered to Yen 10 million (about US\$ 80,000). In addition, with effect from 1st April 1988, Japan ended the "maruyu" system of tax-free savings accounts, thereby putting households' investment alternatives on a more equal footing. Italy is easing restrictions on cross-border capital transactions, following new legislation approved last November. At the start of 1987 France completed the dismantling of quantitative credit controls. In Germany the required notice period before issuance of Deutsche Mark Euro-bonds was cut from two weeks to two days.

Financial liberalisation has continued

Several new financial markets were opened, or existing ones expanded, in the past year. In November Japan opened a commercial paper market. Significantly, both commercial banks and securities firms were allowed to underwrite commercial paper. Contracts on Japanese government bonds began to be traded on the futures market in the United Kingdom. A futures and options exchange has recently opened in Switzerland, and additional contracts were added to the futures exchange in France.

Partly as a result of these trends, Germany, an early liberaliser, is notable in having a relatively narrow menu of short-term financial instruments. For example, Germany is the only one of the seven largest industrial countries without money market mutual funds and, together with Italy, without active markets in either commercial paper or financial futures. Commercial paper and futures contracts are not specifically banned in Germany; rather, a tax on securities turnover renders commercial paper uncompetitive, and gambling statutes make futures contracts unenforceable. Changes are in sight, however, as legislative measures now being considered would permit both a futures and options market and money market funds by 1989.

As direct controls over financial activity are removed, more attention is being paid to other constraints, in particular to restrictions on the permitted business activities of firms in the financial sector. Increasingly, these limits are seen as stifling competition and preventing financial firms from entering profitable complementary activities, and have been relaxed to some degree in many of the major countries. However, in some countries a significant loosening of these constraints is proceeding slowly.

Financial firms are being granted broader powers

Japan, for example, has only recently addressed the many regulations that define the permitted activities of various financial institutions. The division between banking and securities business was eroded somewhat when banks in Japan were allowed to underwrite commercial paper. City and regional banks, long forbidden to borrow at maturities beyond two to three years, were authorised by the end of 1987 to issue longer-term equity-linked bonds, a step which will assist in the raising of the additional capital required to meet new

international standards. Beginning later this year, mutual loan and savings (Sogo) banks will be allowed to convert themselves into commercial banks. However, no timetable has been set for the removal of many other restrictions on bank activities — such as limits on borrowing and lending maturities and the exclusion of most commercial banks from the trust business. Broader securities powers for banks await further discussion and, probably, decisions to be taken in the United States on the same issue.

While small steps were taken in the United States last year to lower the barriers between banking and other financial activities, the prospects for truly wide-ranging reforms are uncertain. Banking regulators granted certain commercial banks limited authority to underwrite commercial paper, bonds backed by their own assets or by residential mortgages, and a broader spectrum of local government debt. But use of these new powers was postponed by a Congressional moratorium until 1st March 1988; subsequently, banks have moved cautiously because of uncertainty about eventual legislative decisions.

Legislation now under consideration in the Congress would loosen the restrictions separating banking and securities underwriting contained in the Glass-Steagall Act. Repeal of the Act, assuming appropriate prudential controls, has been supported by the Federal Reserve Board and other banking regulators. However, most proposals being considered do not amount to a complete repeal; permission for banks to underwrite corporate equities may be withheld or postponed, and one draft bill would limit new underwriting powers to the areas already approved by regulators.

Canada and many European countries have further lowered barriers between financial firms. The “Little Bang” in Canada removed many separations between banks, securities firms, trust companies and insurers. Any firm, financial or not, was allowed to enter the securities business; by the end of 1987 five major banks in Canada had allied themselves with a securities firm. In February last year Italy authorised commercial banks to set up merchant banking subsidiaries. In the United Kingdom the “Big Bang” of 1986 had already opened up the financial industry, removing the distinction between stockbrokers and market-makers and allowing commercial banks to enter into stockbroking. France privatised several large banks and financial companies, substantially reducing the role of the public sector in the financial industry. Germany authorised Japanese banks and investment houses to lead-manage Deutsche Mark Euro-bond issues. In January this year the European Commission put forward proposals for a common banking charter in the EEC to be implemented in 1990. These proposals would remove most geographical constraints on banking in the EEC, as well as promote greater harmonisation of national banking regulations.

Supervision

Supervisory
controls have
been
strengthened

The potential risks in extending the powers of financial firms and markets have long been a topic of discussion and, increasingly, the motivation for strengthening supervisory controls. A highly visible sign of this strengthening was the decision by the central banks and banking supervisors of the leading

industrial countries to propose a common, risk-based, standard of capital adequacy for internationally active banks. The proposal, developed by the Basle Committee on Banking Regulations and Supervisory Practices (the Cooke Committee), broke new ground in two ways. Firstly, a common definition of capital was proposed, one that gives primacy to shareholders' equity. Secondly, for many of the countries concerned, capital requirements for banks would for the first time be explicitly linked to formulae measuring the risk of their portfolios, including off-balance-sheet exposures. As proposed, by 1992 internationally active banks would have to maintain a minimum capital cushion equal to 8% of risk-adjusted assets, of which at least 4% in the form of shareholders' equity, thus providing a significant margin of safety for depositors.

This proposal is currently the subject of consultation and comment, and it is intended that final agreement will be reached in the summer of this year. Whatever the precise nature of the final agreement, prudential standards in banking should be enhanced, to the extent that the banking systems of several countries would have to expand their capital or curb the growth of their lending in order to meet the proposed goals. Equally important from a broader perspective, supervisors from twelve countries with diverse banking systems have been able to agree, in principle, on common standards, setting an example for future co-operative efforts among financial supervisors.

The Cooke Committee proposal is notable also as part of a general trend towards closer supervisory control of financial markets and firms. Most of the seven largest countries have recently tightened, or have proposed tightening, capital standards for banks. Canada has placed banking and insurance regulation under one authority. The United Kingdom has phased in self-regulatory bodies for its financial services industry, including the previously little-regulated markets in international securities. Regulation of financial disclosure has been strengthened in France, and sanctions on insider trading have been, or are being, toughened in the United Kingdom, Japan, Germany, France and Switzerland.

While these actions may depart somewhat from past liberalising trends, they can in no way be termed "re-regulation". Rather, with freer markets there is a greater onus on the management of financial firms to conduct prudent policies, with market forces themselves providing restraint and supervision. For example, requiring banks to raise capital ratios should cause the providers of that capital — shareholders and unsecured lenders — to exercise greater scrutiny over banks' management. However, the integration of the world's financial markets can prove to be a constraint on supervisory initiatives, pointing to the need for a global forum for consultation and co-operation among national supervisory authorities. So far only partial forums exist, such as the Cooke Committee for banking supervisors and bilateral contacts between national securities regulators.

Greater international co-operation is warranted

Some implications

The last several pages have summarised two trends in the recent evolution of the regulation of financial markets: a shift in the focus of liberalisation towards

expansion of the permitted activities of financial firms and a strengthening of prudential supervision. Naturally, these two trends are related, as supervision replaces more direct restrictions. At the same time, it is already possible to detect areas where tension has begun to appear between further liberalisation and the maintenance of prudential standards.

Prudential
safeguards may
limit the
profitability of
new powers

Tension can occur, for example, over the optimum combination of financial activities in individual firms. Supervisory authorities have long considered certain divisions or barriers to be essential. One reason is that protection may be needed against common exposure to losses among affiliated activities; another is that “Chinese Walls” should be present to guard against conflicts of interest. Efforts to maintain these barriers, though, may come into conflict with measures permitting financial firms to engage profitably in a broader array of activities. These latter initiatives are intended to boost efficiency and competition, as well as further prudential goals by stimulating fresh capital investment.

The problem, of course, is to strike a balance between these two goals — maintaining prudential barriers and expanding the powers of financial institutions. In order for expanded powers to be used, their combination in one firm must generate some economic advantage and be sufficiently unencumbered by regulation. Synergies or economies of scope — the economic benefits of combining different activities — between banking and securities underwriting or between finance and commerce depend on operational links between these activities, such as sharing resources or customer lists, joint marketing, or co-ordinating investment and trading positions to offset risks. But, given their nature, these links are also those which supervisors may wish to limit so as to guard against contagion of losses or conflicts of interest. A clear illustration of this dilemma can be found in the debate in the United States over the reform of the Glass-Steagall Act. There, it is proposed on prudential grounds that combinations of banking and securities firms should be permitted only within a holding company structure and that transactions between the bank and its securities affiliate should be regulated. These regulations would in some cases be stricter than those governing transactions between unrelated firms, casting doubt on the profitability of these combinations.

Competition
may place added
stresses on
weaker
institutions

Enhanced competition is another promised benefit of lowered barriers which may create dilemmas for the regulatory authorities. Many barriers which in the past have protected financial institutions from competition have been or are scheduled to be removed. This increases competitive tensions by adding to the number of areas in which firms may operate. While competition clearly has positive aspects, namely the more efficient allocation of capital and provision of financial services, increased competition by its very nature puts greater demands on firms. Furthermore, banks are at the same time being required to boost their capital ratios. As expansion is a capital-using activity, this places a strong constraint on their ability to take on new activities.

This tension may exacerbate the existing gap between weak and strong banks. On a global scale, recent moves by major rating agencies have distinguished banks in Canada and the major European countries, which tend

to have ample capital or large, protected shares of domestic markets, from institutions in Japan, where equity capital is low and deregulation is causing adjustment problems, and in the United States, where exposure to Third World loans is relatively high, many money centre banks have a weak capital base and competition is intense. Within the United States as well, there is a widening gulf between several expanding regional banks, with few problem assets and a strong presence in their home markets, and the money centre banks.

Given these disparities, competition can present an obstacle to the efforts of supervisory authorities to raise prudential standards. Increased competition may have the effect of adding to existing difficulties in banking, difficulties which in some cases have already prompted regulatory assistance. Official assistance to a weak institution, in turn, may raise problems of moral hazard — the tendency for the provision of insurance or some other governmental guarantee to encourage greater risk-taking in the rest of the industry. In addition, given the scale of interbank exposures in most countries and the vulnerability of banks to lapses in public confidence, the soundness of the banking system may depend disproportionately on the weakest institution.

One example of this dilemma became apparent in the United States this spring when both a large commercial bank and a large thrift institution required public assistance. As the problem was one of insolvency rather than illiquidity, credit from the central bank was not a complete solution. The size of these institutions and of their transactions with the rest of the financial system presented clear systemic risks in the event of their failure. Indeed, the public insurance funds backing their deposit liabilities were themselves put under strain, as in each case failure of the institution would have generated large potential liabilities for the respective insurance fund. In the event, both institutions were given government guarantees on all their liabilities, including those exceeding the maximum insured size.

As the liberalisation of financial regulation continues, further eroding barriers among financial firms, the tension between competition and profitability, on the one hand, and prudential standards, on the other, is likely to increase. Certainly, it is premature to claim that liberalisation has proceeded as far as reasonable standards of safety and soundness should allow. It is also not true that liberalisation is always in conflict with stability; the removal of constraints on financial firms can enhance their stability by permitting diversification and hedging of risks. Nevertheless, prudential concerns do place limits on liberalisation; these limits have taken on increasing weight in the policy debate, and can only become more prominent in the future.

V. International financial markets

Highlights

In 1987 the international financial markets operated in an increasingly difficult environment, characterised by rapid shifts in market conditions and pronounced interest and exchange rate uncertainties. Nevertheless, owing to the very large volume of activity in the first half of the year, the amount of new funds channelled through the international markets continued to expand strongly. Excluding exchange rate effects, double-counting and overlaps between individual market sectors, the increase may be estimated at \$315 billion, or 12% — much more than the rises of \$245 and 175 billion recorded in 1986 and 1985 respectively. But, in contrast to the pattern of preceding years, the growth in new lending was no longer spread over all market sectors. International bank lending accelerated, whereas issuing activity in the international bond markets contracted sharply.

The main force behind the continued expansion in the overall volume of new international financing was the ongoing process of internationalisation of financial markets under the continued impact of earlier innovations, deregulation and new technologies. Fundamental demand and supply factors, on the other hand, seem to have played a more modest role. Activity was concentrated more than ever on the reporting area itself, whereas, with few exceptions, lending to countries outside this area slowed down further. The large current-account disequilibria among the principal industrial countries, of course, provided ample scope for cross-border capital flows, but international market activity at times added to official financing requirements rather than reducing them, and the biggest group of borrowers were residents not of the main deficit country, but of the largest surplus country.

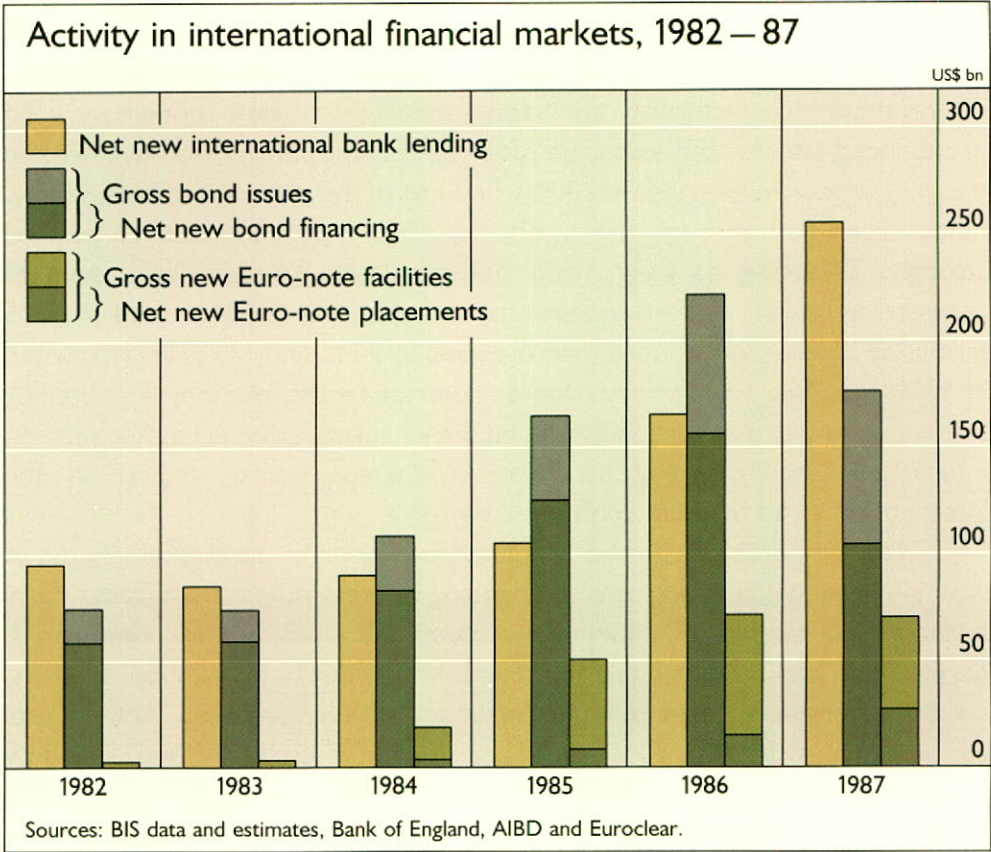
The international debt situation presented a mixed picture last year. After the sharp deterioration that had occurred in 1986, debt ratios declined somewhat, but the underlying economic situation of the problem debtor countries showed little improvement and there were no signs of a revival of spontaneous credit flows to these countries. Nevertheless, after some initial signs of confrontation, a spirit of constructive co-operation has been restored between creditor and debtor countries. Debt conversions and settlements at discounts have increased in importance, and there have been new initiatives for the provision of official funds on concessional terms to the poorest debtor countries.

The overall picture

1987 witnessed a significant shift in the composition of international credit flows away from the long-term securities markets towards commercial bank

intermediation and short-term securities financing. Net new international bank lending, which had already shown a very strong expansion in 1986, increased by a further 55% to \$255 billion, the largest figure ever recorded. This growth was associated with a marked recovery of the syndicated loan market, where the volume of new facilities nearly regained the levels registered in the early years of this decade. At the same time, partly under the influence of the crisis

Strong expansion of international bank lending



in the floating rate note (FRN) market, the banks scaled back their role as borrowers and investors in the bond market. This reduced considerably the overlap between bank and bond financing.

A very strong expansion, from \$29 to 53 billion, occurred in the volume of short and medium-term paper issued under Euro-note facilities, including those for Euro-commercial paper. There was, nevertheless, a modest slowdown in the arrangement of new facilities.

In contrast to the buoyancy of the international banking sector, borrowing activity in the international bond market suffered its first major setback in six years, with new issues announced declining by about 20% from their record level of around \$220 billion in 1986 to about \$175 billion. After allowance is made for scheduled redemptions and early repayments, the net volume of new financing in the international bond market contracted by one-third, from \$156 to 104 billion (see table on page 109). Moreover, these overall figures mask strong activity in the early part of 1987 and a sharp slowdown in the second half of the year. Particularly after the October stock market turmoil, activity in major market segments, such as the straight fixed rate dollar bond sector and equity-related issues, came almost to a halt.

Slowdown in international bond issues

Estimated net lending in international markets: International bank lending and securities issues

	Changes, excluding exchange rate effects ¹						Stocks at end- 1987
	1982	1983	1984	1985	1986	1987	
	in billions of US dollars						
Total cross-border claims of reporting banks ²	180.5	105.7	124.1	233.5	517.3	567.8	4,157.2
minus: double-counting due to redepositing among the reporting banks ²	85.5	20.7	34.1	128.5	352.3	312.8	1,937.2
A = Net international bank lending ³	95.0	85.0	90.0	105.0	165.0	255.0	2,220.0
Euro-bond and foreign bond issues	74.3	73.8	108.4	164.5	221.5	175.6	
minus: redemptions and repurchases	15.8	15.8	25.4	39.5	65.5	71.6	
B = Net international bond financing	58.5	58.0	83.0	125.0	156.0	104.0	984.0
C (A + B) = Total bank and bond financing	153.5	143.0	173.0	230.0	321.0	359.0	3,204.0
minus: double-counting ⁴	8.5	13.0	28.0	55.0	76.0	44.0	284.0
D = Total net bank and bond financing	145.0	130.0	145.0	175.0	245.0	315.0	2,920.0

¹ The yearly changes in banking claims represent the sum of the quarterly changes, computed in the case of non-dollar assets at the exchange rates prevailing at the end of the respective quarter. Unless otherwise mentioned this method is used throughout the rest of this chapter. Non-dollar bonds are converted into dollars at rates ruling on announcement dates. ² Up to 1983 the reporting area includes banks in the Group of Ten countries, Luxembourg, Austria, Denmark and Ireland, plus the offshore branches of US banks in the Bahamas, the Cayman Islands, Panama, Hong Kong and Singapore. As from 1984 the reporting area includes in addition Finland, Norway and Spain as well as non-US banks engaged in international business in the Bahamas, the Cayman Islands, Hong Kong and Singapore, all offshore units in Bahrain and all offshore banks operating in the Netherlands Antilles. ³ In addition to direct 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; a deduction is made, however, in respect of working balances and similar items. 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.

Causes of the contraction in new international bond financing

The main forces behind this contraction in the international bond market were the temporary upturn in long-term interest rates and the more general exchange rate and interest rate uncertainties related to the persistent large payments disequilibria among the big industrial countries (see Chapter IV). Apart from these adverse macro-economic developments, the international bond markets were affected by a rare combination of negative micro-economic influences: excessive competition and mispricing; the related paralysis of the FRN market; announcements of changes in the tax treatment of various bonds; and the repercussions of the stock market crisis on the liquidity of Euro-bonds. The effect of these developments was to induce a fundamental reassessment of international financial market strategies. A number of commercial and investment banks scaled down their involvement in the securities markets, attempted to reduce their costs, particularly by cutting back on staff, undertook thorough reviews of their risk management policies and, in a few instances, merged with other institutions. Similarly, some international investors at least temporarily shifted the focus of their activities back to the domestic markets.

However, developments during the first quarter of 1988, when a more stable

interest and exchange rate environment led to a brisk revival of issuing activity, suggest that it would be premature to conclude that the trends towards internationalisation and securitisation have ceased. In the first place, huge capital flows will be needed to finance the large current-account imbalances which are expected to accumulate over the coming years. Secondly, countries such as Japan, which had long imposed a variety of constraints on their residents' recourse to the foreign financial markets, have continued to ease regulations. Within the European Economic Community the process of internationalisation is likely to accelerate as a result of the removal of all barriers between the financial markets of member countries, which is due to be completed by 1992. Thirdly, although one outcome of developments in 1987 may have been to redirect investors' attention to domestic bond markets, these markets are more open than in the past to non-resident borrowers and investors and to foreign financial intermediaries. This is due both to the streamlining and liberalisation of domestic markets and to the growing similarity between practices in domestic and international markets. While this evolution has been under way in the credit, money and capital markets for many years, the process has more recently gathered momentum in the equities market, where, following the stock market crisis, the international harmonisation of regulations and the implementation of more efficient arrangements for the clearing and settlement of securities transactions have begun to be actively considered. Fourthly, the recovery of the syndicated loan market was associated with the development of new instruments, such as multiple-option facilities, which represent only in part a shift back to bank lending. Finally, the long-standing balance-sheet weakness of many banks in the wake of the LDC debt crisis continues to dampen the prospects for the growth of international bank intermediation. Moreover, the future expansion of international banking activity could be affected if proposals for an international agreement on minimum capital requirements for the banks are accepted.

Temporary or lasting reversal of trends towards securitisation and globalisation?

Indeed, while reasons can readily be found for the retrenchment of the international bond markets last year, the further rapid expansion of international banking activity is more difficult to explain. Lending to countries outside the reporting area, notably the developing world, has slowed down further. As is reflected in a further widening of the discounts quoted in the secondary market for claims on these countries, the credit-standing of most of the problem debtor countries has not improved. At the same time, some of the strongly performing developing countries on the Pacific rim whose credit-standing is unimpaired preferred to cut back their borrowing from the banks or to make actual net repayments.

Stagnation of bank lending to countries outside the reporting area

New international bank lending was therefore almost entirely concentrated on the reporting area itself, where credit can hardly be said to have been in short supply. There were, of course, the continuing large external payments imbalances among the major industrial countries; and it appears that, unlike the securities markets, the international banking sector made a larger contribution to the financing of the US current-account deficit than in 1986. This, however, was mainly the case during the first and third quarters of 1987, when the dollar had temporarily stabilised in the exchange markets.

Factors behind strong expansion of bank lending within the reporting area

Another factor underlying the buoyancy of international banking activity last year was the difficulties that arose in the international bond sector, and the paralysis of the FRN market in particular. Although these developments were associated with a cutback in the banks' own securities business, they did lead to substantial "re-intermediation" of international capital flows via the banking sector.

A third factor was that, unlike the bond markets, international bank activity benefited from the arbitrage opportunities afforded by the volatility of interest rates, the shifts in the shape of yield curves and the fluctuations in international interest rate differentials. Moreover, the pronounced interest and exchange rate volatility boosted borrowing demand for hedging purposes.

Increasing
osmosis between
national and
international
markets

In more general terms, however, the most important reason for the continued rapid growth of international banking activity was the same as that which makes it unlikely that the contraction of the international securities market was more than just a temporary phenomenon: the increasing osmosis between the national and international financial markets. This globalisation not only implies a larger volume of international capital movements; it also means that a substantial proportion of the financial flows channelled through the international markets serves as a substitute for domestic credit flows, or duplicates them.

Prominence of
Japan in the
international
financial markets

Japan, whose banks and other entities continued to play a pivotal role as borrowers, investors and intermediaries in the growth of the international financial markets last year, is a prime example of these trends. Although it remained the largest surplus country, Japanese entities were the most active borrowers. More than 40% of the net international credit intermediated by the reporting banks last year can be estimated to have been channelled to Japan. Net of repayments, borrowings by Japanese entities accounted for one-third of the total funds raised in the international securities markets, and for nearly two-thirds of total issues of equity-related bonds. At the same time, Japanese investors were reportedly the largest group of buyers of the various types of paper issued by Japanese entities.

The role of Japanese financial institutions as intermediaries in the international financial markets is equally striking. Japanese commercial banks have in recent years dominated the growth of the international banking sector, with the result that their international assets (excluding cross-border positions between related offices) are now about three times as large as those of US banks. In 1987 Japanese securities companies acted as lead managers for 32% of all Euro-bond issues, and the subsidiaries of Japanese commercial banks accounted for a further 7%.

Reason for
the growing
presence of
Japanese entities

There were several facets to the growing presence of Japanese entities in the international markets. Firstly, the volatility of exchange rates and interest rates at times gave rise to an active use of portfolio strategies by Japanese entities aimed at hedging losses and exploiting profit opportunities. This led to a surge in foreign currency borrowing by the Japanese non-bank sector, which used the funds to finance its huge purchases of international securities. Secondly, in the interbank market the cross flow of funds out of and into Japan was especially notable in the case of the Japan Offshore Market, where activity,

particularly with the other financial centres in Asia, soared following its opening in December 1986. A significant share of such business involved inter-office transactions aimed at circumventing domestic rules and regulations. Similarly, one of the main reasons for the leading role of Japanese institutions in the international securities market is the freedom from the regulatory or customary constraints to which such business is subject at home. In fact, the sharp increase in Japanese borrowing in the international markets last year was accompanied by a decline in domestic Japanese corporate bond issues and, despite the stock market boom, by a dearth of domestic equity issues other than those related to the exercise of conversion rights attaching to equity-related international bonds.

A final related influence was the attempt by Japanese institutions to exploit the comparative advantage afforded by the country's huge savings surplus and the increasing prominence of the yen in order to establish a strong position in the international markets. This has been accentuated by their use of these markets as a playing field on which they can compete with one another for market shares and balance-sheet size.

The international banking sector

The development of the overall aggregates

Expressed in current dollars, the external positions of the reporting banks last year showed by far the largest increases ever recorded, as their assets and liabilities expanded by \$885 and 959 billion respectively. However, a large portion of this growth resulted from the appreciation of currencies such as the Deutsche Mark and the yen vis-à-vis the US dollar, which boosted the dollar value of the banks' positions in these currencies. Excluding these exchange rate effects, the volume increases amounted to \$568 billion (16%) on the assets side and \$663 billion (19%) in the case of liabilities. The particularly strong growth of liabilities meant that in 1987 the reporting banks as a group moved, for the first time since 1980, from a net asset to a net liability position. This was mainly due to an increase in the banks' use of external funds for local foreign currency lending, to a large extent in conjunction with the financing and hedging of foreign securities purchases by residents.

Record increase
in banking
aggregates

As usual, by far the largest component in the growth of the reporting banks' assets and liabilities was interbank positions within the reporting area itself, but direct claims on non-banks also increased strongly last year. Even if the double-counting resulting from the redepositing of funds between the reporting banks themselves is excluded, new lending accelerated to \$255 billion, 55% more than in 1986.

Sources and uses of international banking funds within the reporting area

Of the total growth in final lending, about \$235 billion, or well over 90%, may be estimated to have been absorbed within the reporting area itself. As much as \$163 billion of this increase was accounted for by direct credits to non-banks, whereas \$72 billion represented the banks' own use of external

Concentration of
new business on
the reporting
area

BIS reporting banks: Selected features of international banking activity										
Items	Assets					Liabilities				
	Changes, excluding exchange rate effects				Stocks at end-1987	Changes, excluding exchange rate effects				Stocks at end-1987
	1984	1985	1986	1987		1984	1985	1986	1987	
	in billions of US dollars									
Cross-border positions vis-à-vis:										
banks within the reporting area	94.1	182.4	450.9	484.5	2,780.2	108.9	197.5	441.6	540.5	3,009.0
non-banks within the reporting area	16.9	23.1	39.8	63.1	542.2	12.0	23.3	72.1	39.5	513.4
countries outside the reporting area	13.1	23.8	13.5	7.4	726.1	28.8	19.3	-2.1	50.6	490.0
unallocated	0.0	4.2	13.1	12.8	108.7	0.3	2.5	31.0	32.4	189.0
Total cross-border positions	124.1	233.5	517.3	567.8	4,157.2	150.0	242.6	542.6	663.0	4,201.4
<i>of which: in foreign currency and ECUs</i>	82.7	184.1	383.5	440.8	3,005.1	92.0	173.5	426.0	475.6	3,203.5
Domestic positions in foreign currency:										
interbank*	4.6	48.5	79.2	62.5	551.8	15.1	65.1	95.6	98.9	668.5
vis-à-vis non-banks*	22.9	14.9	68.4	100.1	427.7	5.7	7.1	17.3	19.6	119.3
Total domestic positions	27.5	63.4	147.6	162.6	979.5	20.8	72.2	112.9	118.5	787.8
Total foreign currency positions	110.2	247.5	531.1	603.4	3,984.6	112.8	245.7	538.9	594.1	3,991.3
* For banks in Europe, Canada and Japan only. On the liabilities side the non-bank figures for Japan are included in the interbank figures.										

* For banks in Europe, Canada and Japan only. On the liabilities side the non-bank figures for Japan are included in the interbank figures.

funds for domestic lending. By far the largest borrowers were Japanese non-bank entities (\$84 billion) and banks in the United States (over \$50 billion).

On the sources side of the international banking market, somewhat over \$170 billion of the total amount of new credit was funded from within the reporting area itself. Identified deposits by non-banks amounted to \$59 billion, with UK and US non-bank entities being the largest suppliers of funds. In addition, about \$20 billion of new non-bank funds were channelled into the market via trustee accounts of banks in Switzerland. As a result of developments in the foreign exchange markets, official entities, notably central banks from within the reporting area, were also important suppliers of new funds last year, and there was a substantial amount of outward switching of domestic funds to the international market by the reporting banks themselves.

Not included in the figures for funds supplied from within the reporting area is the increase of about \$33 billion in the unallocated item. This resulted partly from banks' own issues of short and long-term securities. Although the owners of such paper cannot usually be identified, it may be assumed that most of them were residents of the reporting area.

Estimated sources and uses of international banking funds							
	Changes, excluding exchange rate effects						Stocks at end-1987
	1982	1983	1984	1985	1986	1987	
	in billions of US dollars						
Uses							
Reporting area	42	52	77	77	138	235	1,385
Outside area	39	28	13	24	14	7	726
Unallocated	14	5	0	4	13	13	109
Total	95	85	90	105	165	255	2,220
Sources							
Reporting area	93	81	61	83	136	172	1,541
Outside area	-12	1	29	19	- 2	50	490
Unallocated	14	3	0	3	31	33	189
Total	95	85	90	105	165	255	2,220
Net							
Reporting area	-51	-29	16	-6	2	63	-156
Outside area	51	27	-16	5	16	-43	236
Unallocated	0	2	0	1	-18	-20	- 80

Development of the reporting banks' business with countries outside the reporting area

Last year witnessed a huge turn-round in the flow of funds between the reporting banks and countries outside the reporting area. In 1986 these countries had still been net borrowers of new funds to the extent of almost \$16 billion; in 1987, by contrast, they became net suppliers of about \$43 billion of new funds to the reporting banks. This turn-round of nearly \$60 billion was due primarily to a strong \$50 billion deposit build-up by outside-area countries, whereas in 1986 they had drawn down their deposits with the reporting banks by \$2 billion. A second factor behind the reversal of net credit flows was a further slowdown in the growth of reporting banks' claims on outside-area countries, from the already very modest level of \$13.5 billion in 1986 to only \$7.4 billion last year, the smallest increase yet recorded since comprehensive lending data became available.

These very pronounced changes in flow patterns mainly reflected the development of the reporting banks' business with developing countries, notably the oil exporters. With the oil price collapse in 1986 OPEC countries had drawn down their deposits with the reporting banks by \$22 billion. In 1987 these countries managed to cut back radically their external payments deficits and were able to add \$19 billion to their deposits. Other developing countries also stepped up their depositing activity, from \$12.8 billion in 1986 to \$24.4 billion. On the other hand, developing countries were not major borrowers of new funds last year. The reporting banks' claims on OPEC countries edged up by \$2.3 billion, but claims on other developing countries decreased, particularly if lending to Taiwan, which is a special case, is excluded.

Among OPEC countries, Saudi Arabia was by far the largest depositor of new funds (\$9 billion excluding deposits with banks in the United States) and also the principal borrower. The development of the reporting banks' overall

Outside-area entities become large net suppliers of new funds to the reporting banks

Evolution of the reporting banks' business with developing countries

Estimated changes in positions of BIS reporting banks vis-à-vis groups of countries outside the reporting area¹

Positions of reporting banks vis-à-vis:	Changes, excluding exchange rate effects							Stocks at end- 1987
	1981	1982	1983	1984	1985	1986	1987	
	in billions of US dollars							
OPEC countries ²								
Claims	4.2	8.2	9.8	- 1.9	0.2	0.4	2.3	127.4
Liabilities	3.2	-18.2	-13.0	2.1	7.6	-22.0	18.9	169.7
Net ³	1.0	26.4	22.8	- 4.0	- 7.4	22.4	-16.6	-42.3
Memorandum items:								
Foreign exchange reserves ⁴	- 8.8	- 7.5	- 8.3	- 3.4	6.5	-13.9	4.7	51.9
Current-account balances	53.0	- 8.5	-21.5	- 6.5	5.0	-26.5	- 4.0	
Non-OPEC developing countries								
Claims	39.9	19.8	12.6	9.8	11.1	3.0	- 1.2	384.9
Liabilities	9.5	4.6	10.4	19.3	5.7	12.8	24.4	229.8
Net ³	30.4	15.2	2.2	- 9.5	5.4	- 9.8	-25.6	155.1
Memorandum items:								
Foreign exchange reserves ⁴	- 0.1	- 2.4	8.5	17.4	4.5	24.0	44.9	158.5
Current-account balances	-78.0	-62.5	-34.0	-21.5	-29.0	-13.0	7.5	
Other developed countries								
Claims	16.8	16.0	7.2	5.3	6.8	6.7	4.6	129.8
Liabilities	3.8	- 0.1	1.3	3.1	3.2	7.2	8.0	58.6
Net ³	13.0	16.1	5.9	2.2	3.6	- 0.5	- 3.4	71.2
Memorandum items:								
Foreign exchange reserves ⁴	- 1.6	1.8	2.4	- 1.0	- 1.2	5.1	3.6	21.7
Current-account balances	-25.5	-24.5	-13.5	-15.5	- 9.0	- 9.0	- 7.0	
Eastern Europe								
Claims	4.8	- 4.6	- 1.1	- 0.1	5.7	3.4	1.7	84.0
Liabilities	0.1	2.0	2.7	4.3	2.8	- 0.1	- 0.7	31.9
Net ³	4.7	- 6.6	- 3.8	- 4.4	2.9	3.5	2.4	52.1

Note: The country groupings used in this table have been imposed by the structure of the Euro-currency statistics and therefore differ from those employed in Chapters II, III and VII. This applies in particular to the group of "Other developed countries", which only includes countries which are not part of the reporting system.

¹ For definition of reporting area see footnote 2 to the table on page 109. ² Includes in addition Brunei, Oman and Trinidad and Tobago, but excludes Bahrain as from 1984. ³ A minus sign equals net deposits. ⁴ At current exchange rates.

position with non-OPEC developing countries was strongly influenced by their business with Taiwan. The banks' new credits to this country accelerated markedly to \$8.3 billion, largely as a result of external borrowing by Taiwanese residents in anticipation of a depreciation of the US dollar. At the same time Taiwan's identified depositing with the reporting banks slowed down markedly.

Excluding their positions vis-à-vis Taiwan, the reporting banks' outstanding claims on non-OPEC developing countries fell significantly last year, by \$9.5 billion, despite \$5.6 billion of new lending under officially sponsored credit packages. While these figures paint a very gloomy picture of the financing situation of the heavily indebted countries, they considerably

Contraction in banks' credits to non-OPEC developing countries

The reporting banks' business with individual groups of non-OPEC developing countries									
	Changes, excluding exchange rate effects								Stocks at end-1987
	1980	1981	1982	1983	1984*	1985	1986	1987	
	in billions of US dollars								
Assets									
Latin America	27.4	30.5	12.1	8.3	5.3	1.7	1.6	-7.1	225.7
Middle East	2.1	2.3	1.7	0.3	-0.4	0.2	-0.8	-1.0	17.0
Africa	2.0	2.0	1.7	0.6	0.1	0.9	-0.3	-0.6	25.0
Asia	7.4	5.1	4.3	3.4	4.8	8.3	2.5	7.5	117.2
Total	38.9	39.9	19.8	12.6	9.8	11.1	3.0	-1.2	384.9
Liabilities									
Latin America	-0.9	4.7	-1.9	5.8	10.1	0.4	0.8	7.4	80.0
Middle East	2.7	1.5	1.8	-0.9	-1.6	1.5	-1.0	1.5	25.0
Africa	0.7	0.5	-0.8	0.2	1.0	1.4	-0.1	1.4	15.8
Asia	1.5	2.8	5.5	5.3	9.8	2.4	13.1	14.1	109.0
Total	4.0	9.5	4.6	10.4	19.3	5.7	12.8	24.4	229.8

* As from 1984 the coverage of the figures has been enlarged to include changes in the positions of banks in Finland, Norway, Spain, Bahrain and the Netherlands Antilles, as well as all banks in the Bahamas, the Cayman Islands, Hong Kong and Singapore.

overstate the reversal of the flow of bank credit, since the banks' asset data were influenced by debt conversion schemes, outright asset sales, the non-recording of interest arrears and, in a few cases, actual write-offs. Moreover, there were pronounced differences in the situations of individual countries.

By geographical area, the largest contraction was in the reporting banks' claims in respect of Latin America (-\$7.1 billion), while deposits by countries in that area increased by a similar amount. Claims on Brazil, which in early 1987 declared a moratorium on interest payments on medium and long-term private debt, declined by \$2.7 billion, largely as a result of the non-renewal of trade credits, debt conversions and some buying-back of debt by private borrowers. At the same time the banks in most cases did not include interest arrears on Brazilian debt in their assets. The country's deposits with the reporting banks declined by \$1 billion. The situation was quite different in Mexico, where, thanks to a current-account surplus, \$4.4 billion of drawings on an officially sponsored credit package and spontaneous capital inflows induced by tight credit policies, official reserves increased sharply last year, this being one of the main factors in the \$5 billion build-up of Mexican deposits with the reporting banks. Despite a substantial amount of new lending in the context of officially negotiated credit packages, the reporting banks' claims on Mexico declined as a result of repayments by private debtors and debt conversion schemes.

The reporting banks' claims on Argentina, which drew \$1.2 billion under an officially sponsored credit package, increased by \$0.5 billion. A decrease of \$1.6 billion was recorded in claims on Chile, which made heavy use of debt

Developments in
Latin America

conversion schemes, for a face value of nearly \$2 billion. At the same time, Chilean deposits with the reporting banks rose by as much as \$1.2 billion.

Excluding their positions vis-à-vis Taiwan, the reporting banks' claims on Asia, where most countries have maintained their good credit-standing, recorded a small contraction. At the same time, their liabilities to these countries increased by \$7.5 billion. The largest borrower in this area was China (\$4.8 billion), which also built up its deposits with the reporting banks by \$5.3 billion.

Elsewhere, there was a total decline of \$1.6 billion in the banks' claims vis-à-vis the Middle East and Africa, while nearly \$3 billion of new deposits was received from countries in these areas.

Slow growth of reporting banks' business with eastern Europe

The reporting banks' business with eastern Europe was likewise not very buoyant last year. In current dollar terms, it is true, their claims rose by nearly \$12 billion, but most of this increase was due to exchange rate effects, as a large part of these countries' banking debt is denominated in currencies other than the dollar. Excluding exchange rate effects, the increase amounted to only \$1.7 billion. It occurred mainly vis-à-vis the German Democratic Republic, Hungary, Bulgaria and Czechoslovakia. Claims on Romania and Poland declined, while there was very little change vis-à-vis the Soviet Union. The Soviet Union, however, obtained convertible currencies by reducing its deposits with the reporting banks by \$2 billion.

The increase in the reporting banks' claims on developed countries outside the reporting area, while quite large in current dollar terms (\$14.1 billion), was also modest in terms of constant dollars (\$4.6 billion). New Zealand (\$3.2 billion) and Turkey (\$1.6 billion) were the largest recipients of new credits, while Australia was the largest depositor (\$2.8 billion).

Developments in individual market centres

Very strong expansion of international banking business in Japan

As regards individual market centres, very high growth rates were once more recorded by banks in Japan. The current dollar value of their external assets expanded by \$232 billion to a total of \$577 billion, although nearly 30% of this increase was due to exchange rate effects. This strong growth meant that in the course of 1987 Japan moved up to second place after the United Kingdom, and ahead of the United States, in the scale of its international banking business.

Since their external liabilities showed an even more pronounced increase, banks in Japan, despite the country's large current-account surplus, were net importers of external funds last year, an expansion in their external net debtor position in foreign currencies from \$47 to 80 billion being only partly offset by an increase in their external net creditor position in yen. The net external borrowing of foreign currencies occurred solely in the second and fourth quarters, when the dollar was under heavy pressure in the exchange markets and Japanese entities sought to cover the foreign exchange risks associated with their foreign investments.

The Japan Offshore Market, which had been opened in December 1986, expanded vigorously throughout 1987 and at the end of the year accounted for roughly one-third of the external assets and liabilities of banks in Japan.

Developments in individual banking centres

External positions of banks in:	Changes, excluding exchange rate effects								Stocks at end-1987	
	Assets				Liabilities				Assets	Liabilities
	1984	1985	1986	1987	1984	1985	1986	1987		
	in billions of US dollars									
United Kingdom	23.1	30.7	87.5	89.1	35.6	45.7	97.1	95.5	875.6	927.6
France	8.2	7.5	14.9	37.9	6.6	4.8	13.8	36.3	266.4	271.4
Germany	7.4	19.4	38.8	17.0	5.5	6.4	11.0	12.9	206.0	131.8
Luxembourg	7.3	9.6	15.2	19.0	5.8	9.5	16.6	17.9	182.3	168.9
Belgium	10.8	16.1	22.4	22.2	12.4	16.9	23.5	24.8	164.8	189.3
Switzerland	2.2	9.1	10.3	16.4	1.0	8.1	9.6	11.8	130.2	82.0
Netherlands	3.9	5.2	5.9	12.7	1.7	4.2	9.7	11.5	115.3	107.6
Italy	2.9	8.7	3.8	-1.6	6.6	5.7	8.5	3.6	63.4	93.5
Austria	1.9	5.2	6.1	1.6	3.8	5.6	6.8	3.5	54.9	60.0
Spain	1.3	1.7	2.8	-0.1	0.6	-1.3	4.4	5.1	25.5	31.5
Sweden	0.0	1.6	1.2	4.9	-0.3	3.0	3.4	10.6	17.1	37.1
Denmark	1.2	4.1	-1.2	4.0	1.4	4.8	-0.9	3.4	17.1	17.0
Other European reporting countries ¹	2.2	1.3	3.5	2.8	3.6	4.8	7.4	10.5	21.4	53.3
Total European reporting countries	72.4	120.2	211.2	225.9	84.3	118.2	210.9	247.4	2,140.0	2,171.0
US IBFs	17.1	11.8	35.7	30.5	19.4	16.2	52.9	49.6	277.3	306.0
Other banks in the United States	-2.5	-8.8	14.6	-1.1	12.6	22.1	21.0	29.6	231.6	226.4
Total banks in the United States	14.6	3.0	50.3	29.4	32.0	38.3	73.9	79.2	508.9	532.4
Japan	21.9	53.4	126.6	166.6	23.8	41.4	147.6	191.0	576.9	592.0
<i>of which: Offshore Market</i>			88.7	89.9			88.0	90.2	191.9	191.2
Canada	1.8	2.0	6.7	-1.3	1.2	2.4	3.8	1.7	52.9	73.3
Other reporting countries ²	13.4	54.9	122.5	147.2	8.7	42.3	106.4	143.7	878.5	832.7
Total	124.1	233.5	517.3	567.8	150.0	242.6	542.6	663.0	4,157.2	4,201.4

¹ Includes Finland, Ireland and Norway.
² Banks engaged in international business in the Bahamas, the Cayman Islands, Hong Kong and Singapore, all offshore banking units in Bahrain, all offshore banks operating in the Netherlands Antilles and the branches of US banks in Panama.

¹ Includes Finland, Ireland and Norway. ² Banks engaged in international business in the Bahamas, the Cayman Islands, Hong Kong and Singapore, all offshore banking units in Bahrain, all offshore banks operating in the Netherlands Antilles and the branches of US banks in Panama.

As already noted, banks in the United States were heavy net importers of external funds last year. For the first time since 1975, they moved from an external net creditor position (\$27.5 billion at the end of 1986) to a net debtor position (\$23.5 billion). This \$51 billion inflow made a significant contribution to the financing of the country's huge current-account deficit, but it was partly related to substantial foreign official reserve placements in the Euro-dollar market.

Large net external borrowing by banks in the United States

The external assets of banks in the reporting European countries expanded by 12% in constant dollar terms, which was less than one-third of the rate for banks in Japan. This expansion was very broadly distributed and encompassed all major European market centres; only banks in Italy and Spain showed no growth in their external claims.

Currency composition of international banking activity and growth of the ECU market

Buoyancy of
non-dollar
business

In view of developments on the exchange markets, it is not altogether surprising that last year brought a decline in the relative importance of the use of the US dollar in international banking transactions. Even expressed in volume terms, the growth of cross-border assets (of banks in the industrial reporting countries only) in currencies other than the dollar accelerated from \$163 billion in 1986 to \$221 billion, while the growth of dollar assets slackened from \$232 to 200 billion. The change in roles was even more pronounced when measured in current dollar terms. At current exchange rates cross-border non-dollar assets expanded by \$517 billion, or by two and a half times as much as dollar assets, and their share in the total outstanding cross-border assets of industrial reporting countries rose from just under 42% to 48%.

The currency composition of reporting banks' cross-border positions¹

Currencies		Changes, excluding exchange rate effects								Stocks at end-1987	
		Assets				Liabilities				Assets	Liabilities
		1984	1985	1986	1987	1984	1985	1986	1987		
		in billions of US dollars									
US dollars	A	22.0	52.9	188.8	186.4	40.1	41.3	210.1	196.1	1,238.2	1,377.9
	B	8.8	1.4	43.2	13.5	27.9	33.5	63.1	63.4	458.2	477.4
Other	A	47.5	77.9	72.8	107.2	43.1	90.7	110.1	136.5	893.1	996.2
	B	32.4	46.4	90.0	113.5	30.2	34.8	52.9	123.3	689.2	517.2
of which: ²											
Deutsche Mark	A	10.6	13.5	1.1	33.8	16.4	16.0	28.7	43.1	297.7	338.8
	B	4.2	15.5	26.4	4.0	2.9	3.0	2.3	4.4	147.9	80.7
Swiss francs	A	2.9	15.3	7.8	-1.8	2.7	18.9	17.5	10.0	139.2	181.5
	B	1.6	2.8	3.3	3.5	1.0	2.4	1.4	4.7	66.4	25.3
Japanese yen	A	6.4	21.0	20.9	30.9	1.8	19.4	21.2	23.9	147.8	137.2
	B	11.9	22.1	43.9	92.6	11.3	17.9	29.4	89.9	288.6	223.8
Pounds sterling	A	5.0	4.8	8.7	5.8	4.7	7.1	10.3	14.5	48.3	67.0
	B	6.7	2.3	8.8	8.3	8.3	5.6	9.4	14.9	72.2	94.0
ECUs		12.8	13.7	7.4	9.9	10.5	12.4	4.2	8.7	78.5	69.4

Note: A = Euro-currency positions; B = external positions in domestic currency.

¹ Positions of banks in industrial reporting countries only. ² Excluding positions of banks in the United States.

The main factors underlying the strong volume growth in non-dollar assets were the sharp acceleration in the growth of the yen-denominated external assets of banks in Japan, to \$93 billion, and a \$34 billion expansion in Euro-Deutsche Mark lending, which in 1986 had shown hardly any change. The growth in Euro-yen assets also accelerated further, from \$21 billion in 1986 to \$31 billion. On the other hand, new Euro-sterling lending slowed down and Euro-Swiss franc assets actually declined somewhat.

Pick-up of
growth in banks'
ECU activities

Benefiting from a somewhat more favourable outlook for stable exchange rate relationships among the constituent currencies, the growth of the banks' ECU assets (including local business with residents) also speeded up from \$7.4 billion in 1986 to \$12.7 billion, but remained well below the rates of expansion recorded in earlier years. A notable increase from \$1.9 billion in 1986 to \$5.2

The structure of the ECU banking market

	Assets				Liabilities			
	Changes, excluding exchange rate effects			Stocks at end- 1987	Changes, excluding exchange rate effects			Stocks at end- 1987
	1985	1986	1987		1985	1986	1987	
	in billions of US dollars							
Positions vis-à-vis non-banks:								
Domestic	-0.7	0.0	3.0	11.1	1.7	-0.5	0.1	4.2
Cross-border within the EEC	1.2	0.7	1.2	8.6	0.9	-0.4	0.2	2.6
Cross-border with non-EEC residents	0.9	0.9	0.2	2.9	0.4	0.0	0.2	0.9
Unallocated*	0.6	0.3	0.8	3.6	0.3	0.0	0.2	1.1
Total positions vis-à-vis non-banks	2.0	1.9	5.2	26.2	3.3	-0.9	0.7	8.8
Positions vis-à-vis banks:								
Domestic	3.6	0.0	-0.2	16.5	3.7	-0.2	0.2	16.1
Cross-border within the EEC	7.6	0.6	2.2	40.0	7.6	1.7	1.9	41.7
Cross-border with non-EEC residents	2.0	3.3	3.8	13.1	2.6	2.6	4.8	14.8
Unallocated*	1.4	1.6	1.7	10.3	0.6	0.3	1.4	8.3
Total interbank positions	14.6	5.5	7.5	79.9	14.5	4.4	8.3	80.9
Total	16.6	7.4	12.7	106.1	17.8	3.5	9.0	89.7

* Includes international institutions other than the BIS.

* Includes international institutions other than the BIS.

billion was recorded in the case of direct lending to non-banks. It was essentially due to ECU lending to domestic entities by banks in France, where the use of the ECU is given substantial official encouragement.

A significant turn-round occurred on the sources side of the market, where, after \$0.9 billion of withdrawals in 1986, non-banks' ECU deposits edged up by \$0.7 billion last year. However, the lifting in Germany of the partial ban on the domestic use of the ECU denomination (see Chapter VII, page 179) was not accompanied by any significant increase in ECU deposits by German residents. Strong growth (\$4.8 billion) was recorded in the volume of ECU funds obtained from banks located outside the EEC.

The nationality structure of international banking

Looking at international banking developments from the point of view of the nationality of the reporting banks, the outstanding feature, as for several years past, was the dominant role of Japanese banks in the overall growth of reporting banks' cross-border activity and local lending in foreign currency. The international assets of Japanese banks including their affiliates in the other industrial reporting countries expanded by \$432 billion, or 39%, last year, thereby accounting for nearly half of the total growth of \$927 billion in the international assets of banks in the industrial reporting countries. By comparison, the international assets of French, Swiss, German and Italian banks grew at rates ranging from 30 to 27.5%, whereas the international assets of US and Canadian banks increased by only 8 and 2.5% respectively. As a result, the share of Japanese banks in total international assets expanded

Dominance of Japanese banks in the growth of international banking activities

further, from 32.4% at the end of 1986 to 35.4%, whereas that of US banks fell from 17.3 to 14.8%.

International bank assets, by nationality of banks*						
Parent country of bank	December 1985		December 1986		December 1987	
	in billions of US dollars	percentage share of total assets	in billions of US dollars	percentage share of total assets	in billions of US dollars	percentage share of total assets
France	244.0	9.0	289.6	8.4	375.5	8.6
Germany	191.2	7.0	270.1	7.8	347.9	7.9
Italy	113.3	4.2	145.1	4.2	185.0	4.2
Japan	707.2	26.1	1,120.1	32.4	1,552.1	35.4
Switzerland	109.2	4.0	152.0	4.4	196.1	4.5
United Kingdom	192.9	7.1	211.5	6.1	253.9	5.8
United States	590.2	21.7	599.2	17.3	647.6	14.8
Other	566.8	20.9	666.4	19.4	823.2	18.8
Total	2,714.8	100.0	3,454.0	100.0	4,381.3	100.0
<i>of which: vis-à-vis non-banks</i>	<i>785.0</i>	<i>28.9</i>	<i>954.4</i>	<i>27.6</i>	<i>1,200.1</i>	<i>27.4</i>
* This table shows the international assets, i.e. the cross-border assets in all currencies plus the foreign currency assets vis-à-vis local residents, of banking offices located 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 assets in domestic currency only). The international assets of US banks also include the cross-border assets reported by US banks' branches in the Bahamas, the Cayman Islands, Panama, Hong Kong and Singapore. The international assets in this table are classified according to the nationality of ownership of the reporting banks.						

Reasons for the decline in the market share of US banks

The difference in developments among North American banks and banks of other nationalities becomes particularly striking if claims between related offices are excluded. On that basis the international books of US banks showed hardly any growth last year; at \$357 billion, they were only about one-third as large as those of Japanese banks and, perhaps more surprisingly, only moderately larger than those of French banks (\$325 billion) and of German banks (\$293 billion). This is a far cry from the situation of only five years earlier when the international assets of US banks were still substantially larger than those of Japanese banks and of quite a different order of magnitude from those of the European-based banks. Part of this dramatic decline in the international market share of US banks was due to exchange rate effects. Japanese and European banks' international books are made up to a much greater extent than those of US banks of assets denominated in currencies other than the dollar, the dollar value of which was boosted by exchange rate developments. The main factor behind the decline in the US banks' market share, however, was the effort they made, in view of their heavy exposure vis-à-vis Latin America and of certain domestic credit problems, to strengthen their balance-sheet structures by cutting back their international business.

It should, moreover, be added that these figures tend to overstate the market share of US banks and understate those of Japanese banks since, unlike those for banks of other nationalities, the figures for the US banks include their affiliates in the major offshore centres of the Caribbean and Far East. The very

substantial activities of Japanese affiliates in Singapore and Hong Kong are, by contrast, not included in the statistics.

The syndicated loan market

After several years of sluggish activity the international syndicated loan market staged a strong recovery in 1987. The volume of announced new international facilities amounted to \$88 billion, more than double that of the previous year. But the trend towards bank intermediation did not represent a return to the pattern of the early 1980s, when developing and eastern European countries had played a predominant role as borrowers in the syndicated loan market. In 1987 nearly 90% of new facilities were obtained by borrowers from developed countries, with the bulk of these credits going to non-financial companies. By contrast, some of these countries' governments took advantage of their higher credit-standing to borrow mainly in the international securities market.

Strong revival of activity

The structure of new facilities was also markedly different from that of earlier years. There was a further expansion (to \$40 billion) in multiple-option facilities, allowing borrowers to draw on funds in several currencies and in various forms, such as commercial paper, bankers' acceptances and short-term advances. The largest volume of new syndicated credit last year was arranged for non-financial companies from the United Kingdom (\$30.7 billion), \$8 billion alone being for the construction of the Channel Tunnel. Other sizable facilities were obtained by borrowers in the United States (\$15.8 billion) and France (\$6.3 billion).

Structural features and nationality of borrowers

The international securities markets

The Euro-note market

In 1987 the structure of the market for Euro-notes (defined as comprising both underwritten and non-underwritten promissory notes issued in the international market) displayed many of the features already apparent during the latter part of 1986. The total volume of new medium-term facilities arranged for the issuance of short and medium-term Euro-notes amounted to \$70.2 billion, which was slightly less than in 1986. However, the actual amount of paper issued under these facilities and outstanding in the market may be estimated to have expanded by \$23.3 billion in 1987 to total \$52.7 billion at the end of the year. Nearly 95% of the new facilities were Euro-commercial paper (ECP) programmes, under which dealers arrange the distribution of paper without the commercial banks providing an underwriting commitment. Indeed, several borrowers cancelled existing underwritten facilities and replaced them with ECP programmes. In addition, Euro-commercial paper accounted for almost the entire increase in actual placements and by end-1987 represented 63% of total outstanding Euro-notes. Another salient development was the further growth in the volume of new facilities for the issuance of medium-term notes (defined as paper with maturities of over nine months and up to ten years), which in 1987 amounted to \$11 billion.

Smaller volume of new facilities, but greater degree of utilisation

Shift towards non-underwritten paper

The preponderance of ECP programmes has been the main factor responsible for a growing similarity between the Euro-note market and the US

International financial market activity, by market sectors and borrowers								
Borrowers Market sectors	United States	Japan	Other industrial reporting countries	Other developed countries	Eastern Europe	Developing countries (incl. OPEC)	Other ¹	Total
	in billions of US dollars							
International bond issues								
1982	15.3	5.9	34.4	4.0	0.0	3.1	11.6	74.3
1983	7.9	11.3	34.3	3.6	0.0	1.8	14.9	73.8
1984	24.8	15.8	45.4	6.1	0.1	2.8	13.4	108.4
1985	40.6	20.0	67.8	9.4	0.4	6.1	20.2	164.5
1986	41.6	31.8	109.5	15.4	0.6	2.9	19.7	221.5
1987	22.6	42.3	76.7	11.9	0.6	2.0	19.5	175.6
1988, first quarter	3.0	9.4	35.7	3.4	0.4	0.9	6.7	59.5
Euro-note facilities ²								
1982	0.4	0.0	0.9	0.4	0.0	0.5	0.2	2.4
1983	0.4	0.6	1.0	1.0	0.1	0.2	0.0	3.3
1984	3.0	0.2	9.4	4.8	0.1	0.6	0.7	18.8
1985	16.5	0.5	21.1	9.7	0.1	1.2	1.2	50.3
1986	19.0	10.4	27.6	11.0	0.1	1.3	1.7	71.1
1987	15.0	10.0	31.6	11.8	0.0	1.3	0.5	70.2
1988, first quarter	4.1	0.0	15.1	2.1	0.1	0.4	0.4	22.2
Total securities markets								
1982	15.7	5.9	35.3	4.4	0.0	3.6	11.8	76.7
1983	8.3	11.9	35.3	4.6	0.1	2.0	14.9	77.1
1984	27.8	16.0	54.8	10.9	0.2	3.4	14.1	127.2
1985	57.1	20.5	88.9	19.1	0.5	7.3	21.4	214.8
1986	60.6	42.2	137.1	26.4	0.7	4.2	21.4	292.6
1987	37.6	52.3	108.3	23.7	0.6	3.3	20.0	245.8
1988, first quarter	7.1	9.4	50.8	5.5	0.5	1.3	7.1	81.7
Syndicated bank loans ³								
1982	7.0	0.1	22.9	12.5	0.8	53.5	2.6	99.4 ⁴
1983	3.4	0.1	13.6	5.6	0.8	26.6	1.7	51.8 ⁴
1984	3.6	0.3	8.3	4.2	2.5	17.1	0.6	36.6 ⁴
1985	2.1	0.0	5.1	2.4	3.6	7.8	0.1	21.1 ⁴
1986	3.8	0.3	10.6	3.5	2.0	16.4	1.2	37.8 ⁴
1987	15.8	0.5	52.0	7.8	1.9	8.9	1.0	87.9 ⁴
1988, first quarter	3.4	0.0	15.5	2.6	0.2	2.2	0.0	23.9 ⁴

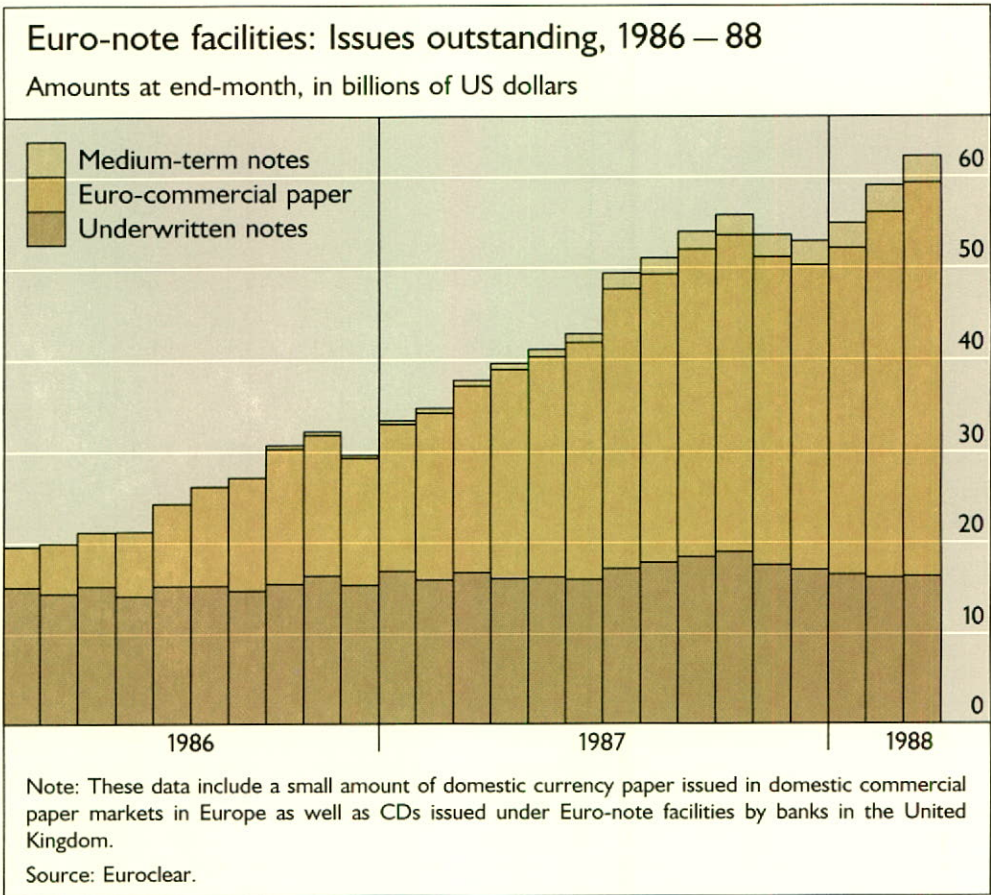
¹ Offshore centres, international institutions plus unallocated items. ² Covers all Euro-note facilities including underwritten facilities (NIFs, RUFs and multi-component facilities with a note issuance option) and non-underwritten or uncommitted facilities, mostly in the form of Euro-commercial paper (ECP) programmes. ³ Excludes existing loans newly negotiated where only spreads are changed. ⁴ Includes the following amounts of lending under officially sponsored credit packages: \$11.2 billion in 1982, \$13.7 billion in 1983, \$6.5 billion in 1984, \$2.3 billion in 1985, \$8 billion in 1986 and \$4.7 billion in 1987. In the first quarter of 1988 such lending amounted to \$1.7 billion.

Source: Bank of England.

Convergence
of US and
Euro-commercial
paper markets

domestic commercial paper market. Developments such as the increasing importance of rating agencies and the publication since August 1987 of representative interest rates on Euro-commercial paper by the Bank of England should help to place the short-term Euro-note market on a more solid footing. The rating of issues requires that borrowers have access to bank credit even if that access is not contractually linked with the issuance of paper. The publication of representative interest rates on Euro-commercial paper of

various maturities permits pricing to be carried out independently of traditional bank-related rates, such as LIBOR, although until now these new benchmarks have not been as widely used as expected. Moreover, it appears that the ECP market is following the US pattern in tailoring the maturity of paper to the needs of individual borrowers and investors and is thereby moving away from the standard three-month maturities which used to account for the bulk of paper issued. Another development has been a decline in the number of financial intermediaries actively making markets in underwritten Euro-notes and Euro-commercial paper. This retrenchment, which paralleled that occurring in other market sectors, reflected the dramatic narrowing of the spreads obtainable. It also represented a movement towards a structure similar to that in the US commercial paper market, where the number of dealers tends to be comparatively small.



Notwithstanding this convergence, some differences between the domestic US commercial paper market and the international market remain. For example, in the United States the major purchasers of commercial paper are large domestic institutions, particularly money market mutual funds, whereas Euro-notes are reportedly acquired by a wider spectrum of international investors. Moreover, placement practices and settlement mechanisms differ between the two markets.

Although the bulk of new ECP programmes and other short-term facilities were in US dollars, a growing number of programmes have included

Spreading of
national
commercial
paper markets

options to issue notes in other currencies and in ECUs. The increasing use of other currencies has been accompanied by an expansion of national commercial paper markets outside the United States. However, these markets remain basically domestic in character. In 1987 the volume of commercial paper outstanding in the French market increased by 70% to Fr.fr. 40.8 billion, nearly all held by resident investors. In the United Kingdom the volume of paper surged from £0.5 to 2.9 billion between the end of 1986 and end-March 1988, with only 5% of this amount having been issued by foreign companies.

Nationality of
borrowers

As regards the nationality of borrowers, US entities arranged the largest volume of new Euro-note programmes (\$15 billion). Japanese entities were also active in setting up new facilities (\$10 billion), mostly for the issuance of bank CDs. Even though Euro-yen commercial paper issues were authorised only as from late November 1987, by the end of the year \$1.5 billion of new programmes had already been arranged for Japanese entities. Other sizable new facilities were established for entities from the United Kingdom (\$9.1 billion), Australia (\$8 billion), Norway and New Zealand (\$3.2 billion each).

In terms of the paper outstanding at the end of December 1987, Australian entities were the largest borrowers (\$11.2 billion). US entities, for which the biggest volume of facilities has been arranged since the Euro-note market opened, had issued only \$7.9 billion. Other sizable borrowers were entities from the Netherlands (\$4.3 billion), France (\$4.1 billion) and Sweden (\$3.9 billion).

In the first quarter of 1988 new Euro-note facilities arranged amounted to \$22.2 billion, the largest quarterly expansion yet recorded. At the same time, the volume of paper outstanding, which had contracted in the two months following the stock market crisis, expanded strongly to \$62 billion at the end of March.

The international bond market

Contraction of
issuing activity

After several years of unprecedented growth the amount of new issues announced in the international bond market dropped off last year, from \$222 billion in 1986 to \$176 billion. This slowdown started during the second quarter, following a record level of issues in the first three months of the year, and became very pronounced in the period immediately following the October stock market crash.

The role of
interest rate
volatility

Three sets of factors exerted a strong influence on the composition and volume of activity in the international bond market. Firstly, after a short-lived decline in interest rates during the first quarter, the macro-economic environment became less congenial. The firming of dollar interest rates which began in March dampened borrowers' and investors' interest in straight fixed rate issues, while the FRN market was still in limbo. The upturn in interest rates also affected underwriting because it became more difficult to hedge trading positions. As a result, issues of fixed rate bonds, which had amounted to \$57.4 billion in the first quarter, declined to a quarterly average of only about \$35 billion during the rest of the year. Yen issues were affected most severely by the rise in Japanese interest rates, which set in a few months later

Structural features of the international bond markets¹

Items	1984	1985	1986	1987					1988 first quarter
				year	first quarter	second quarter	third quarter	fourth quarter	
				in billions of US dollars					
Total issues	108.4	164.5	221.5	175.6	60.1	45.7	42.2	27.6	59.5
by type of issue:									
Fixed rate bonds	74.4	108.6	173.7	163.6	57.4	44.0	39.6	22.6	56.8
Floating rate notes	34.0	55.9	47.8	12.0	2.7	1.7	2.6	5.0	2.7
of which: equity-related ²	8.5	11.6	27.5	43.3	7.8	15.7	17.2	2.6	7.9
by currency of issue:									
US dollar	66.9	95.5	115.3	57.8	18.5	16.0	18.7	4.6	15.5
Euro	1.9	3.9	6.4	5.0	1.3	0.4	1.0	2.3	1.6
foreign	1.2	6.9	18.2	23.1	8.5	8.6	0.9	5.1	4.9
Yen	4.7	5.4	4.4	1.6	0.6	0.0	0.7	0.3	0.9
foreign	13.1	14.9	23.3	24.0	6.1	4.9	7.9	5.1	10.0
Swiss franc	7.0	11.3	16.2	15.0	6.6	2.5	2.2	3.7	7.6
Deutsche Mark	4.1	5.6	10.9	14.9	5.3	4.2	2.5	2.9	7.4
Sterling	1.4	1.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
foreign	0.3	3.2	3.4	8.7	3.1	3.3	2.2	0.1	1.6
Australian dollar	2.9	7.3	6.8	7.4	3.7	1.7	1.1	0.9	2.1
ECU ³	4.9	9.5	16.2	18.1	6.4	4.1	5.0	2.6	7.9
Other									

¹ Figures based on announcement dates. ² Convertible bonds and bonds with equity warrants. ³ Excludes bonds issued in borrowers' national markets.

Source: Bank of England.

than in the United States. After expanding steadily to a peak of \$8.6 billion in the second quarter of 1987, they fell back to only \$0.9 billion in the third quarter.

The weakness of the US dollar and the fear that further depreciation might not be fully offset by the interest rate differentials in its favour were the main influences behind a sharp contraction in the share of dollar bonds in total fixed rate issues to only 37%, the lowest figure ever recorded. Although issues in other currencies expanded, this was not sufficient to compensate for the decline in dollar issues, especially since the swap market, whilst buoyant, was not always supportive of primary bond issues.

Exchange rate
factors

Owing to the continuing problems in the FRN market, the sole driving force behind new issue activity up to October was the buoyancy of the stock markets. Equity-related issues, mostly in the form of equity warrants, surged to \$43.3 billion, or 25% of total issues in 1987. In the second and third quarters, indeed, they accounted on average for almost 40% of new issues.

Impact of equity
market
developments

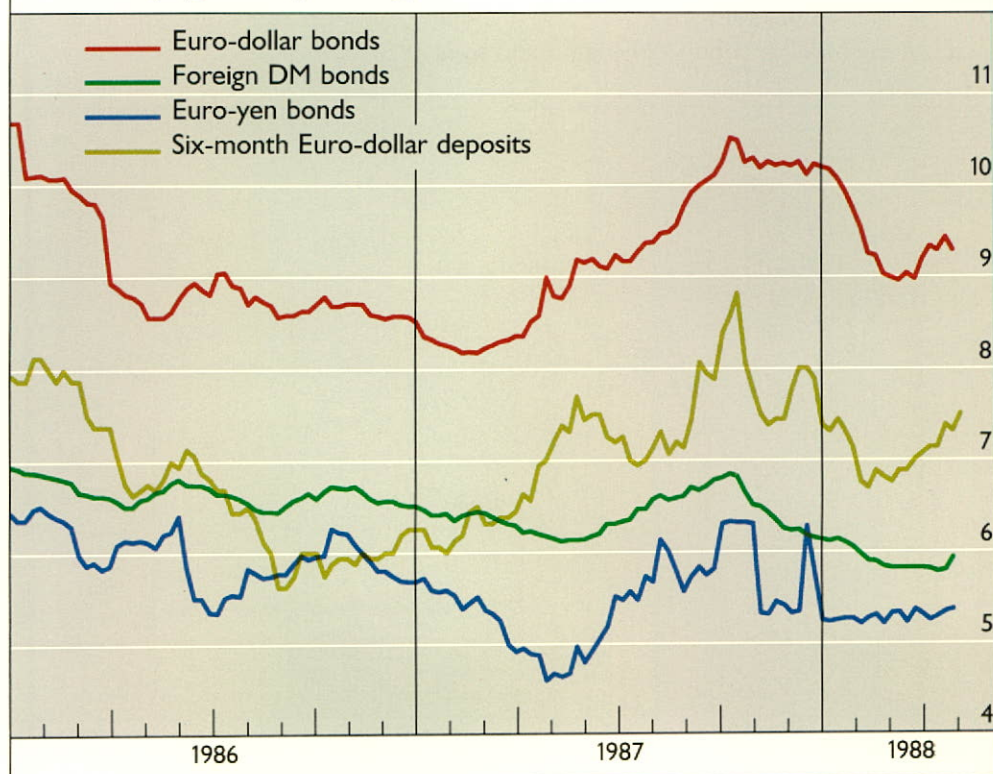
The buoyancy of the stock markets up to October also boosted activity in the international equity market. In 1987 new international issues of shares and other equity-like instruments amounted to \$15.5 billion, or nearly double the previous year's total. A significant proportion of these issues consisted of offerings to non-residents in connection with the privatisation of public sector enterprises.

A second set of influences weighing on the international bond market were prospective changes in tax provisions and, in particular, ambiguities with

Tax uncertainties

Yields of selected international bonds and Euro-dollar deposit rates, 1986 – 88

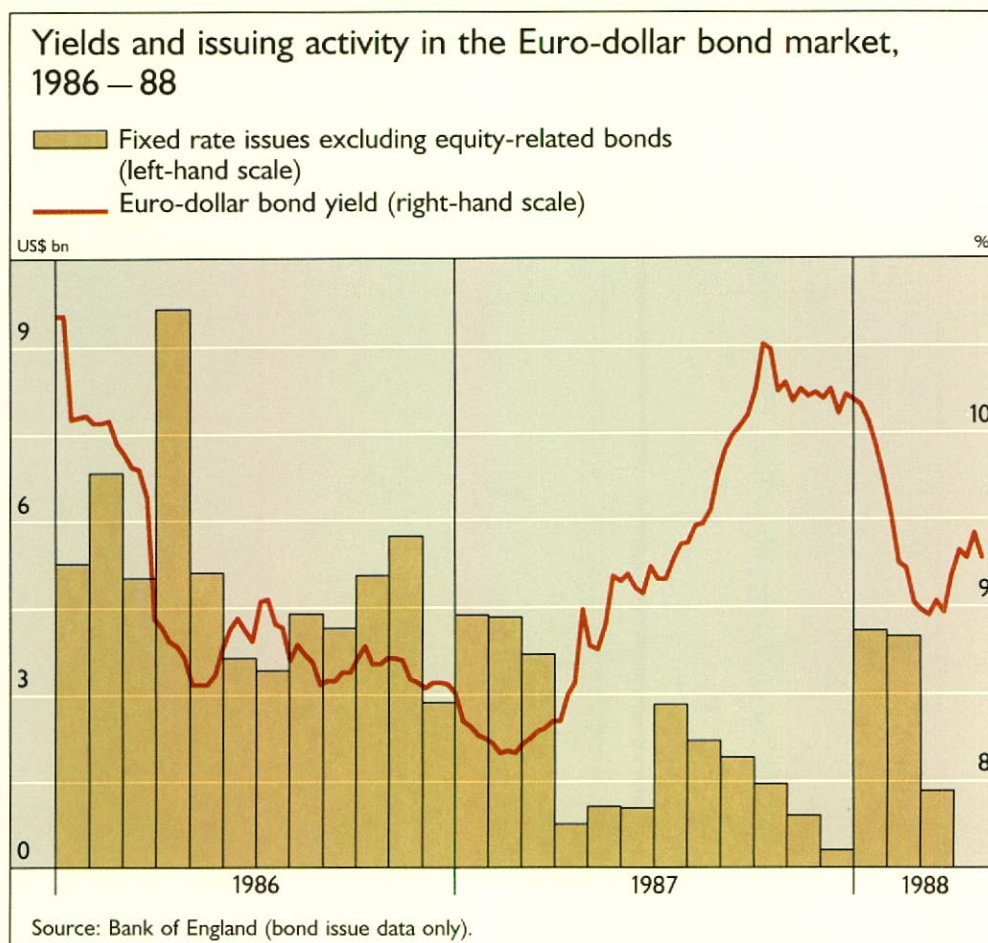
Wednesday figures, in percentages



regard to their application. In late June the US Treasury announced its intention to abrogate the double taxation treaty with the Netherlands Antilles, giving rise to the expectation that the call provisions attached to many bonds would be exercised. Although the US Treasury later withdrew its proposal, the secondary market price of securities which had been issued under the favourable provisions of the tax treaty fell sharply, and for a lot of paper market-making actually ceased. Another event affecting the markets was the announcement by the German authorities of a withholding tax on interest income, whose domain of application was initially not very clear. This had the effect of sharply narrowing the interest rate differential between Euro and domestic Deutsche Mark securities and of bringing about a shift of portfolio preferences towards bonds denominated in currencies perceived as close substitutes for the Deutsche Mark.

A third important influence was the behaviour of financial intermediaries, particularly with respect to competition for mandates and market shares, which had significant repercussions on the pricing of issues and spreads. The consequences of potential mispricing first became apparent at the end of 1986 with the collapse of the perpetual FRN market, and thereafter with the liquidity problems in the FRN market more generally. Despite rising interest rates and steepening yield curves, which should have enhanced the attractiveness of floating rate instruments, the volume of new FRN issues in 1987 (\$12 billion) was the lowest since 1981. During the latter part of the year the liquidity problems spread to other sectors. With investors displaying a

Consequences of underpricing

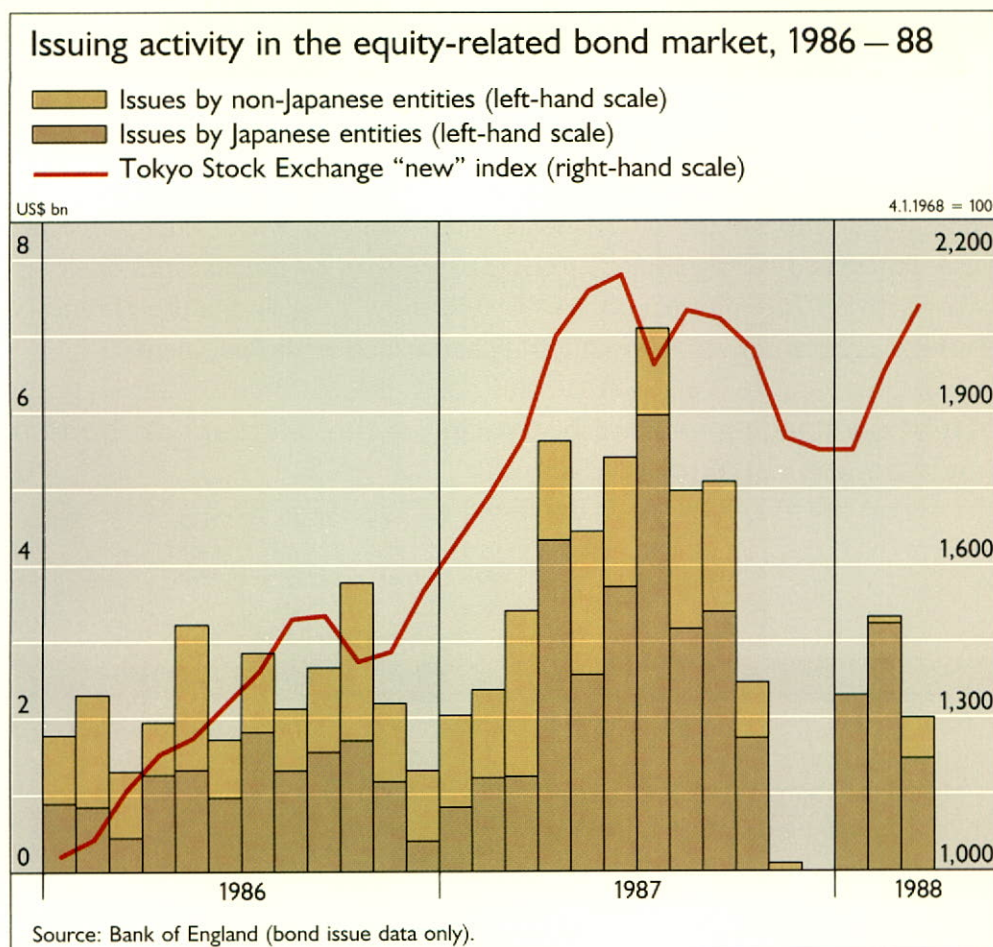


preference for highly liquid and short-dated instruments, badly priced bonds could not be sold in the secondary market without capital losses. This in turn made it more difficult to issue new securities.

Partly as a result of the problems in the FRN market and the decline in dollar issues, swaps played a major role in supporting borrowing activity. The volume of identified interest and currency swaps directly related to primary issues increased by 28% to \$38.1 billion. During the first half of the year swaps were closely linked to activity in non-dollar currencies, with nearly 50% of combined new issues in Australian dollars, ECUs and yen being associated with interest and currency swaps. While in the second half of the year the volume of identified swaps directly associated with issuing activity declined sharply, the difficulty of arranging new FRN issues encouraged swaps not related to new issues as well as the growth of asset-based swaps used for portfolio management purposes.

Buoyancy of
swap activity

More generally, the swap market last year developed in such a way as to allow sovereign issuers and major companies to restructure their asset and liability positions more flexibly. However, in spite of the growing number of applications of the swap technique independently of new issuing activity, the swap market was not immune to the October stock market crisis, and swap spreads rose to record levels. Two sets of factors contributed to this development. Firstly, as interest rates declined the supply of fixed rate instruments outstripped demand. Secondly, because of the increase in interest



and exchange rate volatility and greater prudential risks, hedging became more difficult.

During the first quarter of 1988 the international bond market staged a strong recovery, with new issue activity surging to \$59.5 billion, nearly equal to the record volume registered in the first quarter of the preceding year. The major factors contributing to this pronounced expansion were the favourable interest rate climate, the more stable exchange rate environment and, notably in the case of Japan, the recovery of the stock markets. While FRN issues slipped back after a slight pick-up in the previous quarter, straight fixed rate issues rebounded from \$20 to 49 billion. Equity-related issues, which had come to a halt after the October share market drop, recovered to nearly \$8 billion, the bulk of which was accounted for by Japanese borrowers.

The relatively favourable exchange rate climate contributed to a vigorous comeback of dollar issues, which surged from \$6.9 billion in the fourth quarter to \$17.1 billion, but new issue activity in most other currency sectors was also very buoyant. Swiss franc issues reached a record level of \$10 billion, and Deutsche Mark, sterling and ECU issues more than doubled.

Outstanding debt and net credit flows in the international bond markets

The tables on pages 130 and 131 present for the first time systematic data on international bonds outstanding and on net credit flows through the

international bond markets. These new data, which are similar in conception to the BIS statistics on international banking, have been derived mainly from Bank of England and OECD sources on bond issuing activity and from information made available by the Association of International Bond Dealers on bonds outstanding and on scheduled and early repayments. The picture of net credit flows through the international bond markets which emerges from these data may differ significantly from that provided by the statistics on gross issuing activity. This information will henceforth be a regular feature of the BIS quarterly publications on international financial market developments.

New data base
on international
bonds
outstanding

Debt outstanding and net borrowing in the international bond markets, by type and currency of issue

	Stocks at		Changes in 1986			Stocks at end-1986	Changes in 1987			Stocks at end-1987
	end-1982	end-1985	gross new issues ¹	repayments ²	ex-change rate effects		gross new issues ¹	repayments ²	ex-change rate effects	
	in billions of US dollars									
Total issues	255.0	557.4	218.8	-62.1	58.5	772.6	180.6	-71.9	100.0	981.3
by type of issue:										
Fixed rate bonds	225.0	436.6	170.1	-40.7	56.3	622.3	168.7	-59.8	93.2	824.4
Floating rate notes	30.0	120.8	48.7	-21.4	2.2	150.3	11.9	-12.1	6.8	156.9
of which:										
equity-related	17.0	44.0	26.1	- 3.5	5.2	71.8	44.7	- 7.2	10.2	119.5
identified swaps	3.0	28.9	27.7	- 0.9	2.4	58.1	41.5	- 1.7	9.7	107.6
by currency of issue:										
US dollar	102.0	267.8	113.7	-37.7	0.0	343.8	61.0	-32.9	0.0	371.9
Euro	42.0	48.0	6.0	- 4.0	0.0	50.0	5.2	- 3.3	0.0	51.9
foreign	1.5	9.7	18.1	- 0.3	3.5	31.0	24.1	- 0.8	13.6	67.9
Yen	15.0	33.0	4.2	- 2.0	8.8	44.0	1.9	- 3.8	11.7	53.8
Euro	43.0	78.9	23.3	- 7.7	23.0	117.5	23.7	-16.1	31.9	157.0
foreign	31.0	50.4	16.5	- 5.1	14.6	76.4	13.7	- 9.0	17.4	98.5
Swiss franc	2.0	13.3	10.6	- 0.3	0.2	23.8	15.1	- 0.8	8.6	46.7
Deutsche Mark	2.0	5.9	0.5	- 0.3	0.1	6.2	0.0	- 0.3	1.6	7.5
Sterling	0.1	3.4	3.4	0.0	-0.2	6.6	9.0	0.0	0.9	16.5
Euro	2.0	16.5	6.1	- 1.9	3.8	24.5	8.2	- 0.8	6.4	38.3
foreign	14.4	30.5	16.4	- 2.8	4.7	48.8	18.7	- 4.1	7.9	71.3
Australian dollar										
ECU ³										
Other										

¹ Figures based on completion dates, which may differ from those based on announcement dates given in other tables. Converted at current exchange rates. ² Scheduled (including sinking funds) and early repayments of issues (-), plus implied interest accruals on zero coupon bonds (+). Non-dollar figures are converted into dollars at the exchange rate prevailing at the beginning of the period. ³ Excludes bonds issued in borrowers' national markets.

To begin with a short summary of the main structural characteristics of the stock of international bonds outstanding at the end of 1987, dollar issues accounted for the largest share (43.2%) of the \$981 billion total. However, in comparison with end-1982, when its contribution had amounted to 56.5%, the relative importance of dollar paper has decreased markedly. Declines over this five-year period were also recorded in the shares of the Swiss franc (from 16.9 to 16%) and the Deutsche Mark (from 12.2 to 10%), despite the appreciation of these currencies against the dollar. Conversely, the share of yen paper has soared from 6.5 to 12.4% and, in contrast to 1982, there was a significant

Structural
features of
international
bonds
outstanding

amount of sterling (5.5%) and ECU issues (3.9%) outstanding at the end of 1987. By types of instrument, straight fixed rate bonds accounted for the bulk of the paper, but the importance of equity-related instruments has increased sharply since 1982, as has the share of debt identified as having been swapped.

Debt outstanding and net borrowing in the international bond markets, by type and nationality of issuer

	Stocks at		Changes in 1986			Stocks at end-1986	Changes in 1987			Stocks at end-1987
	end-1982	end-1985	gross new issues ¹	repayments ²	ex-change rate effects		gross new issues ¹	repayments ²	ex-change rate effects	
	in billions of US dollars									
Total issues	255.0	557.4	218.8	-62.1	58.5	772.6	180.6	-71.9	100.0	981.3
by type of issuer:										
Banks	40.0	123.4	50.9	-14.9	7.3	166.7	39.3	-13.4	16.0	208.6
Other financial institutions	15.0	38.9	30.6	- 4.0	3.6	69.1	19.5	- 4.4	9.1	93.3
Private non-banks	100.0	202.3	79.6	-19.2	22.7	285.4	77.1	-29.1	37.5	370.9
Other ³	100.0	192.8	57.7	-24.0	24.9	251.4	44.7	-25.0	37.4	308.5
by nationality of issuer:										
United States	35.0	100.5	42.1	- 7.1	5.9	141.4	24.0	-12.6	10.2	163.0
Japan	15.0	63.2	31.0	- 4.1	9.5	99.6	43.2	- 7.3	15.2	150.7
Other industrial reporting countries	125.0	242.3	107.4	-34.2	22.4	337.9	78.6	-32.8	43.6	427.3
Other developed countries	12.0	30.4	15.3	- 3.7	3.9	45.9	11.7	- 4.0	7.1	60.7
Eastern Europe	0.2	1.0	0.6	0.0	0.1	1.7	0.6	- 0.1	0.2	2.4
OPEC countries	2.8	4.0	0.4	- 0.3	0.3	4.4	0.1	- 0.4	0.5	4.6
Other developing countries	15.0	23.7	2.5	- 2.4	2.3	26.1	1.8	- 2.4	3.3	28.8
Other countries ⁴	1.5	2.7	1.1	- 0.4	0.0	3.4	0.5	0.0	0.2	4.1
International institutions	48.5	89.6	18.4	- 9.9	14.1	112.2	20.1	-12.3	19.7	139.7

¹ Figures based on completion dates, which may differ from those based on announcement dates given in other tables. Converted at current exchange rates. ² Scheduled (including sinking funds) and early repayments of issues (-), plus implied interest accruals on zero coupon bonds (+). Non-dollar figures are converted into dollars at the exchange rate prevailing at the beginning of the period. ³ Including international institutions. ⁴ Offshore centres plus unallocated items.

By category of issuer, the role of financial institutions as debtors in the international bond market has expanded markedly (from 21.6 to 30.8%) since 1982, whereas that of private non-financial companies has slipped from 39.2 to 37.8%. By nationality of issuer, the predominance of borrowers from the industrial countries has become even more pronounced, with the share of non-OPEC developing countries shrinking further from 5.9% at end-1982 to 2.9% and that of international institutions, which in large measure cater for the needs of developing countries, declining from 19 to 14.2%.

Turning to credit flows during 1987, outstanding bonded debt increased by \$209 billion, or 27%, last year. However, \$100 billion of that growth was due to valuation effects resulting from the appreciation of other currencies vis-à-vis the US dollar. In volume terms bonded debt expanded by \$109 billion, or 14%. This net borrowing volume was much smaller than in 1986, not only because of the contraction in gross new issues but also because of an increase in the rate of retirement of bonds, from \$62 billion in 1986 to \$72 billion.

Sharp
contraction in
net new bond
financing

By type of issue, nearly all net new borrowing was in the form of fixed rate paper, while the modest amount of new FRNs was fully offset by the retirement of old paper. Within the fixed rate sector equity-related and identified swap-related issues accounted for a large share of net new borrowing, whereas other fixed rate borrowing dropped off sharply, from \$80 billion in 1986 to \$32 billion. By currency, net dollar issues shrank by over 60% to no more than \$30 billion, or barely 28% of net new bond financing. There were also substantial contractions in Swiss franc and Deutsche Mark borrowing. On the other hand, net borrowing in yen, sterling, Australian dollars and ECUs expanded.

By type of borrower, net new borrowing by banks contracted from \$36 billion in 1986 to \$26 billion, a development which was related to the stagnation of the FRN market. Other financial institutions also scaled down their net recourse to the international bond markets quite sharply, whereas borrowing by non-financial corporations was maintained at a relatively high level (\$48 billion). By nationality of issuer, net borrowing by US entities, formerly the largest issuers, dropped to \$11 billion, less than one-third of its 1986 level. The weakness of the dollar and a deterioration in credit-standing following the wave of take-overs and mergers were the main factors behind this decline. Borrowing by Japanese entities, by contrast, increased by one-third to \$36 billion and accounted for 33% of net new international bond financing. Nearly 70% of Japanese fund-raising was equity-related and benefited from the unusual strength of the Japanese stock market. Borrowing by other developed countries contracted from \$85 to 54 billion. Developing countries made net repayments.

Heavy Japanese borrowing, modest US recourse to the market

The debt situation

In 1987 the development of the international debt situation was somewhat ambiguous, with both positive and negative elements. On the negative side the domestic economic performance of the fourteen major debtor countries in the developing world (i.e. the fifteen Baker countries minus Yugoslavia) had once again deteriorated. Economic growth was slower than in any of the preceding three years, inflation accelerated and investment declined. The secondary market quotations for banks' claims on most debtor countries fell sharply.

Major debtor countries: deterioration of domestic economic performance . . .

At the same time, owing to a pick-up in export volumes and a modest recovery in terms of trade, the external payments position of the major debtor countries improved somewhat last year. Their combined current-account deficit contracted from \$16 billion in 1986 to \$8.6 billion, while their debt/export ratio, which had soared from 302% to 372% in 1986, slipped back to 353%. In spite of the rise in LIBOR, the ratio of gross interest payments to exports of goods and services fell from 30% in 1986 to 23% in 1987, the lowest level since the onset of the debt crisis, but this improvement resulted in part from unilateral suspensions of interest payments.

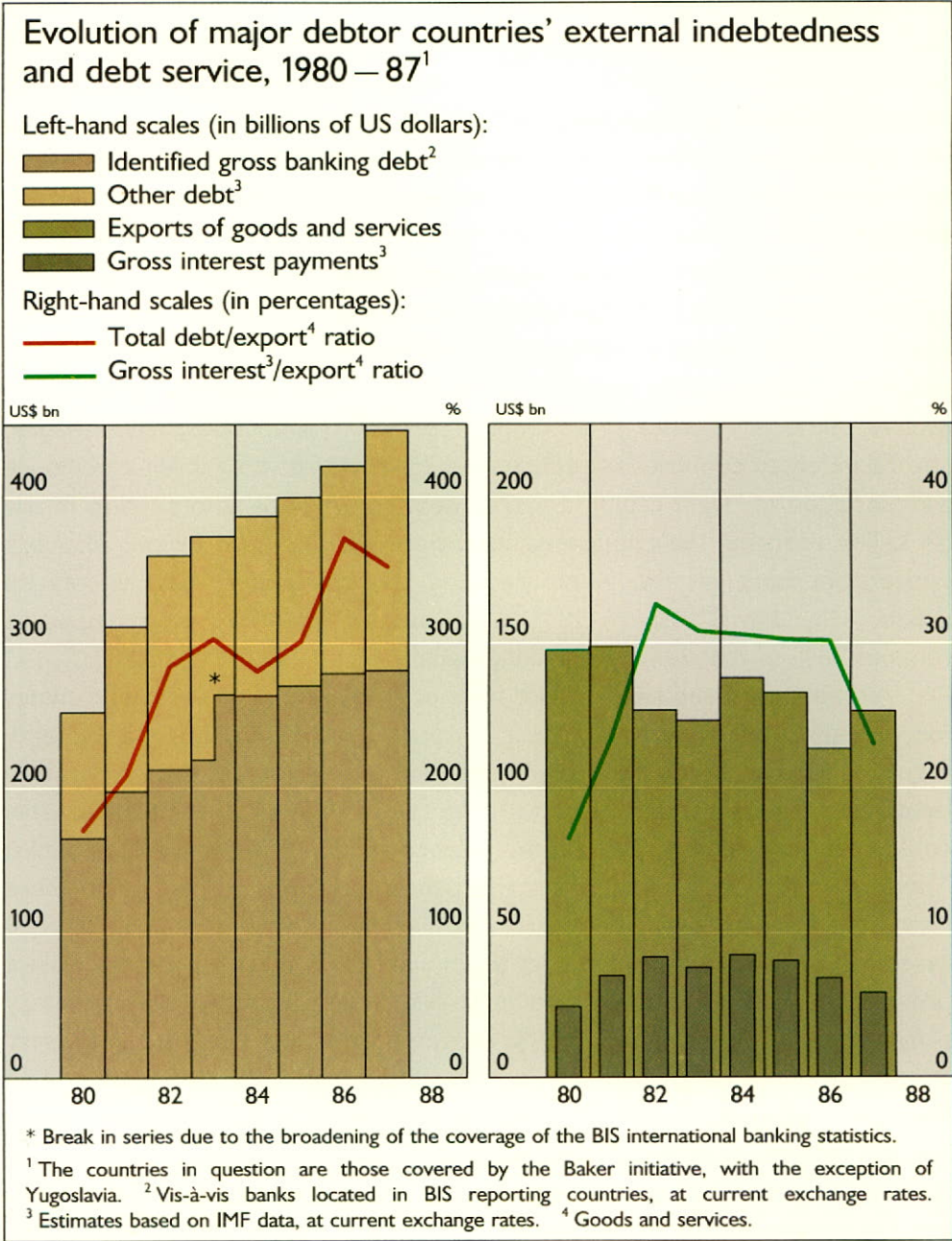
. . . slight improvement in external payments situation

The persistent severe debt service problems, unsatisfactory domestic economic conditions and growing frustration in many developing countries have led to increasing doubts about the adequacy of the strategy used so far to

More flexible attitudes towards debt management

cope with the international debt crisis. These doubts, together with genuine concern about the longer-term evolution of the economic and social situation in the debtor countries, have encouraged new initiatives which have brought greater flexibility to the debt renegotiation process.

As regards debts to commercial banks — the hard core of the problem — new instruments and techniques have been devised to speed up the lengthy negotiations for rescheduling and new credits, such as incentives in the form of early participation fees for banks agreeing to provide new money before a specified date. In addition, “exit” instruments, which are designed for smaller banks not wishing to participate in future rescheduling agreements or new money packages, have been included in a number of recent debt restructurings, notably those of Argentina, Ecuador, Mexico and the Ivory Coast. Partly as a result of this greater flexibility and banks’ willingness to grant more favourable terms (see page 135), the negotiation climate, which had at



times been very strained, can be said to have improved markedly by early 1988.

In addition, there have been new approaches to debt management which, unlike the officially sponsored bank credit packages, do not rely primarily on the injection of new money but aim directly at reducing external debt. These new schemes have included debt conversions and the buying-back of debt at large discounts, in one instance financed by foreign donations of funds. These debt-reducing techniques have relied directly or indirectly on the existence of a secondary market for the outstanding bank claims. Direct buy-backs from creditor banks, although restricted in many instances by legal provisions requiring equal treatment of different creditors and by a shortage of foreign currency, appeal to debtor countries, which can thereby benefit from the implicit discount on the face value of their debt. In Mexico one very sizable buy-back operation was carried out for private sector debt covered by the Mexican foreign exchange guarantee arrangement. It consisted of the use of \$2.7 billion to retire \$3.5–4 billion of debt to the commercial banks. The Bolivian buy-back arrangement, which entailed an 89% discount on the face value of the debt, was negotiated directly between the Bolivian authorities and the creditor banks, financed by voluntary donations from other governments and managed by the IMF. It eliminated nearly half of the country's debt to foreign commercial banks.

Debt reduction schemes

Debt conversion schemes have been set up by several borrower countries, sometimes in the context of debt restructuring agreements with the banks. They involve the exchange of external debt for domestic currency obligations or for equity stakes in local firms. These schemes, which often involve numerous parties in a complex series of transactions, have enabled several indebted countries to reduce their total interest obligations and induce a repatriation of "flight capital". In 1987 debt conversions amounted to nearly \$4 billion, bringing the cumulative total since 1984 to \$7.6 billion. Although conversions have on the whole reduced the outstanding debt to private creditors by only 3% since 1984, in the case of Chile they have helped to redeem 26% of the country's banking debts.

Debt conversion programmes

All these debt-reducing options have proved useful, but the opportunities for extending them further appear limited. For the creditor banks legal, regulatory and accounting considerations tend to restrict the scope for trading debtor country obligations. Moreover, the sale of loans at substantial discounts could have a negative impact on the balance sheets of major creditor banks. There may also be drawbacks for the debtor countries in the use of these instruments. Firstly, they may require the diversion of scarce foreign exchange reserves and, unless associated with additional capital inflows, generally do not provide the debtor country with new resources. Secondly, the necessary provision of domestic funds for the redemption of the outstanding external obligations may aggravate inflationary pressures. Thirdly, many debt conversion programmes entail a transfer of ownership to foreigners, which may be considered politically unacceptable.

Limitations and drawbacks of debt reduction techniques

Finally, it should be noted that from a systemic point of view buy-backs and debt conversion schemes based on secondary market quotations are not

unproblematic. They tend to reward those countries whose debt is traded at the largest discount. By thus putting an implicit premium on poor performance, they provide the wrong kind of incentives and raise questions of fairness. At the same time, large secondary market discounts will increase banks' resistance to new money packages. There is, therefore, a danger that excessive reliance on the secondary market may point to a way out of the international debt problem which would be the antithesis of sound policies and adjustment.

The overall effect of the various innovations in debt management has been to remove a sizable volume of claims from the banks' balance sheets. As a result, changes in outstanding claims on debtor countries no longer provide an accurate picture of actual credit flows between the banks and the debtor countries. In current dollar terms the gross claims of the BIS reporting banks on the major debtor countries increased only marginally, by \$1.7 billion, whereas at constant end-of-quarter exchange rates they actually contracted by \$8.7 billion, the first decline since the beginning of the debt crisis. At the same time, total disbursements of funds under concerted lending packages amounted to \$5.6 billion, or \$2.4 billion more than in 1986. Even if adjustment is made for the difference between changes in outstanding claims and the true cash flows, this suggests that spontaneous credits have declined.

The decrease in banking claims on the major indebted countries has been accompanied by a shift in their currency composition. In current dollar terms the share of non-dollar currencies in total outstanding claims rose from 15 to 20% in 1987, but over 60% of this expansion was the result of valuation effects arising from exchange rate movements. Nevertheless, during the past five years there appears to have been a significant redenomination of the outstanding debt from dollars into other currencies as a result of the restructurings.

In 1987 notable changes also occurred in various aspects of the debt rescheduling process. In particular, there was a significant increase in the amount of long-term debt to commercial banks and to official creditors which was rescheduled. In all, \$92 billion of commercial bank claims were restructured, up from \$72 billion in 1986. In addition, there was a record amount, of over \$25 billion, of reschedulings under Paris Club arrangements for official creditors. In most instances the reschedulings were accompanied by an improvement in debt service terms. Compared with 1986, the maturity of the debt renegotiated with commercial banks rose from ten to fifteen years, the average grace period from four to five years and the average consolidation period from two and three-quarter to four years. In addition, the average spread over LIBOR was cut from 1.3% in 1986 to under 1%. Easier terms were applied with respect to arrangement fees and, sometimes, the timing of interest payments.

A particularly important development affecting the relationship between the creditor banks and the debtor countries was the substantial and broadly based increase in banks' provisioning levels, in some instances facilitated by actual or expected regulatory or tax changes. In particular, banks in the United States, Japan, the United Kingdom and Canada, which had earlier built up only

Decline in banks' claims on developing countries

Changing currency composition of bank claims

Widening scope of rescheduling arrangements

Increased provisioning by banks

modest reserves against their exposures to the problem debtor countries, raised their provisioning levels towards those prevailing in some continental European countries. However, banks in the latter countries also added to their reserves, so that a gap remained between these two groups of banks.

By improving the banks' ability to absorb losses, the most immediate impact of enlarged provisions has been to strengthen the bargaining position of the banks and the capacity of the financial system to sustain shocks. In addition, the build-up of sizable country risk reserves has had a number of complex and indirect effects on the debt situation. Although the decision to add to provisions may be influenced by increased expectations of losses, other factors such as the level of profits, taxation, supervisory rules and sentiment in the equity market may also be of importance. Consequently, higher levels of provisions do not necessarily signal a change in banks' views on the likelihood that losses will actually be incurred, any more than they reduce the obligation on the debtors to service their debt. At the same time increased provisioning also makes it more difficult for the banks to provide new money to the same debtors, particularly when new credits require provisioning in the same way as existing exposures. One effect of increased provisioning may be a greater desire on the part of the banks to dispose of their claims through loan sales. For this reason the steep fall in quotations on the secondary market for loans to debtor countries may not be due entirely to a perceived deterioration in the creditworthiness of the debtors.

Another important development in the debt situation last year was the growing recognition by official and, to a lesser extent, private creditors that the problems of the low-income countries, particularly those in sub-Saharan Africa, are quite different from those of the major middle-income debtors. In view of their general economic distress, many of the poorest and most heavily indebted countries were granted a significant lengthening of the repayment and grace periods in their Paris Club reschedulings in accordance with the Venice Summit pronouncements. Other initiatives included a broadening of the IMF's structural adjustment facility, easier terms in rescheduling agreements with official creditors and proposals for assistance by the World Bank to debt-burdened low-income countries in sub-Saharan Africa undertaking adjustment programmes.

Concessional
official lending
arrangements for
poorest debtor
countries

Finally, official multilateral development institutions have continued to serve as an important source of funds for developing countries, although actual net disbursements declined from \$11.2 to 9.6 billion between 1986 and 1987. Increasing emphasis has been placed on lending linked to structural adjustment policies, particularly for the most heavily indebted countries. In the case of the World Bank, which supplies roughly 75% of the total financing provided by development banks, the share of policy-based loans in total new lending commitments to major debtor countries rose from 14% in 1984-85 to 36% in 1986-87. The \$75 billion increase in its capital that was approved in April 1988 will enable it to expand its gross lending to over \$20 billion a year by the early 1990s. A new Multilateral Investment Guarantee Agency was established in April 1988 under the umbrella of the World Bank to provide insurance against political and similar risks relating to foreign investment.

Role of official
multilateral
development
institutions

Confrontation
and co-
operation: the
developments in
the biggest
debtor countries

As in previous years, the overall debt situation was characterised by different developments in individual countries. The most pronounced contrast was between Mexico and Brazil. Whereas Mexico's difficulties had been in the limelight in 1986, it was Brazil that had the greatest problems in 1987. During the last quarter of 1986 Brazil's trade account went into deficit, and interest payments were financed mainly by drawing on the country's foreign exchange reserves. By end-February these had declined to \$4 billion, equivalent to only about three months of imports, and the authorities announced that they would suspend all interest payments on their medium and long-term debt to commercial banks until an agreement on new bank financing had been reached. Apart from triggering the large increase in creditor bank provisions last year, which weighed heavily on profits, this action greatly reduced the availability of trade credit for Brazil. The experience was a lesson for both creditors and debtors, demonstrating that a co-operative approach is preferable to confrontation. In November Brazil agreed to pay some of its accumulated arrears, while banks undertook to finance a portion of them. Interest payments amounting to \$1.5 billion were made in late 1987 and early 1988. Furthermore, a year after the declaration of the moratorium a medium-term package was announced providing for \$5.2 billion of new funds as well as for the reopening of interbank lines and short-term trade credit facilities.

The Mexican
debt exchange
scheme

In contrast to developments in most other debtor countries, Mexico's economic performance and external payments situation improved somewhat last year. Thanks in part to the disbursement of \$4.4 billion under the new finance package arranged in 1986, its foreign exchange reserves rose by \$6.1 billion last year, despite sizable buy-backs of outstanding private sector debt. Moreover, a portion of official reserves was earmarked for a debt exchange, announced in December 1987, whereby existing medium-term syndicated bank debt would be converted into a twenty-year Mexican bond. The Mexican Government undertook to pay a spread over LIBOR of 1½%, or double that on rescheduled bank debt, while the principal of the bond was to be collateralised by twenty-year US Treasury zero coupon paper purchased by the Mexican authorities. It had originally been hoped that up to \$20 billion of bank claims could be converted under the scheme, the final amounts depending on the attractiveness of banks' tenders. In the end only \$3.7 billion in bank loans was exchanged for \$2.6 billion in bonds at discounts ranging from 23 to 37%, which reduced Mexico's outstanding debt by about \$1 billion. An important element of this debt reduction scheme was its endorsement by the authorities in various creditor countries. For example, the US authorities stated that other Mexican claims would not have to be entered in banks' books at a lower value, the Bank of England indicated that additional provisions would not be required with respect to the new bonds, and the Japanese authorities made it known that any losses incurred by the banks as a result of the conversion could be deducted from taxable income.

In April 1987 Argentina reached agreement with its creditor banks on the rescheduling of \$30 billion of existing debt and concluded negotiations for a \$1.55 billion new money package and a further \$400 million trade credit facility with a maturity of four years. By the end of 1987 roughly two-thirds of the new

money had been drawn. In addition, a Paris Club rescheduling agreed to in May covered principal falling due up to June 1988 and arrears of interest. In February 1988 the US Treasury provided a \$550 million bridging loan pending disbursement of IMF and World Bank financing. The Argentinian package was the first to offer explicit exit instruments, which, however, were not taken up in large quantities owing to insufficiently attractive terms.

Summing up, it can be said that by early 1988 the international debt situation presented a mixed picture. Some of the most threatening clouds that had darkened the horizon a year earlier had disappeared and certain rays of light had broken through. In 1987 the debtor countries achieved some improvement in their debt and debt service ratios, while the creditor banks further strengthened their provisions against losses. Partly under the influence of developments in Brazil, the earlier climate of confrontation between debtor countries and creditors has tended to give way to more constructive attitudes. Banks and debtor governments have co-operated in the development of new schemes and instruments which not only make greater allowance for the specific situations of individual countries and provide for new injections of capital, but also increasingly contain elements of outright relief in respect of both interest and principal.

Nevertheless, many problems remain. The new initiatives and instruments are in most cases of too limited quantitative scope to touch the core of the debt problem. Despite a relatively favourable international economic environment, the domestic and external economic situations of many debtor countries continue to be very fragile. Per capita GNP and real investment in most debtor countries are still well below the levels of the beginning of this decade, and it is not easy to see how these countries could re-embark on a satisfactory economic growth path without large new injections of capital or a sharp reduction in interest obligations. At the same time the persistently large disequilibria in the industrial countries give rise to a number of questions concerning the future development of dollar interest rates, free trade and the more general economic environment with which the debtor countries will have to contend in the future.

Despite signs of improvement, the international debt situation is therefore far from "finished business". The basic idea of the Baker initiative — progress through growth — is certainly still valid. To bring about this increased growth, however, enhanced efforts will have to be made in both debtor and creditor countries. Debtor countries will have to seek to make better use of available resources and to achieve greater continuity of policies, while it will be the responsibility of creditor countries to find ways to increase the net resource flows to debtor countries and to create a world economic climate propitious to international trade and economic growth.

Uncertain
outlook for
international
debt situation

Need for further
efforts

VI. Monetary developments and policy

Highlights

Last year monetary policy was used extensively to cope with exchange market problems. Overall the policy stance can be said to have been accommodating. Short-term interest rates were lowered and the monetary aggregates grew rapidly in most countries other than the United States. Given the relatively favourable price performance and uncertainties about the influences on the aggregates, the pace of monetary expansion, while causing some concern and uneasiness, did not dominate policy decisions. In response to the worldwide decline in equity prices last October, monetary policy was specifically directed at containing financial fragility and averting recession.

The framework of monetary aggregate control policies with their medium-term orientation was kept in place, but in several countries monetary policy was highly judgemental in circumstances in which the longer-term implications of rapid monetary growth were extremely difficult to gauge.

Only to a limited extent can monetary developments be said to have been directly related to official exchange market intervention, although the purchases of dollars by monetary authorities in the industrial countries were indeed very large. Rates of monetary expansion were strongly influenced by the interest rate policies pursued by central banks in response to developments both in the domestic economy and in the exchange markets. In many cases the rates of growth of broad monetary aggregates were also influenced by fast rates of growth of bank credit associated with lower interest rates, deregulation, intensified competition between financial institutions, rapid economic expansion and speculation in land and financial assets.

With the convergence of inflation rates in countries adhering to the exchange rate mechanism of the European Monetary System, the differing impact of the depreciation of the US dollar on member countries' external current and capital accounts put relatively more strain on the system than inflation differentials. Calls have been made for greater symmetry in the objectives and implementation of monetary policy in EMS member countries, and, looking far ahead, the institutional centralisation of monetary policy decision-making in Europe has been discussed. Although the latter may be implied in the ultimate political aim of economic and financial integration within the European Economic Community, for the foreseeable future the question is what progress can be made towards meeting the necessary preconditions.

Conflicts between exchange rate and domestic monetary policy considerations became particularly acute last year in another group of countries, which included the United Kingdom, Canada, Sweden and Spain. Exchange rate considerations at times meant that short-term interest rates had to be kept below the levels needed to restrain rapid rates of monetary and

credit growth which were contributing to potentially unsustainable rates of expansion of economic activity.

The exchange rate objectives which small and medium-sized countries have pursued in recent years to underpin counter-inflationary monetary policy and their commitment to these objectives have varied considerably. While concern about countries' ability to meet growth objectives has increased in some cases, there is still a question as to how far exchange rate depreciation can be expected to bring about a significant and lasting easing of the external constraint in very open economies. Countries also have to take into account the effect on the risk premium in their long-term interest rates that a loss of credibility might imply.

The achievement of satisfactory performance in the world economy in the medium term ultimately depends on the control of inflation in the largest industrial countries. While inflation remains low to moderate in the major economies, there exists the risk that monetary policy may be expected to achieve too much in the short run should the situation on the price front change. The goal of maintaining a high degree of price stability can only be achieved by cautious monetary policies over the medium term.

Monetary policy in the largest industrial countries in a context of imbalances in the world economy

Last year the conduct of monetary policy in the largest industrial countries was strongly influenced by efforts to implement a more co-ordinated approach to rectifying imbalances in the world economy and to coping with turbulence in the financial and exchange markets. Policies oriented towards controlling money or credit aggregates had made a major contribution to moderating inflation in the industrial world. In varying degrees, however, difficulties in interpreting the aggregates required more judgemental approaches to monetary policy. Moreover, misalignments and, at times, excessive volatility of exchange rates had increasingly come to be regarded as a basic weakness of floating exchange rates. The view emerged that policies which took more account of exchange rates were needed to prevent another cycle of overshooting, particularly vis-à-vis the US dollar.

Monetary policy used last year to cope with exchange and financial market problems

Exchange market developments as a constraint on monetary policy

Although there was a broader consensus about the advantages of international co-operation for stabilising exchange rates last year than there had been for many years, the severity of the burdens which exchange market pressures could place on monetary policy only became evident following the Louvre Accord of February 1987. Many countries had used specific exchange rate objectives as the fulcrum of a counter-inflationary monetary policy, and others had at times adapted monetary policy in the hope of preventing an excessively large or rapid depreciation of the domestic currency. By contrast, in major countries other than the United States efforts to stabilise the dollar last year involved the use of monetary policy to avoid a serious weakening of domestic economic activity. In a context of high real interest rates in the United States

Advantages of stable exchange rates recognised

in the early 1980s the question of stabilising key exchange rate relationships had not been seriously considered, although other countries would have welcomed US support in the efforts they made to limit excessive appreciation of the dollar. Following a change in the official US attitude, international co-operation played a role after the Plaza Agreement in efforts to prevent the fall of the dollar from becoming disorderly. By early 1987 the significant dollar depreciation that had taken place over the previous two years held out promise of a substantial reduction of the major countries' huge external current-account imbalances. Moreover, in the United States the impact of exchange rate depreciation on domestic inflation was becoming a matter of increasing concern, while in Japan and Germany confidence in industry was weakened as a result of rapid currency appreciation.

Policy adapted to
supporting Louvre
Accord . . .

Monetary policy was called upon to contribute actively to the implementation of the Louvre Accord. With the Federal Reserve slowly tightening the availability of non-borrowed reserves to the US banking system, the Federal funds rate was "snugged up" between February and May, while the Bank of Japan guided the call-money rate down to a level closer to that of its discount rate. The intended exchange market objectives of these divergent interest rate movements were made clear by a joint US/Japanese statement in April. In Germany the interest rate on the Bundesbank's securities purchase and resale operations had been lowered in January and was brought down further in May. Following large-scale official exchange market intervention to limit currency appreciation, short-term interest rates were also lowered in the spring of 1987 in the United Kingdom and Canada, while the easing of tensions within the exchange rate mechanism of the European Monetary System also permitted some downward movement, for a time, in money market rates in France and Italy.

. . . but
confronted with
generalised rises
in bond yields

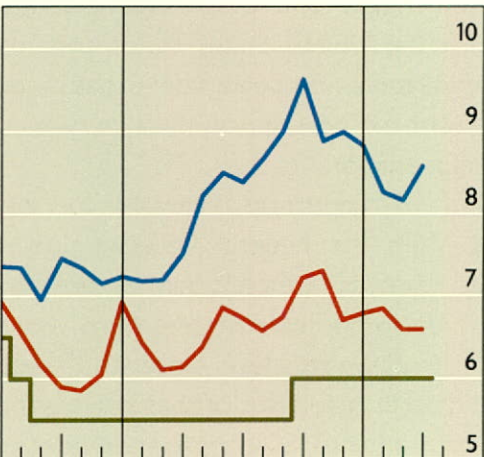
From the spring onwards monetary policy was confronted with pressures in the capital market. With the US dollar continuing to suffer bouts of weakness, particularly vis-à-vis the yen, despite large-scale support purchases by central banks, long-term interest rates in Germany and Japan continued to decline until May, though dollar yields began to rise in January. However, when, after a brief retreat in May, interest rates in the United States moved upwards again in the summer, yields in most other countries also rose. In the United States the underlying weakness of foreign private demand for securities was one influence, as well as concerns about inflation risks arising from currency depreciation, commodity prices and the fact that some industries were approaching capacity limits. Changes in international portfolio capital flows were also a factor in Japan and Germany, where earlier exchange rate appreciation had helped to reduce current inflation rates but not, apparently, to allay concerns about the risk of future inflation entirely. By the early autumn, term yield curves in most countries were sloping steeply upwards.

In the United States, where policy was responding more to clear evidence of demand and price pressures in the economy than to developments in the monetary aggregates, a modest increase in the Federal funds rate in the summer was underpinned by a rise in the official discount rate in September. The Bank of Japan had been concerned for some time that fast rates of

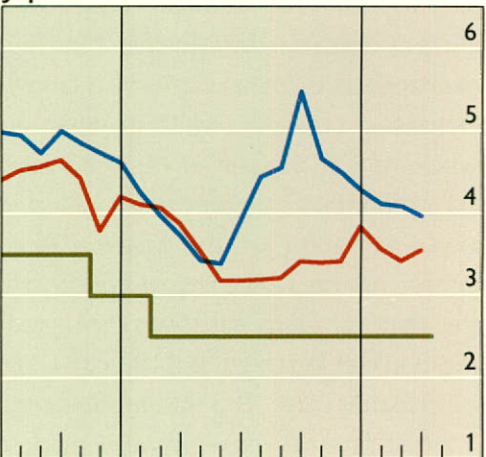
Official and market interest rates, 1986 – 88

- Rate on central bank tender operations in securities¹
- Posted official discount rate
- Maximum posted central bank lending rate²
- Day-to-day money market rate
- Government bond yield³

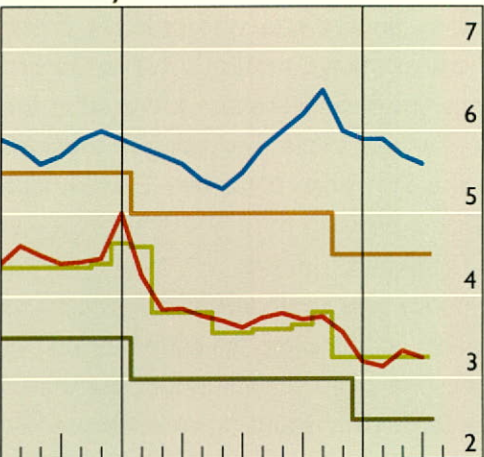
United States



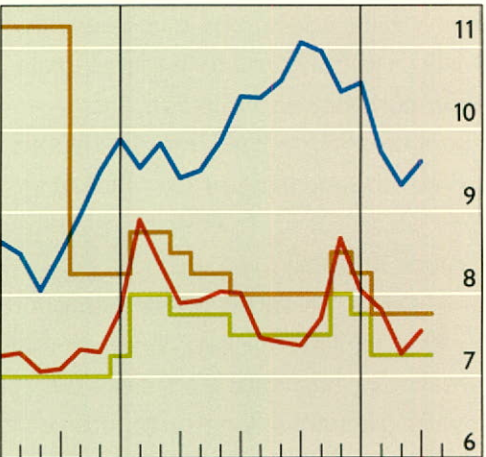
Japan



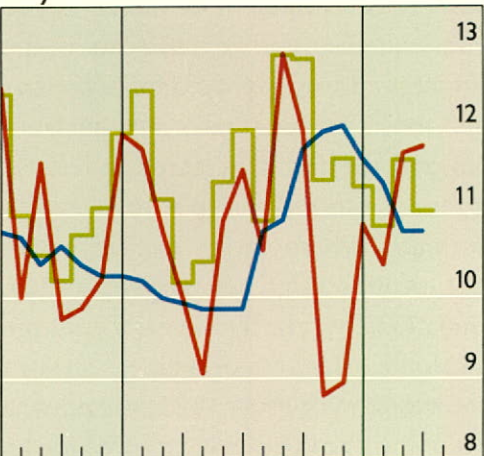
Germany



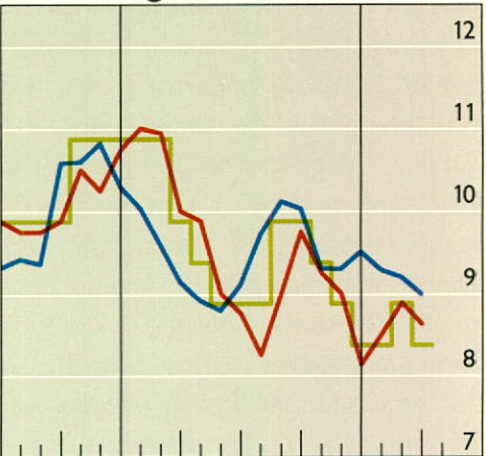
France



Italy



United Kingdom



¹ For the United Kingdom, purchases of very short-term bank bills. ² For Germany, lombard rate; for France, seven-day securities sale and repurchase facility. ³ For Italy, six-month Treasury bills.

Concern about
fast monetary
expansion

monetary and credit expansion might be fuelling rapid rises in the price of land and financial assets. By mid-1987 a quickening of the pace of the economic adjustment in Japan was beginning to be reflected in bottlenecks in construction, cases of speculative inventory accumulation and rises in commodity prices. The stance of monetary policy was therefore tempered and further declines in interest rates were resisted. By this time earlier joint exchange market intervention by central banks and some signs of modest progress towards implementing the fiscal policy intentions expressed in the Louvre Accord, in the Washington ministerial communiqué issued by the Group of Seven in April and at the Venice summit in June seemed to have helped to stabilise the dollar. Short-term interest rates in all European Group of Seven countries and in Canada were increased during the summer and early autumn, though in all cases the rise was less than that in US money market rates. In Germany the Bundesbank accepted a continued overshooting of its money stock objective but sought to counter inflationary expectations by supplying bank reserves less freely and allowing market pressures to move its securities repurchase rate back to about the February level.

Response to risk
of financial
fragility . . .

Confronted with the stock market collapse in October, monetary authorities clearly had to consider the risk of financial fragility, which was greater in some countries than in others. The monetary policy response in several of the larger countries was of major dimensions. In the United States the potential wealth effects of the fall in share prices on economic activity and on the outlook for inflation seemed to justify lower interest rates, and the Federal funds rate declined by about 100 basis points within two weeks. Monetary policy in other countries also had to consider the effects of the subsequent further fall in the dollar, which contributed to renewed strains in the European Monetary System. The dollar remained weak until January 1988, when the exchange markets became more stable following forceful co-ordinated dollar purchases by central banks, the announcement of supporting fiscal measures in the United States and Germany and the publication of a further Group of Seven communiqué. Short-term interest rates eased slightly in Japan after October. The Bundesbank gradually lowered its securities repurchase rate and in December brought the discount rate down to an unprecedentedly low level. Some of these changes were co-ordinated with increases in official rates in other European countries. In the United States and Japan bond yields also recorded large declines in late 1987 and early 1988. In Germany, however, the decline in long-term rates was limited and by early 1988 the yield curve was again quite steep.

. . . and to a
further fall in the
US dollar

Long-term interest rates as a constraint on monetary policy

Last year developments in bond markets in major countries other than the United States were not closely related to changes in domestic short-term interest rates. During the last decade there has been ample evidence that even in a purely domestic setting bond yields often respond to market judgements about long-run developments in the economy and, in particular, to inflation expectations. In the long run these expectations are based mainly on the country's inflation performance, but in the short run developments in

intermediate variables such as the money stock in relation to the authorities' objectives may also be important.

Increasingly, too, central banks have had to take into account the way in which the internationalisation of the securities markets has limited the scope, even in the largest countries, for influencing long-term interest rates by short-term interest rate policy. Since the mid-1970s arbitrage between national markets has been increasingly facilitated by the removal of controls on cross-border capital movements and on foreign participation in the domestic markets, as well as by innovations in communications technology and market instruments. The international mobility of capital has increased the sensitivity of market yields in all countries to policies and market forces in foreign countries and has limited the scope for responses of yields to domestic conditions. At times last year the demand for new issues of government debt in the United States seemed to be strongly influenced by foreign investor preferences. In Japan changes in domestic investor confidence with respect to the dollar were a major influence affecting the demand for domestic bonds. In Germany large inflows of portfolio capital from abroad helped to bring down yields in early 1987, but they gave way to outflows in the second half of the year.

Effect of global capital market linkages . . .

Expectations of changes over time in floating exchange rates have often driven a wedge between bond yields in countries with differing rates of inflation. To this extent the credibility of monetary policy remained a major influence on yields in individual countries. Other influences have become important, however, in a context of exchange rate overshooting, or when a major exchange rate adjustment has recently been effected, as was the case early last year. Differentials between bond yields in different currencies may tend to increase, as they did in early 1987, if official exchange market intervention is not expected to delay for long the appreciation of currencies with relatively low rates of inflation or if there are substantial uncertainties about the outlook for exchange rates. If, however, markets believe that official exchange rate co-operation will be effective for a considerable length of time, as was evidently the case in the summer of last year, yields in different countries will tend to move closer together. Given the size of the US capital markets, this could imply levels of long-term interest rates in other countries which might seem high in relation to comparatively low current rates of domestic inflation.

. . . and exchange rate expectations

In a situation of this kind steps to bring down short-term interest rates are most unlikely to be effective in lowering long-term interest rates. On the other hand, increases in short-term interest rates which might seem indicated as a way of moderating rates of monetary expansion and preventing a loss of credibility may be inconsistent with avoiding pressures on the exchange rate in the short run.

Financial fragility as a constraint on monetary policy

In conducting day-to-day monetary operations in 1987, central banks had to weigh carefully the effect of heightened financial market uncertainty on the

actual and potential demand for liquidity on the part of banks and non-banks. In response to the October collapse in equity prices, the monetary authorities in the United States and Japan stated publicly that they stood ready to provide liquidity to the financial markets. Several central banks took special steps to accommodate unusual increases in the demand for bank reserves by means of short-term operations. Central banks in the larger countries remained in close consultation with one another and with market participants during the crucial days. In early November the central bank Governors of the Group of Ten countries expressed satisfaction with the measures taken to maintain the smooth functioning of the financial system and reaffirmed their commitment to that end.

Visible Federal
Reserve action in
late October . . .

As the situation in the United States was obviously more dramatic than that in other countries, it is of interest to record in some detail the responses of the Federal Reserve. Between 19th and 30th October 1987 the System maintained a highly visible presence through open market operations, arranging repurchase agreements each day in large amounts, frequently at an earlier time of day than usual. For several weeks the practice of gearing Federal Reserve repurchase operations to objectives for bank borrowing at the discount window was suspended. In the event, adjustment and seasonal borrowing at the window decreased from around \$500 million before the crisis to some \$300 million in early November.

. . . in monitoring
market
liquidity . . .

While carefully monitoring liquidity, the position of market-makers and settlement conditions in the stock, futures and options markets, the Federal Reserve sought to allay concerns about counterparty risk in the government securities market and liberalised the rules for lending government securities from its own portfolio. To facilitate timely margins collections in the futures markets, the operations of the Federal Reserve funds transfer system were extended on two days. Close track was kept of currency shipments to permit the identification of potential emerging bank runs. While closely supervising the banks' credit exposure, the Federal Reserve discussed with the banks the importance of ensuring adequate liquidity and the funding of securities brokers and dealers. The System also made reserves available on a scale sufficient to ensure that the banks would not face escalating funding costs. A rise in the banks' demand for excess reserves was accommodated, as well as an increase in required reserves associated with a bulge in their demand deposit liabilities, caused by the surge in financial transactions. In the process, monetary policy was eased, as indicated by a fall in the Federal funds rate.

. . . supplying
bank reserves
generously and
lowering interest
rates

Subsequently the US banks' demand for both required and excess reserves returned to more normal levels and the supply of reserves was adjusted downwards. A steep rise in security-based bank lending during the crisis was also reversed. There were no indications of a permanent shift in the public's liquidity preference, and the growth of the monetary aggregates slowed in November and December. During this period a marked fall in short-term interest rates took place in a number of other countries, including the United Kingdom and Canada.

Need for
carefully judged
responses . . .

The events of October 1987 vividly illustrate the essential role of the central bank in times of financial crisis. In the face of financial turmoil the

appropriate central bank response will depend on circumstances and the assessment of the need for liquidity. In the event, the risk to confidence was averted. However, the speed with which fears of financial instability and economic recession have been dispelled since October underlines the need for careful judgement as to how much, and for how long, additional liquidity should be supplied in times of financial market crisis. Appropriate longer-term regulatory and supervisory policies for both the banking and securities industries will help to minimise the aggregate economic risks of financial market fragility and are a prerequisite for viable monetary policies.

... and
appropriate
supervision

Alternative monetary policy objectives and strategies

The practice of setting and publishing norms for monetary expansion followed in recent years in most large industrial countries and in some smaller ones has been designed to provide an “anchor” for monetary policy and inflation expectations. Over the years various difficulties have been encountered in implementing these strategies, but pronounced overshooting or undershooting of the money stock objectives in major countries in the last two years has occasioned a reappraisal not only of tactics but also of possible alternative intermediate targets.

Reassessing
monetary policy
strategies

Monetary targeting has been based on the tenets that rates of growth of the money stock in excess of the economy’s output potential, taking into account any long-term trend in the growth rate of velocity, ultimately lead to inflation, and that a high degree of price stability is a prerequisite for satisfactory economic performance in the medium term. In general, central banks have not subscribed to the view that these propositions hold in the short run. In principle, as is well known, allowance needs to be made in targeting specific aggregates for certain types of domestic and international shift in the demand for money and for influences coming from interest rates and exchange rates. However, some presentational advantages are lost if targets cannot be directly related to observed or potential economic growth and to inflation rates in a way which facilitates the public expression of policy intentions.

Monetary
targeting

Targeting strategies have provided for various elements of flexibility in the setting of the objectives. In recent years, in the United States and Germany, annual target bands have been widened and applied to broad monetary aggregates. Central banks have not normally sought to control developments in monetary aggregates closely in the short run, mainly because they wished to avoid disruptive movements in interest rates. However, special influences on developments in the aggregates that persist for several years — such as changes in real exchange rates which alter the relationships between the aggregates and changes in price levels in individual countries — clearly give rise to problems, even though more normal relationships may be re-established in the longer run.

The exchange rate objectives pursued in recent years by many small European countries and an increasing number of larger ones may be considered as an alternative anchor for monetary policy. Last year policy in the

Alternative
objectives:
exchange
rates . . .

United States recognised that the exchange rate was an important relative price in the economy, whose effect on costs, profits and economic activity could not be left out of account in the formulation of monetary policy. However, gearing monetary policy to exchange rate objectives is not always a reliable way of ensuring satisfactory wage and price developments in the longer run. In practice, the benefits which come from using exchange rates as anchors for monetary policy in individual countries have depended on the achievement of price stability by at least one large country using a monetary policy guided by domestic targets or indicators.

... interest
rates ...

Objectives for nominal interest rates cannot generally be regarded as an alternative to money stock or exchange rate targets. Nearly all central banks in industrial countries now set operating objectives for interest rates which serve as instruments in efforts to meet intermediate or final objectives of monetary policy. Most central banks have also continued to view interest rates as a central element of the monetary policy transmission mechanism, in fact as the "cutting edge" of monetary policy. It is not certain, however, that in the absence of other guides interest rates will always be set at levels appropriate to counter the build-up of inflationary pressures. Changes in bond yields, which are strongly influenced by market forces, have come to be seen in a number of major countries as indicative of changing market assessments of inflation. The problem lies, however, in distinguishing these from other influences on bond yields.

... nominal
GNP and
commodity
prices

Other variables which are less amenable to central bank influence have been proposed as policy guides. In fact, in some large countries developments in the aggregates have increasingly been interpreted in the light of incoming data on developments in the economy and in prices. Formal targets for nominal GNP can in principle serve as a nominal anchor but in practice may risk placing monetary policy at the service of attempts to influence current developments in output and employment. Developments in commodity prices in competitive international markets can serve as a leading indicator of demand or cost pressures, but they are also influenced by supply conditions and are not always closely linked to the prices of final output, to which policy goals apply. In the United States a range of monetary policy indicators is now used in efforts to stabilise the economy.

Risks entailed in
judgemental
approaches

In general, however, judgemental approaches entail some risks if markets are left uncertain about which indicator is being followed at any given time. The publication of targets for the aggregates has generally been intended to emphasise the medium-term aims of monetary policy and to help counteract pressures towards low interest rates, in particular. Flexible monetary policy responses to changing circumstances are thereby made more difficult, but last year central banks made strong efforts to explain the technical reasons for failure to meet monetary objectives and the limits to what could be achieved by monetary policy. They concluded that continuing to publish targets, even if they were overshoot for a time, might contribute to preserving the credibility of monetary policy and stabilising long-term interest rate and inflation expectations.

Medium-term objectives of monetary policy and money stock targeting

While the growth rates of the monetary aggregates slowed significantly in the United States, they remained very rapid in many other countries. Concerned about the apparent build-up of inflationary expectations in the summer of 1987, monetary authorities in major countries took cautious action designed to moderate monetary expansion, but in most cases policies were eased following the October equity price collapse. Interpreting developments in particular monetary or credit aggregates continued to be difficult, but monetary authorities remained alert to the possibility that the relationship between monetary expansion and inflation might re-emerge in the longer run.

In the United States rates of monetary expansion slowed sharply in 1987. The deceleration was most marked in the case of M_1 , the target for which had been abandoned at the beginning of the year. The growth of M_2 and M_3 fell below the lower ends of their respective target ranges. Total debt of domestic non-financial sectors expanded at a rate in the middle of the monitoring range but still in excess of the growth of nominal income.

Money growth slows in United States

In Japan the projection by the Bank of Japan for the four-quarter growth rate of $M_2 + \text{CDs}$ was adjusted upwards throughout 1987. By the end of the year growth in $M_2 + \text{CDs}$ stood at around 12% — a rate not recorded for almost a decade. In Germany growth in the central bank money stock was well above the upper limit of the target range for the second consecutive year.

Rapid monetary expansion elsewhere

In France the growth in M_2 was close to the lower limit of its target range last year, but the growth of M_3 exceeded the target. In the United Kingdom the growth of M_0 remained barely within its target band, while the growth of nominal GDP exceeded the Government's projection. In Italy the growth of credit to the non-state sector slowed after the summer, but for the year as a whole the growth of the credit aggregate and that of M_2 were close to the upper limits of their target ranges. In Spain the growth of liquid assets held by the public was well in excess of the original objective.

In Switzerland the annual average growth of the adjusted central bank money stock exceeded the target. In the Netherlands the growth in bank lending decelerated rapidly last year, but the growth of banks' long-term (non-monetary) liabilities also declined and the norm for net domestic money creation by the banks for the two-year period ending in December 1987 was slightly exceeded.

Interpreting rates of monetary expansion

Developments in key aggregates in the major countries in relation to nominal GNP last year can largely be explained by movements in short-term interest rates, but in some cases the effect of exchange market conditions or the volume of financial activity was also an influence. In the United States the rise in the velocity of M_2 and M_3 in 1987 closely reflected the rise in interest rates during the first three quarters of the year. In Germany and Japan lower interest rates contributed to the further decline in the velocity of the targeted or projected monetary aggregates.

Clear impact of interest rates

Increased
interest
sensitivity of US
aggregates

In the United States the sharp slowdown in the rates of monetary expansion in 1987 overstated the extent of the tightening of monetary policy in the early part of the year. The interest sensitivity of the demand for particular components of the monetary aggregates increased markedly following the deregulation of interest rates completed in 1986. Slow responses on the part of

Monetary and credit aggregates: Objectives and rates of expansion								
Countries	Monetary or credit aggregate ¹	Objective ² for			Monetary or credit expansion			
					Target period ⁴		Change over four quarters ⁵	
		1986 ³	1987 ³	1988 ³	1986	1987	1987Q1	1988Q1
in percentages								
United States	M ₁	3–8	–	–	15.6	6.3	16.8	3.9
	M ₂	6–9	5½–8½	4–8	9.4	4.0	9.5	4.1
	M ₃	6–9	5½–8½	4–8	9.2	5.3	8.6	5.4
	TDND	8–11	8–11	7–11	13.3	9.8	11.9	9.5
Japan	M ₂ + CDs	8–9	11–12	12	8.3	11.8	8.8	12.1
Germany	CBM	3½–5½	3–6	–	7.7	8.1	7.7	8.3
	M ₃	–	–	3–6	7.3	6.1	7.4	6.0
France	M ₂	–	4–6	4–6	4.9	4.1	3.8	3.1
	M ₃	3–5	3–5	–	4.5	9.2	5.2	8.1
United Kingdom	M0	2–6	2–6	1–5	5.8 ⁶	5.8 ⁶	4.4	5.2
	M ₃	11–15	–	–	20.7 ⁶	20.7 ⁶	19.5	20.9
Italy	CPS	7	5–9	6–10	11.4	10.2	13.4	9.9
	M ₂	7–11	6–9	6–9	9.4	8.4	10.2	7.0
Spain	ALP	9½–12½	6½–9½	8–11	11.9	14.0	11.5	13.8
Switzerland	CBMA	2	2	3	2.0	3.0	3.2	1.3
Netherlands	DM ₂	5½–6	11–12 ⁷	–	9.6	13.6 ⁷	6.9	n.a.

¹ TDND = total domestic debt of non-financial sectors; CBM = central bank money; M0 = wide monetary base; CPS = credit to non-state sector (including certain public sector enterprises); ALP = liquid assets in the hands of the public; CBMA = adjusted monetary base; DM₂ = contribution to M₂ creation by the banking system (the increase in bank credit to the private sector and in long-term bank credit to the public authorities minus the increase in banks' long-term liabilities). ² For TDND in the United States, monitoring range only; for M₂ + CDs in Japan, projection only. ³ Periods running from the fourth quarter to the fourth quarter for the United States, Japan (except 1988, second quarter to second quarter), Germany and France; and from December to December for Italy, Spain and the Netherlands. For the United Kingdom, twelve-month periods ending in March. Annual averages for Switzerland. In the United Kingdom the 1986 target for sterling M₃ (subsequently renamed M₃) was suspended in October 1986. ⁴ Calculated on the same basis as the objective. ⁵ Based on quarterly averages. ⁶ Twelve months to March 1987 and 1988. ⁷ For a period of twenty-four months ending in December 1987.

Sources: National data.

banks and thrift institutions in adjusting interest rates on their deposits to movements in money market interest rates have given rise to large swings in the incentive to hold bank deposits. This behaviour, which had been an important influence on the rapid growth in the narrow aggregates in 1986, contributed to the slowdown in their growth rates last year. Largely as a result, growth in chequable M₁ deposit accounts and savings accounts contributed little to broad money growth, while placements in time deposits and in money market instruments expanded strongly.

Components of the increase in the broad money stock and in total liquidity ¹							
Countries and periods	Currency	Demand deposits	Other M ₁ accounts ²	Time deposits	Savings deposits ³	Market paper ⁴	Increase in M ₃ as a percentage of the change in liquidity
	December-to-December change as a percentage of the increase in the broad money stock						
United States							
1972–86	5	6	7	29	28	25	85
1986	4	13	19	–9	54	19	95
1987	10	–9	14	35	5	46	89
Japan							
1972–86	7	18	n.a.	71	n.a.	5 ⁵	60
1987	6	6	n.a.	88	n.a.	–1	66
Germany							
1972–86	10	22	n.a.	26	42	n.a.	n.a.
1987	19	23	n.a.	13	44	n.a.	n.a.
France							
1978–86	5	37	n.a.	18	37	12 ⁶	88
1987	3	17	n.a.	24	17	39	68
United Kingdom							
1972–86	12	20 ⁷	23 ⁷	46	n.a.	n.a.	56
1987	2	10	37	50	n.a.	n.a.	81

¹ Broad money stock: M₃ (for Japan, M₂ + CDs); total liquidity: for the United States and France, L; for Japan, M₃ + CDs; for the United Kingdom, M₄. ² Interest-bearing component of M₁. ³ For the United States, includes money market deposit accounts and general purpose mutual funds. ⁴ For the United States, large time deposits; for Japan and France, certificates of deposit. ⁵ 1979–86. ⁶ 1985–86. ⁷ 1976–86.

Sources: National data.

In Japan part of the relatively rapid growth of M₂ + CDs last year may be attributable to continuing rapid growth in time deposit balances following the further lowering in early 1987 of the minimum size of placements which may be remunerated at unregulated interest rates. An increased volume of transactions in financial assets contributed to a marked decline in the velocity of money balances held by the corporate sector. Largely reflecting the relatively modest growth of postal deposits, the broader monetary aggregate M₃ + CDs continued to grow somewhat less rapidly than M₂ + CDs.

Deregulation in Japan

In Germany the behaviour of the monetary aggregates was broadly in line with previously established relationships with nominal income and interest rates. The Bundesbank had frequently pointed out that in 1986 and 1987 the rise in the central bank money stock (which consists of the banks' required minimum reserve holdings with respect to their domestic liabilities at 1974 reserve ratios plus notes and coin in circulation) had been influenced by the strong growth of the large currency component and might be overstating to some extent the underlying rate of monetary expansion. The interest sensitivity of the demand for currency in Germany has long been much greater than that in some other countries, though the recent rapid growth in the demand for currency may also be directly related to expectations of exchange

Interest rates and external influences in Germany

Liquidity
preference and
structural
changes in other
countries

rate appreciation. The growth of M_3 was strongly influenced by capital inflows in the first half of the year, which kept long-term interest rates below levels that would have made bank bonds attractive to domestic investors.

In France the fast growth of M_3 could to a large extent be attributed to an increase in liquidity preference on the part of investors, reflecting their expectation of higher long-term interest rates. The growth of time deposits, and especially of certificates of deposit, newly introduced in 1985 and included in M_3 but not M_2 , remained high, notwithstanding a selective increase in the reserve requirements applying to them in June. In particular, there was a shift in investment trust portfolios towards M_3 claims, and the public's placements in specialised money market mutual funds also increased markedly. In the United Kingdom continuing competition between banks and building societies was reflected last year in a strong rise in M_4 and an even stronger rise in M_3 , which excludes the liabilities of the building societies. Part of the latter rise was attributable to a shift in building society assets from government securities to bank deposits and a build-up of deposits by other parts of the financial sector as their activities expanded.

In Switzerland strong growth in the demand for currency contributed to a quickening in the growth of central bank money in the first half of last year. At the beginning of the summer the National Bank concluded that the degree of restraint on bank reserves which would be required to prevent overshooting of the monetary target could result in excessive upward pressure on the Swiss franc exchange rate vis-à-vis other European currencies and indicated its willingness to tolerate above-target rates of monetary growth.

Growth in bank
lending a major
counterpart of
fast money
stock growth

In many other countries monetary developments have to be interpreted in the light of very rapid rates of growth of bank credit to the private sector. Bank credit made a substantial contribution to the growth of the broad money stock last year in Japan, France, the United Kingdom, Canada, Sweden and Spain. While the rise partly reflected a strong underlying growth of domestic demand, it also served in many countries to finance speculative transactions in land and financial assets. In Japan one factor was the further fall in bank lending charges, but the corporate sector also made extensive use of bank credit to finance transactions in domestic and foreign securities. In Italy, where the acceleration in the growth of lira credit to the non-state sector in the first half of 1987 partly reflected currency speculation, it was checked by the credit ceiling introduced in September but the contribution of credit to the state sector to monetary expansion almost doubled. In France and Sweden the earlier removal of direct controls on bank lending and increased competition between financial institutions contributed to a sharp rise in bank credit, in particular to the household sector. In the United Kingdom continued rapid growth of bank mortgage credit reflected aggressive efforts by banks to expand this type of lending, which they had come to regard as particularly lucrative. In many countries households' incentive to incur debt is affected by the tax-deductibility of mortgage interest payments, though steps have recently been taken to limit this in some cases. In the United States, where a phasing-out of the tax-deductibility of interest payments on consumer credit began in 1987, banks introduced "home equity" credit lines which give home

Changes in the broad money stock and the contributions of selected counterparts								
Countries	Broad money stock ¹		Credit to enterprises and households ²		Credit to public authorities ³		Net foreign assets ⁴	
	1986	1987	1986	1987	1986	1987	1986	1987
	December-to-December change as a percentage of the broad money stock							
United States	9.3	4.8	7.3	5.5	3.1	2.0	-2.2	-2.6
Japan	9.2	10.8	9.6	11.3	1.3	0.1	-2.3	-0.9
Germany	6.7	5.8	7.5	5.8	0.8	2.5	5.7	5.1
France	4.7	9.0	9.6	14.4	1.2	-0.6	2.3	-0.8
Italy	9.4	8.4	5.3	4.2	5.6	10.6	-0.5	0.2
United Kingdom	20.4	22.8	24.3	25.4	-1.0	-1.0	-1.9	1.7
Spain	12.2	13.6	7.0	10.6	7.9	4.9	0.9	2.9
Netherlands	5.1	3.9	14.0	8.9	4.5	-0.6	-5.5	1.6
Belgium	10.3	8.0	5.1	6.6	7.1	4.9	-4.3	-0.1
Sweden	10.9	4.0	12.6	13.7	1.7	-3.0	-1.2	-0.9

¹ For Japan, M₂ + CDs; for Italy, the Netherlands and Belgium, M₂; for Spain, ALP; for other countries, M₃. ² For the United States, commercial banking and savings institution credit excluding Treasury securities; for the United Kingdom, sterling credit. ³ For the United States, Federal Reserve, commercial banking and savings institution acquisitions of Treasury securities; for France and Sweden, central government only. ⁴ Banking system; for the United States, includes US official reserve assets and liabilities to foreign official institutions plus other net bank-reported claims on non-residents.

Sources: National data.

owners easier access to mortgage credit, on which the interest payments remain fully tax-deductible.

In most cases external monetary flows did not constitute an important balance-sheet counterpart of broad money creation last year. In many countries, including Japan, an increase in the central bank's net foreign assets was partly offset by a deterioration in the net foreign position of the banks. The situation was strikingly different in the case of Germany, where the external current-account surplus was not associated with large-scale outflows of funds on non-bank account. In Germany and the Netherlands the implied external surplus position of non-banks moderated their demand for domestic bank credit. In both countries a fall in short-term bank credit combined with a substantial rise in long-term bank lending seemed to reflect a view taken by borrowers that long-term interest rates were likely to rise.

Developments in targeting procedures

At the beginning of 1988 the outlook for the real economy, inflation and the current account was more uncertain than usual in many countries. Given that the causes of the instability in the financial and foreign exchange markets which had so obviously constrained monetary policy in 1987 had not fully disappeared, a reappraisal of the targeting procedures at the end of the year was extremely difficult. There was also some discussion about the need to continue quantitatively oriented strategies in the absence of strong indications of an immediate acceleration of inflation. Nevertheless, in all countries strategies with a medium-term orientation were maintained, even though

Small external contribution to money growth except in Germany

Targeting procedures kept in place and adapted

various changes were made in the targeting procedures. Furthermore, it is felt in some countries that, although formal target commitments may not be warranted, publicly announced norms or projections for particular monetary or credit aggregates can be useful in the conduct of monetary policy.

Wider M_2/M_3
ranges in
United States

In the United States the Federal Reserve lowered the midpoints of the target ranges for M_2 and M_3 for 1988 from 7 to 6% but widened the ranges with a view to permitting outcomes for monetary growth that would be consistent with satisfactory economic performance. Although the Open Market Committee expected M_2 and M_3 to grow at rates close to the middle of their target ranges, it accepted that the outcome could differ if significant changes in interest rates were required to counter an unanticipated weakness in aggregate demand or an intensification of inflation. While the growth in the debt aggregate will continue to be monitored, no target for M_1 was established because the Committee considered that M_1 had been affected more than the broader aggregates by deregulation and financial innovation and that its relationship with other economic variables was still unpredictable.

Rapid $M_2 + CD$
growth projected
in Japan

During 1987 the Bank of Japan frequently expressed the views that price stability was a necessary precondition for sustained growth of domestic demand and that excessive monetary expansion could cause inflation to accelerate in the longer run. Steps were taken to moderate the growth in bank lending, in particular for financing purchases of land or securities. However, the official projection for the second quarter of 1988 implied that the rate of growth of $M_2 + CD$ s would remain at about 12%.

Target expressed
in terms of M_3 in
Germany

In January 1988, a month later than has been customary, the Bundesbank announced a 3 to 6% target range for the expansion of the money stock in Germany in 1988. Although the target was the same as that set for 1987, the objective was expressed in terms of M_3 instead of central bank money, the aggregate employed ever since a formal monetary target was announced for 1975. As most of the banks' liabilities to residents which are subject to reserve requirements (and are, in effect, weighted by reserve requirements in computing central bank money) are included in M_3 , growth rates of central bank money and M_3 have been similar over long periods. Last year the growth rate of M_3 , at around 6%, was close to the upper limit of the target range for monetary expansion. The target midpoint for M_3 of 4½% in 1988 takes into account the medium-term rate of growth of productive potential in the economy (estimated at 2%), an unavoidable rise in the price level (2%) and a small effect from the trend fall in the velocity of the aggregate.

Targets for M_2
maintained in
France and Italy

In France objectives for the monetary aggregates have to some extent been designed to reinforce market confidence in exchange rate policy. Given the official forecasts of slightly faster real growth and a lower inflation rate in 1988, it was decided to maintain the target range for the growth of M_2 at 4 to 6%. It was stated that developments in the other aggregates, especially M_3 and L , would be monitored closely and that particular attention would be paid to domestic credit expansion. In Italy the greater part of total domestic credit expansion consists of lending to the Government. Since the Government had undertaken to bring the state sector borrowing requirement down in 1988, keeping M_2 growth in line with nominal GDP seemed likely to be consistent

with a slightly higher target midpoint of 8% for the growth in credit to the non-state sector (which includes certain public enterprises). The range takes account of the possibility of a weakening of private credit demand, on the one hand, and of increased recourse by public sector enterprises to borrowing from banks, on the other.

In the United Kingdom the Chancellor of the Exchequer indicated in his budget speech in March 1988 that the Medium-Term Financial Strategy would continue to provide the framework for reducing the growth of money GDP and that developments in the broad monetary aggregates would be taken into account. Although a new target range for M0 was set, it was pointed out that the exchange rate would continue to play a central role in domestic monetary policy decisions.

More focus on
the exchange
rate in the
United
Kingdom . . .

In Switzerland, where the growth of central bank money had been close to 3% during most of 1987, the raising of the target for adjusted central bank money for 1988 did not signal an easing of monetary policy. It was expected that inflation would remain moderate and that the higher target would allow the authorities to react flexibly to disturbances in the financial and foreign exchange markets. The possibility was not excluded that the monetary target could be undershot if the introduction of new liquidity requirement regulations for banks or recent changes in the clearing system led to a reduction in the banks' demand for reserves.

. . . and
Switzerland . . .

In Canada, where the targeting of M_1 was abandoned in 1982 because of financial innovation, the authorities have continued to search for alternative aggregates which could be used as intermediate targets of monetary policy. Exchange market management has played an important role since 1982, especially at times when a lack of confidence in policy has been reflected in strong downward pressure on the Canadian dollar. More recently, concern about the inflationary consequences of a strong expansion in domestic demand has increased, and attention has again turned to the monetary aggregates. Over the last few years the broader aggregates M_2 and $M_2 +$ have tended to move in line with nominal spending over periods of about twelve to twenty-four months. The acceleration in the growth of these aggregates to over 10% in early 1987 influenced the decision to tighten monetary policy. However, the intention is not to re-establish formal targets for any aggregate but only to use the aggregates as policy guides.

. . . but
aggregates
restored as
guides in Canada

The Netherlands Bank's temporary arrangement with the banks for reducing the expansion of their net money creation operations was terminated last year. With a view to providing an alternative instrument for influencing the term structure of interest rates so as to stimulate non-bank investment in capital market instruments and help to moderate the growth of the money stock, the Netherlands Bank has made arrangements with the Treasury to build up a portfolio of government bonds which will permit it to conduct operations in the capital market. In this connection agreement has been reached on the introduction of a system of reserve requirements for banks.

New instruments
in the
Netherlands

In short, monetary targeting strategies in most countries have been kept in place, though current procedures allow for a high degree of policy latitude in the short run.

Official foreign exchange market intervention and monetary policy

The impact of official exchange market intervention on international liquidity is discussed in Chapter VII. The question addressed here is how official purchases of foreign exchange on a scale large enough to finance — directly and indirectly — much of the US current-account deficit affected monetary developments in other countries last year.

Influences on the central bank money stock								
Items and periods	Japan	Germany	France	Italy	United Kingdom	Canada	Belgium	Netherlands
	change as a percentage of central bank money stock at end of previous year ¹							
Central bank net foreign assets ²								
1979–86 average ³	– 1.4	–2.6	6.9	0.7	– 4.1	– 1.5	– 3.3	3.3
1987	18.4	17.5	–20.7	4.9	79.4	19.9	20.2	19.2
Central bank loans, market operations ⁴								
1979–86 average ³	4.3	3.1	1.7	0.9	17.6	5.3	– 2.5	2.9
1987	3.0	–4.4	29.2	–3.5	–52.0	5.0	– 0.4	–16.5
Other domestic influences ⁵								
1979–86 average ³	2.6	5.1	0.8	12.1	– 8.9	1.1	7.5	– 0.2
1987	–12.3	–4.8	– 0.4	8.5	–23.1	–15.7	–17.2	9.2
Central bank money stock ⁶								
1979–86 average ³	5.5	5.6	9.4	13.7	4.6	4.9	1.7	6.0
1987	9.1	8.3	8.1	9.9	4.3	9.2	2.6	11.9

¹ Flows net of valuation changes, partly estimated by the BIS. For Germany, France and Canada, based on monthly averages of daily or weekly data; for other countries, month-end data. ² Excluding foreign exchange swaps used for the purpose of influencing bank liquidity. For Japan, the United Kingdom and Canada, operations of the government foreign exchange fund. ³ For the United Kingdom, 1981–86. ⁴ Lombard and (except for Germany) discount credit; outright open market purchases and sales of bills and securities, special loans at market interest rates and government deposits transferred to the market. ⁵ Includes movements in the government accounts and, in the case of Germany, the effect of changes in reserve requirements and discount quotas. ⁶ For Germany, at December 1974 reserve ratios; for the United Kingdom, M0; for other countries, currency and bank reserves.

Sources: National data.

Large scale of intervention

A large part of last year's increase in official holdings of foreign exchange was concentrated in industrial countries other than the United States. It is of interest to set net acquisitions of foreign exchange by the monetary authorities in the major countries in relation to other developments in their balance sheets. One way of doing this is to compare the "contributions" of transactions in domestic and foreign assets to the growth of central bank money (basically currency and bank reserves). Net official sales of domestic currency against foreign exchange during the year are thereby set in relation to the level of the central bank money stock at the end of the previous year. This measure highlights the enormous size of official intervention operations, by the standards of the previous eight years, in nearly all of the countries shown in the table, even allowing for some conceptual differences between the data for individual countries. The very high figure for the United Kingdom, the

relatively low one for Italy and the negative value for France indicate the importance of policies designed to stabilise exchange rate relationships among European currencies.

It is often assumed, without analysis of the linkages, that large increases in international liquidity are inherently inflationary. In fact, the effects of changes in central banks' external positions on monetary developments in individual countries are much less direct than is often supposed. Central banks in most industrial countries set operating objectives for short-term interest rates which are designed to be consistent with the intermediate and ultimate objectives of monetary policy. In other words, interest rate determination normally implies an explicit policy decision, which may, however, take exchange rate considerations into account. The central bank's instruments are used to regulate the supply of bank reserves in a manner consistent with the operating objective for interest rates. In the short run banks' demand for reserves is accommodated and undesired effects of official purchases or sales of foreign exchange on the supply of bank reserves are more or less automatically offset, along with the undesired impact of domestic disturbances such as changes in the government's position with the central bank. There is little point in calling this behaviour of central banks "sterilised" intervention. Institutional and behavioural constraints on portfolio adjustments by banks and non-banks are such that there is virtually no alternative to this course of action. The wide swings in money market interest rates which would result from the absence of central bank action to counter disturbances in the supply of bank reserves would serve no useful purpose from a policy point of view.

The instruments used for regulating the supply of bank reserves vary from country to country, but they have in virtually all cases proved adequate for the purpose, even in the context of the large-scale official intervention which took place last year. In the United States the relatively small potential effects on the supply of bank reserves of exchange market intervention by the Federal Reserve and the Treasury and of movements in the dollar balances of foreign central banks at the Federal Reserve were routinely offset by open market operations. In Japan, where much larger volumes of intervention in dollar terms remained modest in relation to movements in the government accounts at the central bank and the note issue, the Bank of Japan cut back the rate of its lending to banks and at times sold Treasury bills on a considerable scale to counter the impact of official exchange market intervention on bank reserves. In Germany the procedure used by the Bundesbank involved foreign exchange swaps with the banks, a cutback in purchase and resale transactions in securities, sales of short-term Treasury paper, increases in reserve requirements and reductions in banks' rediscount quotas. In France, where the direction of the pressures on the exchange rate changed during the year, the size of the Bank of France's periodic tender operations was adjusted and, in addition, day-to-day purchase and resale transactions were conducted on an unusually large scale. In the United Kingdom the Bank of England reduced its purchases of private bills. In Canada the offsetting mechanism involved Bank of Canada swaps with the Exchange Fund Account and a shift of government deposits to the banks. In Italy and Belgium the process partly

Intervention,
money market
policies and bank
reserves

Instruments used
to offset impact
of intervention
on bank reserves

operated through induced changes in bank or non-bank demand for Treasury bills and hence in the Government's need for residual financing from the central bank. In Belgium significant cuts were made in the National Bank's credit line to the Security Market Regulation Fund (which indirectly serves to finance the Government).

Other monetary
effects of foreign
currency flows

Foreign exchange flows may influence domestic monetary conditions, however, in a number of other ways. Even intervention which has no effect on bank reserves may have second-round effects on bank credit and the money stock if, as in Japan and Germany last year, central bank action to counter the effects of intervention increases the banks' holdings of secondary liquid assets such as Treasury bills. In the United Kingdom, where the official foreign exchange reserves are held in a Treasury account, the principle of fully "funding" the public sector borrowing requirement implies approximate offsetting of the effect of intervention on the broad money stock by sales of public debt outside the money-creating institutions, at least in the medium term. As noted above, the rapid expansion of bank credit observed last year in many countries can to a large extent be explained in terms of deregulation, declines in short-term interest rates, economic resurgence and speculative activity. But these phenomena can scarcely be regarded as entirely independent of exchange market developments and policies.

The conduct of exchange rate oriented monetary policy in small and medium-sized industrial countries

Countries participating in the exchange rate mechanism of the EMS

Interest rates
reflect inflation
rate
convergence . . .

Last year relationships between interest rate developments in countries participating in the exchange rate mechanism of the EMS reflected the previous convergence of their inflation rates and disturbances stemming mainly from developments in the US dollar. In using nominal exchange rate anchors in monetary policies designed to bring down relatively high rates of inflation, some countries had at times willingly accepted losses of external competitiveness. Despite parity adjustments within the EMS in 1985 and 1986, countries' differing current-account positions suggested a differing ability to cope with a depreciation of the US dollar. Remaining differences in rates of consumer price inflation might be considered small enough to be consistent with stable exchange rates. Yet they still seemed to call for keeping short-term interest rates in most of the countries higher than those in Germany and the Netherlands. In many cases the implied nominal interest rate differentials tended to attract unwelcome capital inflows at times when exchange rates were expected to remain stable but risked being too small to deter capital outflows at times when markets began to speculate on the prospect of an approaching realignment.

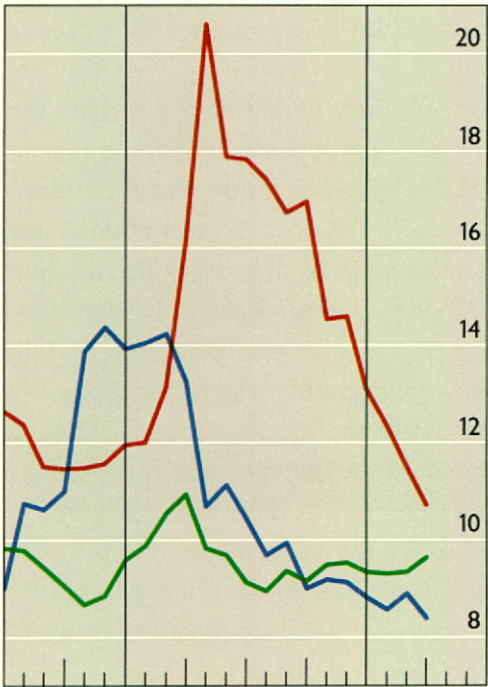
. . . but also
exchange market
tensions

Developments in
specific countries

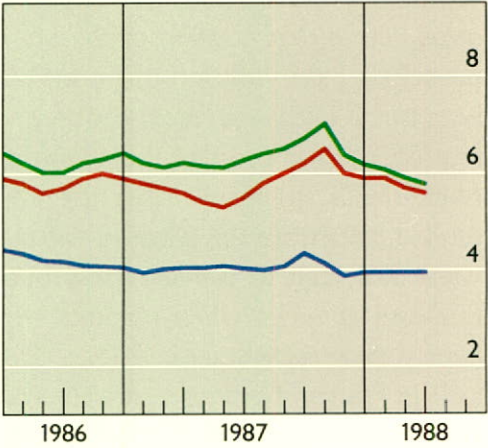
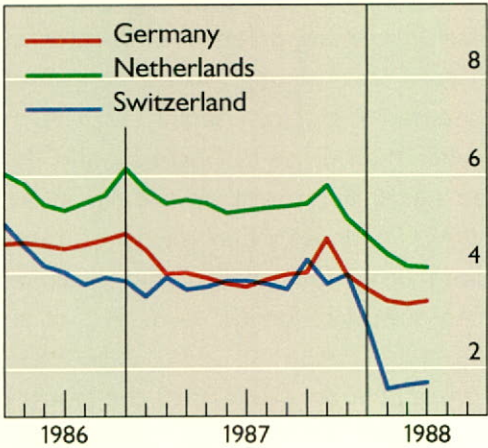
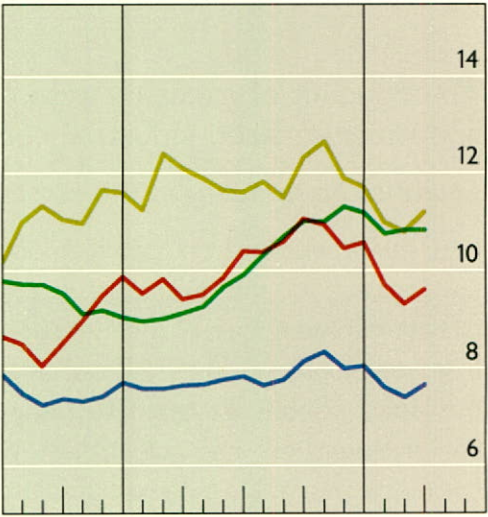
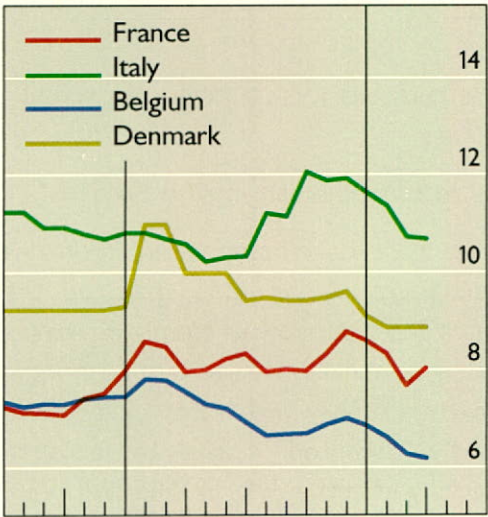
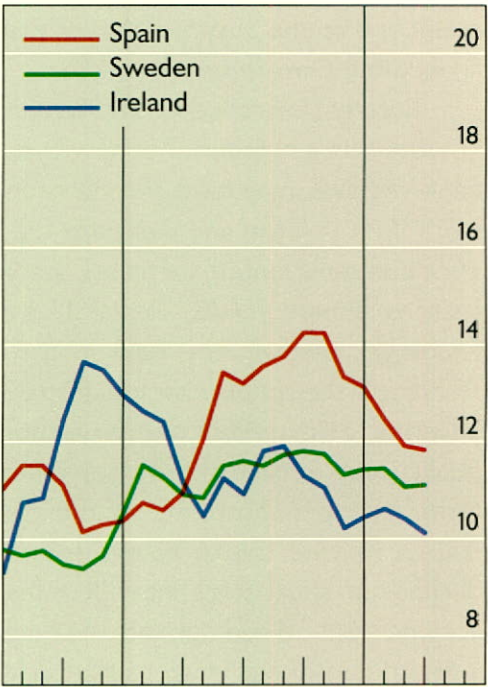
In France short-term interest rates were brought down after the January 1987 EMS realignment and were then kept stable. In November, to counter temporary strains associated with the fall of the US dollar, a rise in the Bank of France's tender rate was co-ordinated with a fall in the Bundesbank's securities

Interest rates in selected European countries, 1986 – 88

Three-month interbank loans¹



Government bonds²



¹ For Italy and Sweden, three-month Treasury instruments; for Denmark, day-to-day loans. ² For France, Italy and Spain, public sector bonds; for Denmark, weighted average of government and mortgage bonds.

repurchase rate. In Italy the overnight interbank rate rose sharply in the spring and summer as monetary policy resisted pressures on the lira, though the Treasury bill rate was slow to follow. Temporary exchange controls on short-term capital movements were introduced in September but were removed ahead of schedule in January 1988. With the guilder at times coming under stronger upward pressure than the Deutsche Mark, the Netherlands Bank's rate for secured advances was lowered independently in four stages between November 1987 and January 1988. By March its special loan rate, which usually has a more direct impact on money market rates, stood several percentage points lower than it had a year earlier. In Belgium and Denmark money market rates came under moderate upward pressure in November but fell on balance between March 1987 and March 1988. In Belgium money market rates continued to be steered by the three-month Treasury bill rate set by the National Bank, which was adjusted frequently and by small amounts to reflect changes in exchange market conditions. In Denmark, with banks remaining indebted to the National Bank, market rates generally followed the latter's borrowing rate against certificates of deposit until July and the rate on the National Bank's newly introduced facility for drawings on current account thereafter. In Ireland money market rates were brought down from the peaks reached in early 1987, and by early 1988 stood at levels close to those of money market rates in France. Representative government or public authority bond yields in France, Italy, Denmark and Ireland displayed a striking tendency to converge in 1987 and early 1988. Following the announcement of proposals to introduce a withholding tax on interest income in Germany, long-term interest rates in the Netherlands and Germany also converged late in 1987, but yields in Belgium remained in an intermediate position.

Questions raised
by further
liberalisation of
capital flows

While participating countries consider that the EMS exchange rate mechanism has made a substantial contribution to monetary and price stability in the region, questions have recently been raised about the implications of liberalising capital movements in the European Economic Community for the conduct of interest rate policy in member countries. Also of concern is whether policy adjustments to disturbances which exert downward pressure on some currencies and upward pressure on others could be made more "symmetrical". Looking further ahead, there has been much speculation about the kind of monetary policy and institutional arrangements which the political aim of full economic and financial integration might imply.

Reactions to risk
of realignment
still major source
of disturbances

The predominant kind of disturbance with which short-term interest rate policy has had to cope in countries participating in the exchange rate mechanism has been the market's anticipation of currency realignments, based on the experience that the timing of adjustments has often been determined more by political considerations than by economic needs. Steep increases in very short-term interest rates in the offshore markets for temporarily weak currencies helped at times in the early 1980s to ward off speculation. However, this is not an attractive option when exchange controls can no longer be used for insulating rates in the domestic market. The short-term interest rate adjustments needed to resist realignments have clearly had much less effect on long-term interest rates than realignments themselves, but,

inevitably, the cost has mainly been borne by countries whose currency was expected to depreciate, given the limited scope for declines in interest rates in other countries. To the extent that the problem is now one of gradually convincing the market that large central rate adjustments will be avoided in future, increased willingness on the part of countries to allow exchange rates to move within the limits of the band should increase the cost of speculation and minimise its effect on interest rates.

Pressures on short-term interest rate relationships in the EMS stemming from changes in currency preferences motivated by considerations other than the timing of realignments have been comparatively minor. The impact of disturbances originating in the US dollar market, which were sizable last year, should become smaller if convergence and capital liberalisation tend in time to make the Deutsche Mark and other European currencies closer substitutes in international investors' portfolios. The Basle/Nyborg Agreement, concluded in September 1987, which provides for access to the European Monetary Co-operation Fund for the financing of intra-marginal intervention, permits such intervention potentially to influence bank reserves in creditor as well as debtor countries. The recent examples of co-ordinated interest rate responses should also be noted.

New agreements
on the financing
of intervention

The convergence of inflation rates has been fostered by the decisions of governments and central banks in participating countries to limit the number and scale of exchange rate adjustments within the system. The costs of fighting inflation have no doubt been relatively large in countries where inflation rates were previously high. These countries are now reluctant to jeopardise their hard-won gains by exchange rate changes and evidently hope that any difficulties in the system associated with the depreciation of the dollar will prove to be transitory or that they can be eased by adjustments in fiscal policies in member countries and by increased consultation in the field of interest rates. Proposals which go further call for more explicit co-operation in specifying the aims of monetary policy, a diversification of reserve holdings to reduce the special role of the Deutsche Mark, and more sharing of the burden of intervention. The provision for financing intervention in the Basle/Nyborg Agreement expresses a compromise on burden sharing, but under existing arrangements a degree of interest rate policy autonomy in individual countries and a degree of asymmetry in interest rate responses are still needed to meet common objectives of monetary policy. The role played by exchange rate objectives in controlling inflation still differs from country to country, but exchange rate objectives alone cannot ensure price stability in the system as a whole.

Background to
calls for further
changes in the
EMS

Financial integration in the Community is likely to increase as a result of planned further steps to liberalise capital movements in member countries and to open domestic financial service industries to intra-Community competition. These developments may come into conflict with the aim of stabilising exchange rates and further reduce the scope for national monetary policy autonomy. At present, as is well known, many obstacles still retard progress in monetary arrangements in Europe. Even in countries belonging to the EMS exchange rate mechanism private capital movements have not been

Obstacles to
financial
integration . . .

completely liberalised, and one currency still retains a wide margin of fluctuation. Other Community countries do not participate in the exchange rate mechanism.

... and to full
monetary union

Ultimately economic and monetary union implies permanently fixed exchange rates between Community currencies or a common currency and some form of centralisation of monetary policy decision-making, as has recently been proposed. Clearly, many far-reaching political issues are involved. Two questions which would obviously be raised are what institutional arrangements could provide the guarantee that price stability would be the central goal of a future common monetary policy and how independence from political interference could be achieved. Other considerations are whether new institutions would help to strengthen efforts towards integration, or whether central economic issues should be faced squarely, recognising that they cannot be settled by focusing on currency arrangements alone. Although there are technical aspects for which imaginative solutions might be found by experts, the essence of the problem is the need for hard political decisions involving sacrifices of national sovereignty. It is by no means clear that governments and electorates are prepared to make these.

Monetary policy with exchange rate guides in other countries

Dilemmas caused
by upward
pressures on the
currency in a
context of rapid
money and
credit growth

In some industrial countries the exchange rate standards applied in the conduct of counter-inflationary monetary policy have left a degree of scope for pursuing objectives for the external current account or nominal GNP. Elsewhere, standards have helped to limit losses of international competitiveness in unintended ways. In the United Kingdom exchange rate depreciation in 1986 was viewed as consistent with moderate further declines in inflation following the fall in oil prices. In Canada exchange rate depreciation in 1984 and 1985 following falls in the relative prices of resource exports was seen as likely to have only moderate effects on inflation, given the weakness of aggregate demand at the time. In Spain a fairly stable effective exchange rate implied a depreciation in real terms against European trading partners on balance in 1985 and 1986 as the dollar depreciated. The weight of the dollar in the basket for the currency index which the Bank of Sweden uses as a monetary standard has contributed to the downward adjustment of the Swedish krona vis-à-vis most European currencies since 1985. By last year the dilemma faced by the authorities in these countries was that the unsustainably rapid expansion of domestic demand and the medium-term risk of a rise in inflation seemed to call for relatively high short-term interest rates. However, favourable nominal interest rate differentials vis-à-vis other currencies tended to attract inflows of funds from abroad. In most cases appreciation seemed inappropriate as a response, either because the government wished to retain earlier gains of competitiveness or because of a desire to move towards using a stable exchange rate as a policy anchor in the medium term. Signs of a prospective deterioration in current-account positions suggested that the thrust of the exchange market pressures might subsequently be reversed.

In the United Kingdom the concern in the spring of 1987 was that yielding to upward market pressures on sterling might damage business confidence. Appreciation vis-à-vis the Deutsche Mark, in particular, was resisted both by large-scale official exchange market intervention and by declines in short-term interest rates. Increasingly, however, the authorities became concerned about the outlook for inflation and the sustainability of the pace of economic expansion. Short-term interest rates were raised in the summer, and the decline that took place after the equity market collapse was reversed in January 1988. In March, after further massive official exchange market intervention, it was decided to permit the exchange rate to move above DM 3.0, which the market had assumed to be the upper limit of an informal target range within which the authorities had been operating. However, a few days later, after the budget had been presented, a cut in short-term interest rates was accepted. How the authorities might act in a situation in which sterling weakened significantly against the Mark was not tested last year, and the longer-term question remains whether effectively stabilising the exchange rate can contribute to moderating domestic cost pressures in the absence of a more binding exchange rate commitment.

Policy responses
in the United
Kingdom . . .

In Canada prospective pressures on productive capacity led last year to increasing concern about the risk of an acceleration of inflation. While relying heavily on exchange market intervention for resisting short-term exchange rate movements, the Bank of Canada encouraged a rise in the short-term interest rate differential vis-à-vis the United States and accepted an appreciation of the Canadian dollar against the US dollar in order to help moderate the pace of the economic expansion.

. . . Canada . . .

In Spain, where the policy of lowering the inflation rate has been based mainly on objectives for the money stock, reference paths for the exchange rate have projected a rate of depreciation which compensates for the rate of inflation being higher in Spain than in its European trading partners. In early 1987, in the context of a rapid expansion of domestic demand, short-term interest rates were raised. Despite large official purchases of foreign exchange and a reintroduction of exchange controls, the peseta appreciated strongly. Late in the year short-term interest rates were lowered and an overshooting of the monetary objective was accepted, though the pace of the economic expansion remained a cause for concern. In Sweden a relatively high inflation rate and an unsustainably strong growth in consumption expenditure also called for a firm stance of monetary policy last year. To counter strong speculative capital inflows, the Bank of Sweden at times allowed the effective exchange rate to reach the upper limit of its fluctuation band.

. . . Spain . . .

. . . and Sweden

Flexibility in exchange rate based monetary policies

To the extent that countries have used exchange rate objectives as an anchor for counter-inflationary monetary policy, the exchange rate objective can hardly be viewed as conflicting with long-run domestic considerations. The exchange rate policies followed by many European countries are based on the conviction that necessary adjustments in the economy can most appropriately

Potential
advantages and
risks . . .

be effected by fiscal and structural measures. In some cases, however, concerns about the ability to meet growth objectives following, in particular, a large depreciation of the dollar against other currencies may have reopened questions which were thought to be resolved. In Canada monetary policy, in seeking to control inflation in the medium term, has often been geared to balancing the impact on nominal spending of changes in interest rates and short-term movements in the exchange rate. In striking contrast, the "hard-currency" policies pursued in many European countries are based more on concern about the cost impact on domestic prices of exchange rate changes. In some cases measures taken in recent years to reduce the role of indexation in wage-fixing may have weakened this link. However, experience in a range of countries with differing exchange rate standards has not resolved the question of how sustainable gains in competitiveness from exchange rate depreciation are likely to be in relatively open economies.

Inflation-adjusted bond yields, March 1988 ¹							
Germany	France	Italy	Belgium	Nether-lands	Ireland	Spain	Portugal
4.6	7.1	5.9	6.7	5.2	8.2	7.3	5.5 ²
Austria	Switzer-land	Denmark	Sweden	Norway	Finland	United Kingdom	Canada
4.4	2.0	6.5	5.6	6.6	6.4	5.5	6.0
¹ Yield on representative long-term bonds minus change over last twelve months in consumer prices, in percentages. ² February. Sources: National data.							

... including
unwelcome
long-term
interest rate
effects

Countries also have to take into account the likely effect of exchange rate changes on their long-term interest rates. In some countries the level of bond yields in relation to current rates of consumer price inflation is regarded as a cause for concern. In early 1988 such adjusted rates stood between 4 and 8% in most European countries. The differences did not seem to correspond closely to government budgetary positions, perhaps because of the extent to which recourse has been made to external and short-term financing for covering very large financing requirements. In a context of increasing capital market liberalisation, expectations of long-run exchange rate developments have apparently come to play an important role. Irrespective of the exchange rate system, exchange rate expectations seem in many cases to be related to anticipated inflation differentials because of the experience that exchange rate developments and inflation performance have generally been closely linked in all but the largest countries. Markets may also have regard to current and prospective current-account positions. However, in recent years an increasing number of countries have become aware of the way past exchange rate depreciation seems to have delayed a build-up of confidence in the credibility of their policies and to have retarded declines in their long-term interest rates as inflation abated. Not surprisingly, countries take this into account in evaluating their exchange rate strategies.

The risk of excessive dependence on monetary policy

Last year monetary policy had to be framed in a context of continuing large international payments imbalances, periodic exchange rate volatility and reduced private foreign demand for US financial assets. For diverse reasons countries agreed to attempt to stabilise the dollar. This did not imply full agreement about the growth conditions under which external deficits could best be reduced, but it was generally agreed that supporting fiscal adjustments were needed. Given the difficulty experienced by the US Administration and Congress in agreeing on substantial budgetary retrenchment and the domestic consensus supporting fiscal consolidation in other countries, monetary authorities had to cope with the situation as best they could. When private investors outside the United States proved unwilling to continue accumulating US dollar assets at going exchange rates, central banks did so on a massive scale. With the pace of external adjustment at times testing market and even official patience, the attempt to use intervention and monetary policy to stabilise exchange rates seems to have served to shift pressures to the bond and equity markets. Holding short-term interest rates down implied rapid rates of monetary expansion in many countries. In early 1988 the exchange markets were calmer, but there was continued concern about the durability of major exchange rate relations, given growth differentials between countries, the continued need for fiscal correction in the United States and the noticeable but still modest improvement in the US external payments position.

Monetary policy in the United States has for some time been adapted to compensating for the aggregate demand impact of budgetary retrenchment and changes in the external current-account deficit in a way which is designed to continue the expansion in economic activity. As this objective has not always been consistent with stabilising developments in the monetary aggregates, the conduct of monetary policy has come to be based on observations of developments in a range of indicators. In other major countries close adherence to medium-term monetary policy objectives was not a viable strategy in the circumstances prevailing last year. However, monetary authorities are still convinced that price stability is a precondition for sustainable economic growth. Even in a low to moderate inflation environment, central banks remain alert to signs of a resurgence of inflation and inflationary expectations. Should the short-term focus on maintaining economic growth delay a return to a stable medium-term monetary policy course for too long, hard-won gains made in the struggle to bring inflation under control might not be very long-lasting.

External imbalances and fiscal rigidity . . .

. . . place burdens on intervention and interest rate policy

Short-term focus entails risks if inflation revives

VII. The international monetary system

Highlights

The international monetary scene in 1987 and early 1988 continued to be dominated by developments in the dollar market. In view of the very large depreciation that had already occurred, the authorities became increasingly reluctant to accept a further uncontrolled decline of the dollar. At the same time the slowness of the international adjustment process (see Chapter III) weighed heavily on exchange market sentiment and private investors were at times less willing to add to their dollar exposures at prevailing exchange rates. The resultant gap between actual balance-of-payments financing requirements and the volume of spontaneous capital flows led the monetary authorities to play an increasingly active role in the exchange markets. The official strategy, as embodied in the Louvre Accord, was to bolster market confidence by stabilising exchange rates around their prevailing levels while supporting the international adjustment process through appropriate macro-economic policy co-ordination. But in spite of a remarkable strengthening of international monetary co-operation, there were some perceived or real policy slippages. As a result, the dollar suffered from repeated attacks of weakness, and at times confidence could be restored only after substantial further depreciation and very heavy official exchange market intervention.

The exchange rate troubles and related inflationary concerns also left their imprint on developments in the gold market. Despite expanding supplies, the dollar price of gold rose for the third year in succession.

The increasing role of the official sector in financing the US current-account deficit, coupled with EMS operations and currency diversification, contributed to a strong expansion in international reserves last year. However, the bulk of it was concentrated on a limited number of countries, and it does not seem to pose acute inflationary threats for the future development of the world economy.

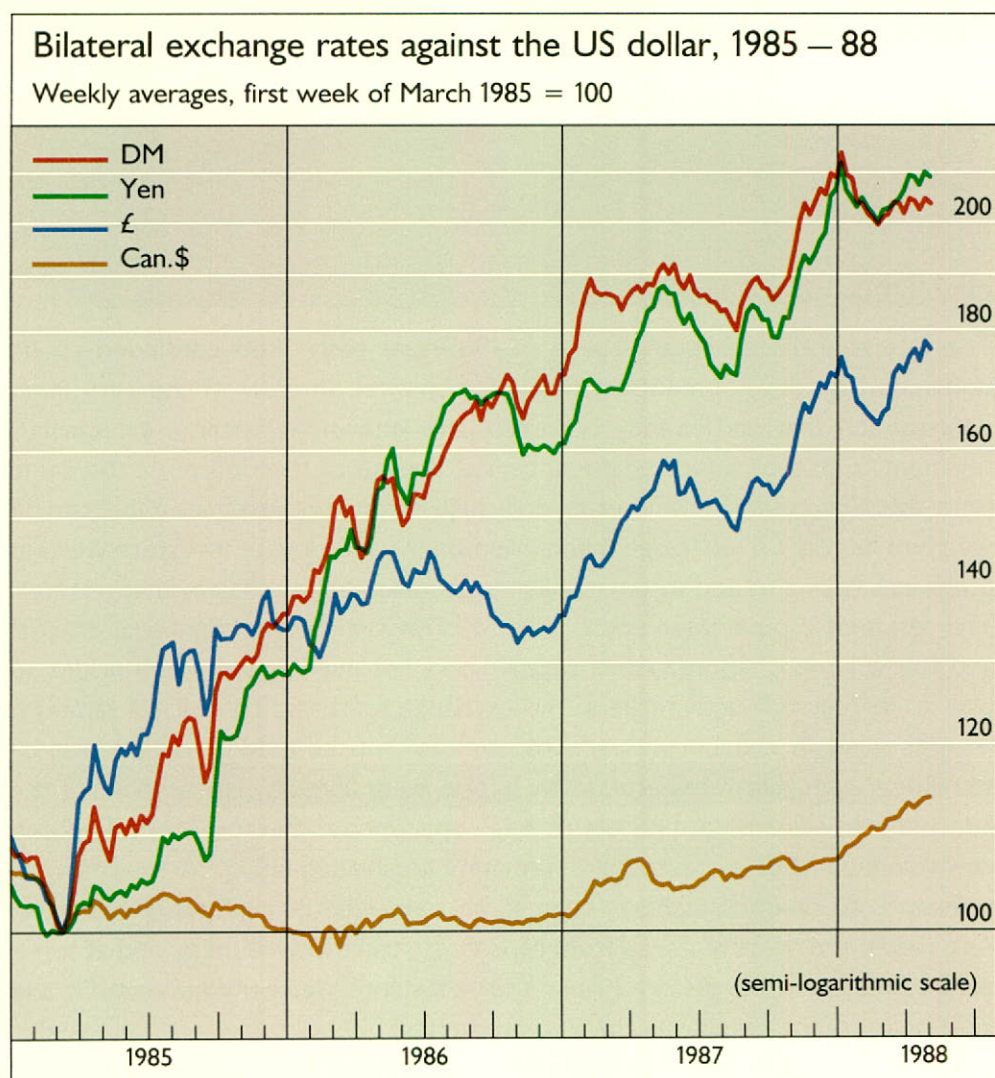
Exchange markets

Current exchange rate developments

The period under review continued to be characterised by repeated bouts of dollar weakness. However, whereas in 1986 the decline of the dollar had been widely welcomed as an indispensable ingredient of the international adjustment process, by early 1987 a consensus had begun to emerge that a further uncontrolled fall of the dollar would entail considerable risks.

Moves in the early months of 1987 to stabilise exchange rates around the levels then prevailing, notably within the framework of the Louvre Accord, and the subsequent severe downward pressures on the dollar in the period from

Official efforts to stem the decline of the dollar



late March to early May were already described in some detail in last year's Annual Report.

The pronounced weakness of the dollar that followed in the early spring of 1987 was due essentially to market doubts about the authorities' resolve to stand firmly behind the Louvre Accord by gearing their domestic policies to exchange rate stability. In addition, confidence was impaired by signs of serious trade frictions between the main industrial countries. The downward pressures on the dollar started in the second half of March and were particularly concentrated on the exchange rate vis-à-vis the yen. The deterioration of market sentiment soon reached a point at which it took a whole gamut of official measures to restore calm and stability.

Market doubts
and official
responses

The first line of defence was exchange market intervention, closely co-ordinated and on a scale previously unknown. The United States itself intervened, selling about \$4 billion out of its official foreign currency holdings in the period from mid-March to mid-May. Japanese official exchange reserves soared by \$16 billion in March and April and those of the United Kingdom, where stability vis-à-vis the Deutsche Mark was also an important consideration, by nearly \$10 billion in the three-month period from March to May.

Record volume
of intervention

Interest rate
responses

The second line of defence was monetary policy. Of course, the exchange rate fears themselves tended to affect interest rates in the United States and the surplus countries, but these interest rate movements were encouraged or validated by domestic monetary policy actions. Here again, the salient feature was the size of the adjustment, particularly of long-term interest rates. In Japan the ten-year bond yield, for example, dropped to a low of 2.5% around mid-May — over 200 basis points below its February level. Movements in long-term bond yields of that speed and order of magnitude were unprecedented. US long and short-term interest rates rose by about 150 and 100 basis points respectively between mid-March and mid-May. As a result, the long-term US interest rate differential vis-à-vis Japan widened from 2.5 to over 6 percentage points.

Moral suasion

A third line of defence was verbal suasion. In early April, on the occasion of the spring meetings of the Bretton Woods institutions, the Group of Seven countries reaffirmed their adherence to the Louvre Accord and its co-operative policy approach. A few days later the Bank of Japan indicated that agreement had been reached with other central banks on currency swaps to be used for supporting the dollar against the yen. In the final days of April, on the occasion of an official visit to Washington, the Japanese Prime Minister and the Chairman of the Federal Reserve indicated that there would, if necessary, be further adjustment in their countries' monetary policies in order to stabilise the dollar/yen exchange rate. In addition, the Japanese authorities brought strong moral suasion to bear on major Japanese exchange market participants to moderate their "speculative" dollar trading.

Finally, there was evidence of more fundamental economic adjustment. In early April the Japanese Government proposed a large and comprehensive supplementary budget to stimulate economic activity and imports, and during May considerable progress was made towards its implementation.

Authorities
prevail over
market forces

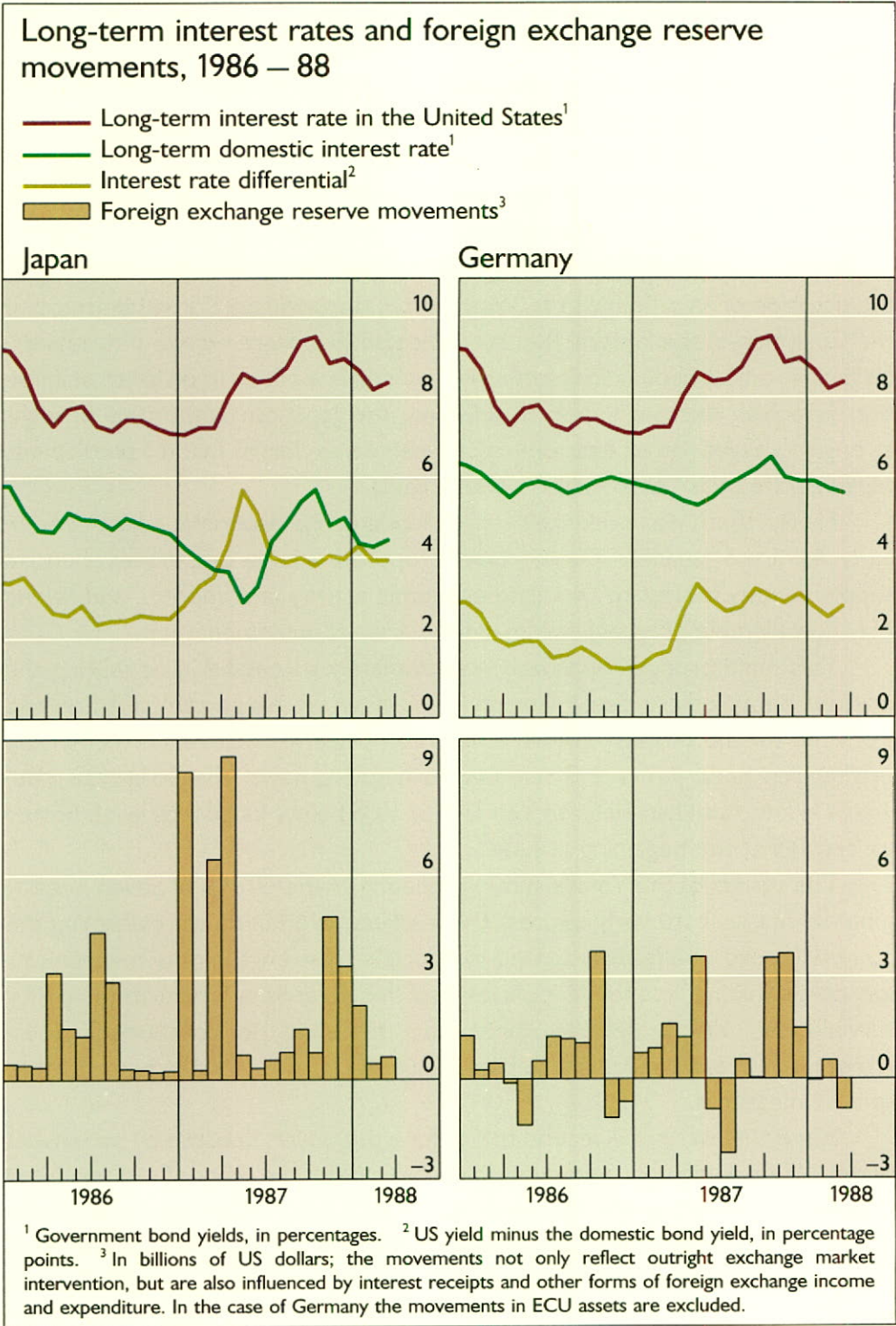
This multi-pronged approach was ultimately successful in reassuring the markets about official determination to maintain exchange rate stability, and from the middle of May onwards the dollar began to recover. Although the market remained jittery and sensitive to negative news, the dollar/yen rate, which in late April had fallen to Yen 138, or 10% below its Louvre level, firmed to Yen 145 at the beginning of June.

The results of the Venice summit meeting of the Group of Seven in early June did not at first overly impress the markets. In addition to reaffirming the Louvre Accord, the leaders agreed in principle to strengthen the mechanisms for co-ordinating economic policies and for exercising multilateral policy surveillance, with a view to "promoting sustained non-inflationary global growth and greater currency stability". But the markets had expected more specific measures.

Temporary dollar
strength

Nevertheless, in the second half of June the dollar, boosted by somewhat better US trade figures, continued to recover. With the fears of further dollar depreciation receding, the high level of US long-term interest rates began to exert a strong pull on foreign investors. Despite an upward movement of Japanese and German interest rates and a resultant narrowing of the interest rate differentials in favour of the dollar, capital flows to the United States began

to exceed the country's external financing requirements, thereby exerting upward pressure on the dollar. By the second half of July the dollar/yen exchange rate was back to around Yen 151, or only 2% short of its Louvre level. The dollar/Deutsche Mark rate began to rise clearly above DM 1.83, its level at the time of the Louvre Accord, and at one point in the first half of August it touched DM 1.90. In fact, in early August, under the influence of increasing tensions in the Persian Gulf, the upward pressure on the dollar became so strong that the US authorities, in co-ordination with the Deutsche Bundesbank and other central banks, began to intervene quite forcefully to



moderate its rise. The US authorities alone sold over \$600 million against Deutsche Mark during this period.

Renewed dollar
doubts

The dollar's strength, however, was only transient. Around the middle of August disappointing trade figures cast doubts on the continued improvement of the US current-account balance. Market sentiment turned around sharply, and co-ordinated official intervention was now required to support the weakening dollar. At the same time, fears of an acceleration in inflation contributed to an upturn in US long-term interest rates. On 4th September the US discount rate was raised from 5.5 to 6%. Although the aim of this move was primarily "to deal effectively and in a timely way with potential inflationary pressures", it also had a calming effect on the exchange markets. When, in late September, on the occasion of the IMF Annual Meeting, the Finance Ministers and central bank Governors of the Group of Seven reaffirmed their adherence to the Louvre Accord and expressed their satisfaction with it, the dollar even staged a modest recovery.

Gaps in policy
co-ordination

However, this breather was short-lived; with the upward movement of interest rates in Japan and Germany at times leading that in the United States, the dollar weakened once more in early October. Further discouraging US trade figures, criticism in the United States of the raising of policy-controlled interest rates abroad, lack of US budgetary progress and hints in official US circles that there would be scope for further currency adjustments did nothing to reassure the markets.

Turmoil in the
stock markets
and exchange
market reactions

The traumatic fall in prices on the US share market on 19th October did not immediately lead to a weakening of the dollar, as it was at first accompanied by a repatriation of US funds from abroad. However, when after a few days the market began to reassess the dollar's position, the adverse winds set in with full force. The stock market crash had wiped out inflation fears overnight. This, together with strong official liquidity support and a "flight to quality", resulted in a steep decline in US short and long-term interest rates. Moreover, in the circumstances it seemed likely that US monetary policy would have to continue to give priority to maintaining financial market stability and avoiding recession, while leaving the dollar exchange rate to find its own level. In fact, the upward spiralling of long-term interest rates internationally prior to the share market turmoil, together with the lack of any evidence of sufficient US budgetary progress, had eroded the markets' belief in the Louvre Accord. Despite vigorous official support, in which the United States also participated, the dollar eased sharply, its Deutsche Mark rate dropping from just over DM 1.80 in the days following the share market crash to a low of DM 1.65 on 10th November. Cuts in official lending rates in early November by three European hard-currency countries, viz. the Federal Republic of Germany, Switzerland and the Netherlands, helped to relieve pressures within the European Monetary System (see page 181) but went largely unnoticed as far as the dollar market was concerned.

Mounting dollar
weakness despite
official
reassurances

On 10th November a statement by the US President to the effect that he did not want to see a further decline in the dollar led to some easing of market pressures, but the dollar remained frail despite continued intervention. A budget compromise reached on 20th November between the Administration

and congressional negotiators to cut the deficit by \$75 billion over two years did not fully convince the markets. Nor did further concerted rounds of reductions in official lending rates in Europe on 24th November and again on 3rd December bring more than limited relief, although they led to a widening of short-term interest rate differentials in favour of the dollar.

The downward pressures on the dollar mounted again after the announcement on 10th December of a record US trade deficit for October. A statement by the Group of Seven on 22nd December reaffirming the basic economic policy objectives of the Louvre Accord and agreeing that a further decline in the dollar would be counter-productive failed at first to impress the markets. Despite heavy co-ordinated official intervention — the US authorities alone bought \$1.7 billion during the second half of December — the currency's plunge accelerated in the last few days of the month, with the downward pressures being particularly strong vis-à-vis the Japanese yen. Around the turn of the year the yen and Deutsche Mark quotations of the dollar reached new lows of Yen 122 and DM 1.58, down by 21 and 14% from their Louvre levels.

At this point, however, the markets had over-extended themselves, and the authorities were quick to take advantage of this fact. Aggressive and closely co-ordinated official interventions around the clock made it clear that the December statement by the Group of Seven had been more than an empty gesture. As a result, market sentiment began to shift and the dollar recovered sharply. On 13th January 1988 President Reagan and the Japanese Prime Minister, Mr. Takeshita, agreed on an arrangement to enable the United States to obtain yen in exchange for SDRs, a move which seemed to underline further the determination behind the Group of Seven's agreement of December 1987. The firmer undertone was subsequently supported by markedly improved US trade balance data suggesting that the adjustment process was finally under way. Japanese statistics showing a narrowing of the country's current-account surplus pointed in the same direction. From mid-January onwards quotations moved within a narrow range around Yen 129 and DM 1.69 until in late March the dollar eased once more and required repeated support, particularly vis-à-vis the yen. The spring meeting of the Bretton Woods institutions in the second week of April brought a reconfirmation of the earlier Group of Seven understandings on policy co-ordination and exchange market co-operation. In mid-April the publication of disappointing US trade figures gave rise to a renewed bout of dollar selling, but the downward pressures were quickly contained through forceful co-ordinated intervention and the dollar subsequently steadied around Yen 125 and DM 1.70.

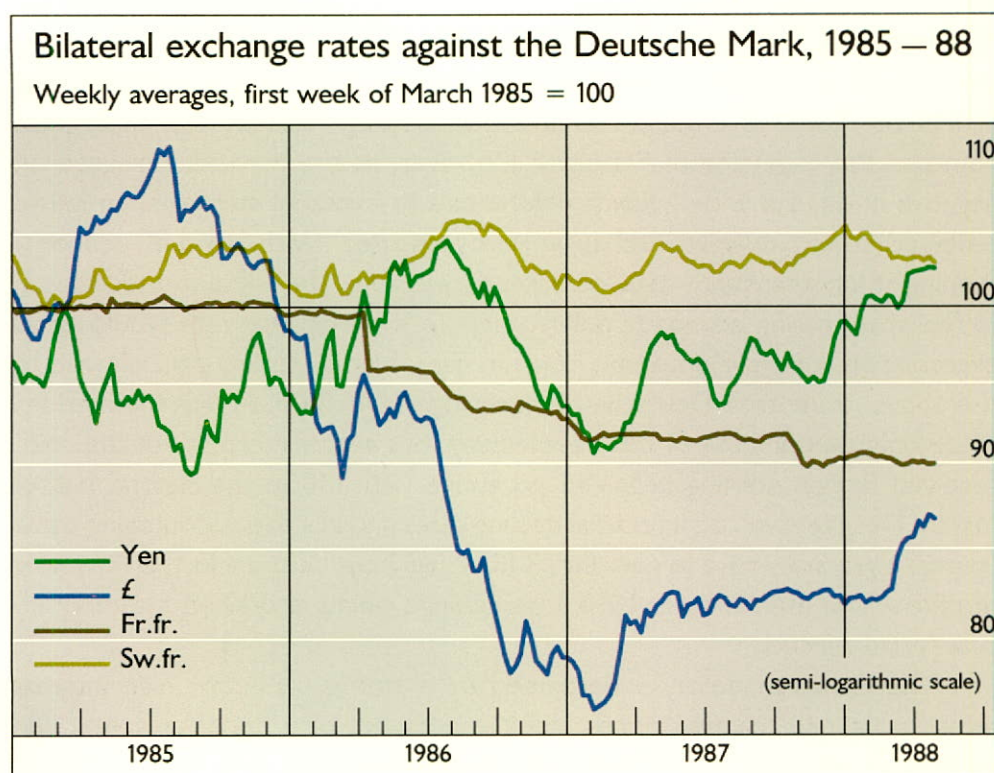
With the dollar stabilising in the early months of 1988, the focus of the markets shifted temporarily to the cross rates between the Deutsche Mark, the yen and sterling. In fact, one salient feature of developments in the period under review was the relatively greater strength of the yen than of the Mark. After easing sharply against the Deutsche Mark in the second half of 1986 and in January 1987, the yen strengthened by over 15% in the course of the following sixteen months. It was particularly firm in March-April 1987, when it bore the main brunt of the strong downward pressures on the dollar, and again between December 1987 and May 1988. During the latter period the

Timely and
successful
intervention

Greater dollar
stability

Strengthening of
the yen against
the Mark

contrast between the performance of the Japanese and German economies had become quite striking. The Japanese economy seemed to have adjusted smoothly to the new exchange rate environment, with both business profits and the economy booming. German growth, by contrast, was muted and it was widely feared that a further appreciation of the Mark could have serious consequences for the economy. In these circumstances a combination of monetary tightening and some further exchange rate appreciation was considered by the markets to be a somewhat more conceivable policy constellation for Japan than for Germany.



Pronounced
sterling strength

Benefiting from steadier oil prices and the high level of domestic interest rates, the pound sterling was for the most part subject to upward pressure in the period under review. Given the underlying strength of the British economy and certain inflationary undertones, monetary policy had to perform a delicate balancing act between the needs of domestic restraint and exchange rate considerations.

After its sharp decline in the second half of 1986 and in January 1987, sterling appreciated persistently against the other EEC currencies, and even more so against the US dollar, until early May 1987, when it reached just under DM 3.00. This appreciation of about 8% against the Deutsche Mark occurred despite a sharp reduction in the official dealing rates, which were cut in four steps between early March and early May, and despite an unprecedented volume of exchange market interventions, which boosted official reserve holdings by nearly \$10 billion in the three-month period from March to May.

In parallel with the gradual recovery of the dollar, the upward pressures on sterling subsequently eased. In early August the authorities took advantage of the currency's weaker tone to raise official dealing rates by a full percentage

point, a move which was prompted by the strength of domestic demand and the worsening trade balance. From late August until February 1988 sterling moved against the dollar almost exactly in line with the other EEC currencies. The official policy was clearly to shadow the Deutsche Mark, or at least to prevent an appreciation of sterling beyond DM 3.00. In the last few months of the year, when the dollar was weakening sharply in the wake of the stock market fall, the Bank of England, in concert with other European central banks, not only cut its dealing rates in three steps, but also intervened heavily in the exchange markets, with its official exchange reserves increasing by a further \$12.6 billion in the October–December period.

Shadowing the Mark

In January 1988 the recovery of the dollar brought temporary relief from the upward pressures on sterling, and following a set of discouraging trade figures the Bank of England raised official dealing rates by 0.5 percentage points at the beginning of February. However, as the markets shrugged off negative news, the wide interest differentials in favour of sterling soon led to renewed strong upward exchange rate pressures. With the UK economy running at full steam and wage increases accelerating, the UK authorities began to feel that gearing economic policy solely to the exchange rate would entail excessive risks on the domestic front. In early March sterling was allowed to rise above its informal Deutsche Mark ceiling of DM 3.00. At first the markets made only cautious use of this new leeway, but in the aftermath of the well-received budget sterling began to go above DM 3.10 in the second half of March. Despite two cuts in official dealing rates and not too encouraging trade figures, it gradually rose to over DM 3.18 in mid-May, before a further lowering of official UK interest rates by 0.5 percentage points produced a temporary downward reaction.

Sterling allowed to appreciate against the Mark

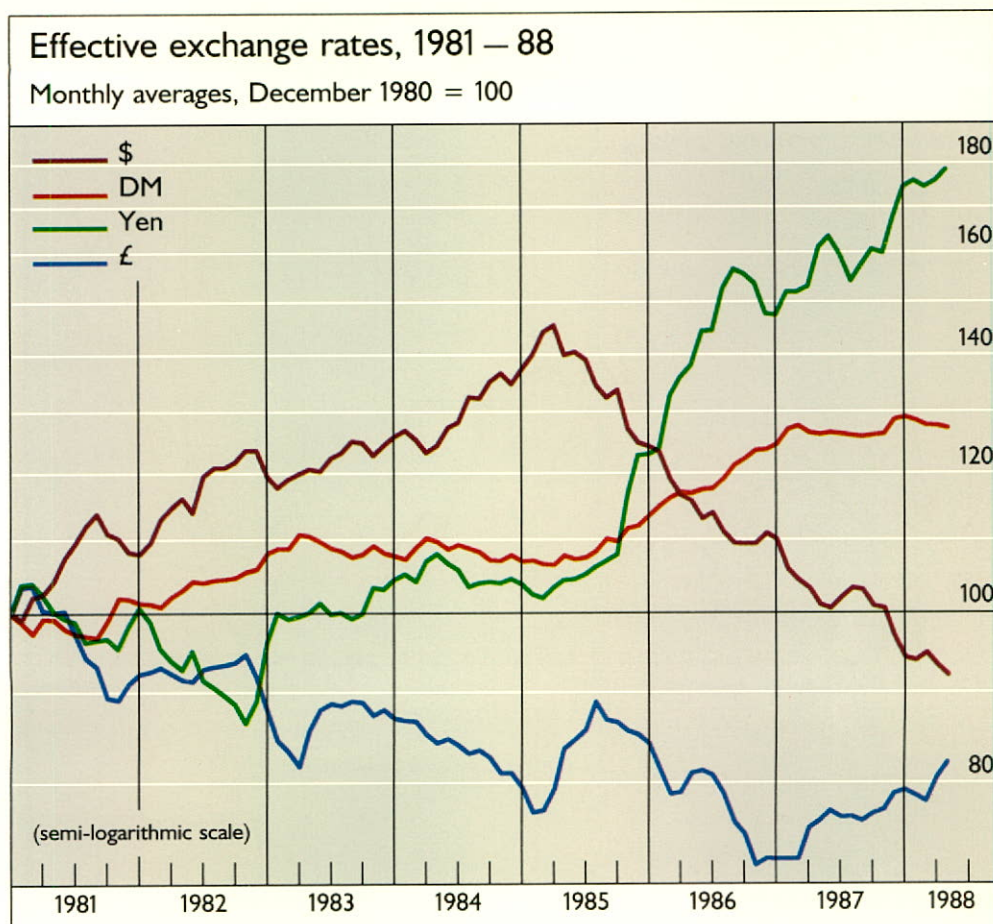
The Canadian dollar, underpinned by a strong economy, high interest rates, rising raw material prices and the prospect of a Canadian free trade agreement with the United States, was for the most part quite firm against the US dollar. Between the beginning of 1987 and mid-May 1988 it appreciated by nearly 12% on a bilateral basis. The upward movement was concentrated on the early months of both 1987 and 1988. During the latter period it not only appreciated against the US dollar but also firmed markedly vis-à-vis the yen and the Deutsche Mark.

Firm Canadian dollar

Longer-term perspectives

The graphs on pages 173 and 174 view exchange rate developments in a longer-term perspective. The graph on page 173 shows the development since end-1980 of the nominal exchange rates of four major currencies, weighted according to the bilateral import shares and to the bilateral and multilateral export shares of twenty-one industrial countries. At the end of 1980, the reference point of this graph, the Deutsche Mark and the yen had come down somewhat from their previous high level of the late 1970s, which, together with the renewed oil price increases, had contributed to the emergence of considerable current-account deficits in Germany and Japan. The US current account was at that time roughly in balance.

Trade-weighted exchange rates



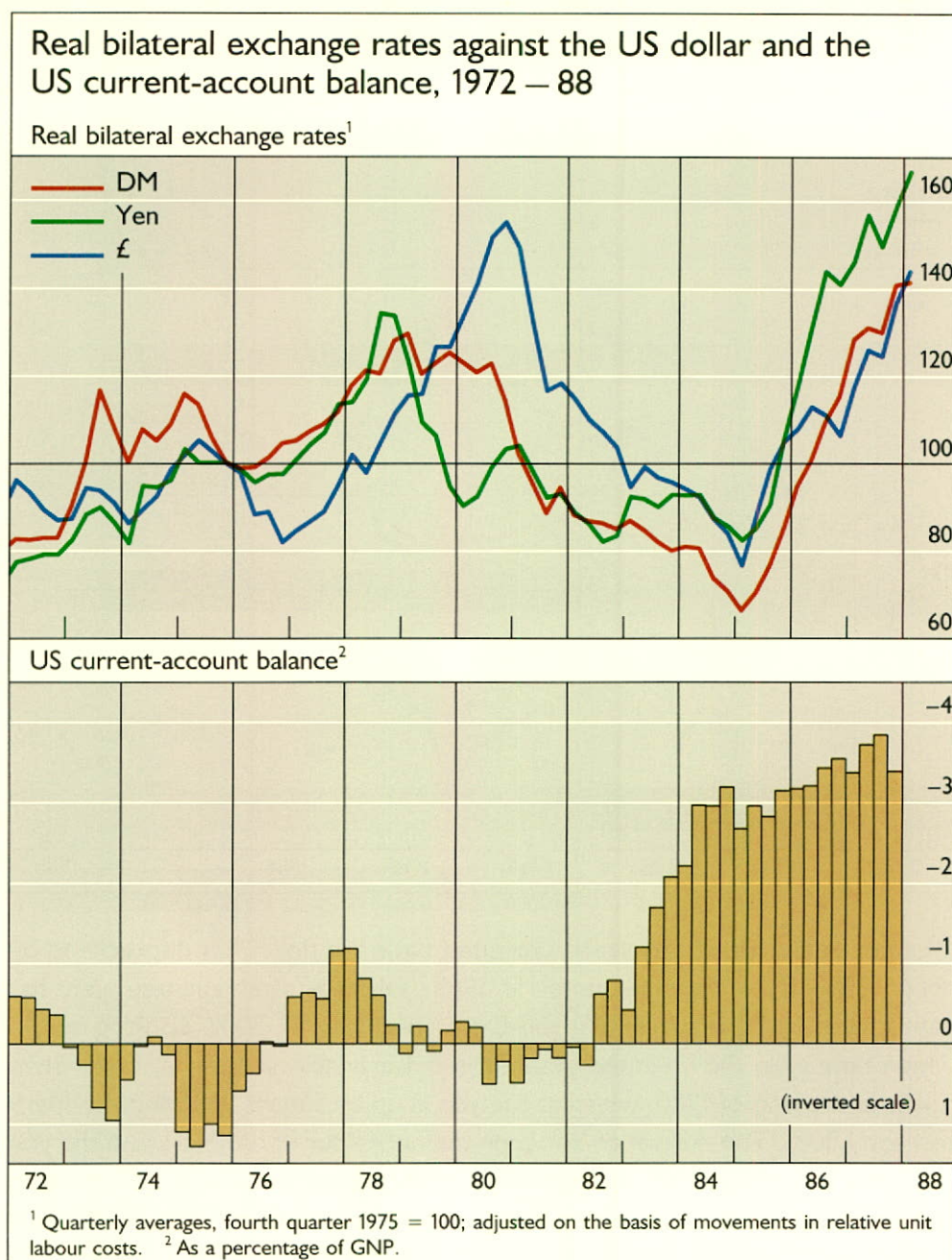
Divergent yen
and Mark
performance

It can be seen that on this trade-weighted basis the dollar has depreciated by about 35% from its peak in early 1985, whereas the Japanese yen has appreciated by about 75% and the Deutsche Mark by 20%. Looking at the whole time span shown in the graph, the dollar is now somewhat lower than it was at the end of 1980, whereas the yen is up by almost 80% and the Mark by nearly 30%. The difference between the behaviour of the Mark and the yen over this 7¼-year period is due to the much greater weight of the dollar in Japan's effective exchange rate than in Germany's, since a very high proportion of Germany's external trade is conducted with other European countries. This accounts for the much steeper rise of the yen since early 1985 and helps to explain why, since the Louvre Accord, the Mark's effective exchange rate has shown hardly any further increase, whereas the yen has appreciated by a further 17%.

It might be added that at end-1980 sterling was at an unusually high level owing to the renewed oil price increases and pronounced domestic monetary stringency. Despite the depreciation of nearly 20% since that date, sterling is therefore not out of line with historical levels (see also the graph overleaf).

Real bilateral
exchange rates

Finally, it should be noted that, because of the widely differing trade weights used for the computation of these effective exchange rates, the above graph should not serve as a basis for bilateral comparisons, such as the development of Germany's competitiveness relative to that of Japan. For that purpose it is necessary to look directly at bilateral exchange rates. This is attempted in the graph on the following page, which, after allowing for



differential changes in unit labour costs, shows the development of the Mark and the yen vis-à-vis the US dollar since the Smithsonian Agreement.

It can be seen that on this “real” bilateral exchange rate basis the yen and the Mark have since the end of 1980 appreciated by about 60 and 25% respectively vis-à-vis the dollar and now stand well above the previous peak levels reached in the late 1970s.

The outstanding feature of this graph, however, is the very large medium-term fluctuations in real exchange rates with progressively widening amplitudes. In fact, since their early 1985 lows the real exchange rates of the yen and the Mark have appreciated by around 100% vis-à-vis the dollar. As it can hardly be argued that, apart from the exchange rates themselves, the fundamentals have changed very much in recent years, it is difficult to avoid the conclusion that exchange rates were for most of the time strongly out of line

Large real medium-term exchange rate fluctuations

with economic reality and that, given the large US current-account deficit, the strong appreciation of the dollar in the three or four years up to early 1985, which has now been reversed, was clearly excessive.

The costs of overshooting

The costs of unnecessary longer-term exchange rate fluctuations are well known: competitive distortions, wrong signals for resource allocation, disruptive effects on domestic price stability, encouragement of protectionist policies and increased general uncertainty which heightens the risks inherent in longer-term investment decisions. One additional consequence of excessive medium-term exchange rate instability is that businesses, in their investment, allocation and pricing decisions, will take less and less notice of these fluctuations and use their own estimated equilibrium exchange rates. This will be a good thing when the exchange rate movements are in the wrong direction, but it may pose problems when, as in the recent past, a major exchange rate adjustment is required. In that case, the J-curve effects will tend to be stretched out even further. For example, it might take quite a while before business firms become convinced that the present low exchange rate level of the dollar is here to stay and correspondingly adjust their investment and allocative dispositions.

The experience with the Louvre Accord

The role of co-ordinated exchange market intervention

The period under review was characterised by the prominent role played by the authorities in the exchange markets. But while events in recent years have clearly demonstrated that internationally co-ordinated exchange market intervention, particularly if supported by other policy measures, can have a major influence on exchange rate developments, it may be less clear whether this influence has always been used to maximum advantage.

The Louvre Accord of late February 1987 came at a point when the dollar had already undergone a very large depreciation and there was a danger that without a demonstration of official concern and commitment there would be a collapse of confidence. An indication of what that could mean had already been provided by exchange market developments surrounding the EMS realignment of early January 1987.

Rationale for supporting the dollar

The agreement to stabilise exchange rates around the levels then prevailing and to validate this informal kind of exchange rate target through appropriate co-ordination of national policies was not based on the assumption that these nominal exchange rate relationships could be defended for ever. But in view of the historical experience of exchange rate overshooting and the size of the exchange rate adjustments that had already occurred, it was felt that there would be considerable merit in preventing any further large dollar depreciation for the time being. In this way new J-curve effects would not be superimposed on existing ones and the necessary breathing-space would be provided to allow the new exchange rate structure to work itself through to a corresponding reduction of the current-account imbalances. In fact, recent trade figures had given rise to hopes that such a correction of the current-account imbalances was under way. And in the event that the exchange rate adjustments that had already occurred should ultimately turn out to be insufficient or excessive there would be time for a further adjustment.

Since there was no immediate evidence that the enhanced policy co-ordination widely expected after the Louvre Accord meeting was actually forthcoming, the official resolve behind this agreement was severely tested by the exchange markets only a few weeks later. In view of this credibility gap, only massive official intervention, supported by strong monetary policy signals and, notably in the case of Japan, by clear signs of progress towards more fundamental adjustment, was able to restore confidence (see pages 166–167 above).

However, once the markets were persuaded of official determination and ability to defend the prevailing exchange rate structure, a new kind of problem emerged. On the assumption of no further dollar depreciation, the high nominal US interest rates looked extremely attractive and, therefore, began to exert an overriding influence on capital movements. As a result the dollar became very strong despite rising interest rates in the surplus countries. Intervention now had to be used to prevent an excessive rebound of the dollar that might have delayed the adjustment process even further.

In mid-August, when a spate of poor US trade figures cast doubts on one of the fundamental assumptions on which the Louvre Accord had been based, namely that the US trade performance was on a firmly improving trend, the scenario changed once more. The dollar came under renewed downward pressure and again required support. Exchange rate fears added further fuel to inflationary expectations, and dollar interest rates began to go up steeply. It was at this point that policy conflicts began to emerge. The exchange rate fears that contributed to the rise of dollar interest rates should by the same token have exerted downward pressure on interest rates in the surplus countries. Instead, with official encouragement, rates in Germany and Japan, where there was considerable concern about the strong growth of the domestic monetary aggregates, continued to go up too. This, in turn, was interpreted by the markets as requiring a corresponding further upward adjustment of US interest rates, particularly since there was no evidence of decisive US action on the budgetary front and since the dollar continued to be affected by discouraging trade figures. This upward spiralling of interest rates between the surplus countries and the United States was clearly against the spirit of the Louvre Accord and undermined its credibility. By giving rise to grave doubts about the future development of the world economy, it undoubtedly influenced the timing of the dramatic turn-round on the stock markets and contributed to renewed exchange market unrest which, despite co-ordinated monetary policy moves and large-scale co-ordinated intervention, could only be contained after permitting another substantial dollar depreciation.

It has been argued that, by trying to freeze in exchange rates at unrealistic levels, the Louvre Accord was not only doomed to failure but also gave rise to policy distortions in other areas. One assumption on which the Louvre Accord was based was that a further dollar depreciation would not be helpful for the time being. It could, however, be argued that once it had become clear in the course of the early autumn that a further limited decline of the dollar might be needed to speed up and strengthen the adjustment process, such a depreciation could have been permitted and justified in terms of the original Louvre Accord without impairing its credibility.

Inconsistencies between large interest rate differentials and stable exchange rate expectations

Upward interest rate spiral and its consequences

Real versus
nominal
exchange rate
stabilisation

A second criticism might be that at times of substantial, inflation-based, international interest rate differentials it makes little sense to stabilise nominal exchange rates. When the authorities succeed in convincing the market of their ability to defend the prevailing exchange rates, the nominal interest rate differentials in favour of the higher-inflation countries will, for foreign investors, become real ones. Capital will therefore tend to flow in excessive amounts to the countries with relatively higher inflation rates, thereby tending to push their exchange rates in the wrong direction, a trend which was exemplified by developments during the earlier part of the summer of 1987, when the dollar was unduly strong. On the other hand, once the market doubts the ability of the authorities to defend existing exchange rates, nominal interest rate differentials lose their effectiveness and capital flows will tend to turn round. Consequently, there will generally be a situation of either too much or too little. A more appropriate policy would therefore be to use a more flexible target that would leave room for exchange rate movements in line with inflation or interest rate differentials.

The role of the
Louvre Accord

Apart from conceding these more technical points, it is difficult to side with the criticisms blaming the Louvre Accord for the policy slippages that may have contributed to the stock market turn-round, or at least its timing. There was no major conflict between domestic requirements and international policy goals as specified under the Louvre Accord. In the United States more decisive action on the fiscal front would have been in the longer-term interest both of the domestic economy and of external adjustment. In Germany more forceful expansionary action not only could have contributed to better external balance, but would also have benefited the country's economy. And similarly in Japan, the more expansionary policy stance adopted under the pressure of external events could have been justified on purely domestic grounds.

The implications of a high rate of capital mobility for exchange rate stability

Stabilising or
destabilising role
of capital flows?

Another question raised by the excessive exchange rate fluctuations in recent years is the stabilising or destabilising role of international capital movements in the context of the ongoing global integration of national financial markets. It is sometimes argued that increasing international capital mobility has been one of the main factors behind the greater degree of exchange market instability of recent years, and that, in particular, short-term capital flows are liable to produce exchange rate turbulence.

Short-term
capital
movements and
the functioning of
the exchange
markets

While it cannot be denied that short-term capital flows may at times contribute to excessive exchange rate volatility, in general their role is essential for the smooth functioning of a floating rate system. Even if a country's current account is in equilibrium over a business cycle, there will tend to be temporary cyclical and seasonal imbalances; and on a monthly, weekly, daily and hourly basis there will be transitory imbalances. It is generally recognised that, as far as current-account transactions are concerned, exchange rate movements are useless as a short-term balancing mechanism; because of J-curve effects they even tend to aggravate disequilibria. Genuine long-term capital flows also may not respond very quickly to exchange rate movements. In the absence of official exchange market interventions, it is therefore only the so-called short-

term speculative capital flows and “market-making” activities of banks that ensure continuous equilibrium in the exchange market. And it is mainly through their impact on short-term capital flows that exchange rate movements can exert an immediate stabilising effect.

Exchange markets are different from other financial markets insofar as all prices are directly linked. For example, a change in the Deutsche Mark/dollar rate necessarily entails adjustments in the cross rates of all other currencies vis-à-vis the dollar and/or the Mark. Therefore, a given change in balance-of-payments flows that affects, for example, the Deutsche Mark/dollar exchange rate will tend to give rise to a multiple of exchange market transactions associated with the maintenance of a consistent equilibrium pattern of exchange rates. It is these continuous arbitrage, balancing and market-making activities of the banks which explain why commercial transactions directly account only for a minor proportion of total exchange market turnover. This does not, however, mean that the bulk of exchange market transactions and short-term capital flows represent simply “noise and nuisance”. On the contrary, they are essential for a smooth functioning of the markets.

Large volume of secondary exchange market transactions

This is not to deny that short-term capital flows, including transactions in long-term assets for short-term speculative purposes, may at times have a strong destabilising impact on the exchange market. Moreover, it is certainly true that, as a result of the increasing global integration of national markets, these destabilising capital flows can assume vast proportions. The answer, however, is not new controls and impediments which would also curtail the stabilising capital flows and exchange rate transactions, but more stable national economic policies and their better international co-ordination.

The importance of a predictable and internationally consistent policy framework

The satisfactory functioning of a floating rate system depends on the ability of market participants to form realistic and stable views of the longer-run equilibrium level or path of exchange rates. If this requirement is fulfilled, stabilising “speculative” capital flows will ensure that in the event of temporary disturbances exchange rates will not diverge too much from their approximate equilibrium level. If, on the contrary, exchange rates are not anchored in such stable expectations, there is a danger that exchange rate movements will give rise to parallel shifts in expectations, with the result that they become self-perpetuating and acquire a life of their own. Exchange rate movements will then no longer act as a balancing mechanism but may themselves become a source of economic disturbances and balance-of-payments disequilibria.

The role of expectations

The most important condition for market participants to be able to arrive at realistic and reasonably firm views of the longer-term equilibrium level of exchange rates is that the general economic policy environment should be stable and predictable. This means not only that the policies of individual countries should be sound and transparent, but also that the global economic and balance-of-payments picture resulting from the interaction of these national policies must be consistent. Exchange rates should not be just a

The importance of a stable economic policy environment

residual after other policies have been determined, but a reasonable degree of exchange rate stability should be part of a more general policy framework. From this point of view the Louvre Accord was certainly a step in the right direction.

The need for increased international policy co-ordination is an unavoidable by-product of the trend towards growing global interdependence and integration which necessarily entails a certain loss of national autonomy and requires a certain willingness to compromise. This may be politically painful, but can hardly be avoided, and there are advantages in terms of greater allocative efficiency and a more global outlook in general.

The tasks ahead

Looking to the future, the task facing the authorities of the major industrial countries is not without challenge. Although, in volume terms, trade flows have begun to respond clearly to the adjustment in exchange rate relationships, the US current-account deficit is forecast to remain substantial for years to come. This would imply that the cumulative amount of position-taking in favour of the dollar necessary to finance this deficit will be very large. Even marginal attempts to reduce these huge open positions in dollars could entail major exchange market pressures.

Against this background it will be of the utmost importance that the authorities of the major industrial countries demonstrate unanimity and determination in providing exchange market guidance and continuing in their adjustment efforts. As the experience with the Louvre Accord has shown, the tolerance margins for policy slippages, indecision and disagreements have become narrower. Failures in the field of policy co-ordination and joint exchange rate management can quickly lead to serious market upsets with potentially damaging consequences for the stability and health of the world economy.

Developments within the EMS

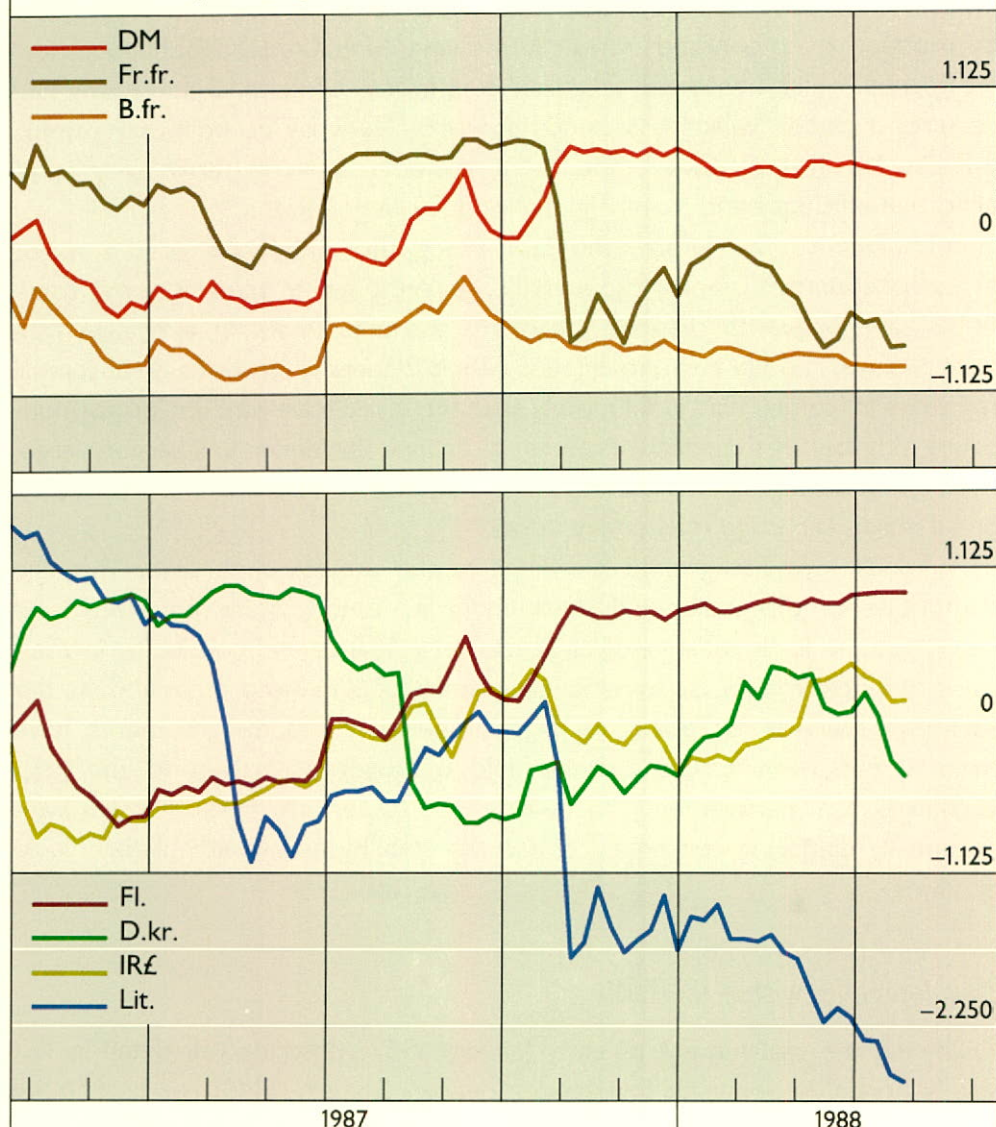
Central rate
stability after the
early 1987
realignment

Following the realignment of early January 1987 (described in detail in last year's Annual Report) the European Monetary System (EMS) has been quite successful in insulating the exchange rate relationships between member currencies from the developments in the dollar market. The instability of the dollar exchange rate in the period under review has emphasised to the EMS member countries the importance of greater monetary cohesion among themselves. The policy successes achieved in recent years in the field of convergence towards lower inflation rates have been consolidated. Moreover, in September 1987 the EEC Governors adopted a number of measures to strengthen the operating mechanisms of the EMS (see Chapter VIII). With a view to achieving truly Community-wide financial markets by 1992 there were some further moves towards deregulation of cross-border capital flows, including the lifting in June 1987 of the official ban on the acceptance of ECU-denominated deposits by banks in Germany.

Apart from the modest early 1987 EMS realignment, central rates were left unchanged in the period under review. Nevertheless, market developments continued to be characterised by large and sudden shifts in

Spot exchange rates in the EMS exchange rate mechanism, 1987 – 88*

Weekly averages of deviations from the central rates of the participating currencies, in percentages



* As from the realignment of 12th January 1987.

capital flows giving rise at times to severe exchange rate pressures. As a result, the existing EMS parity grid had to be defended repeatedly through large-scale exchange market intervention and supporting policy moves. Although after the realignment the EMS band was never fully stretched, there was a strategic shift of intervention policies towards permitting changes in market conditions to be more fully reflected in intra-marginal exchange rate movements, thereby reducing the potential rewards of destabilising speculation.

In the early months of 1987 the gradual and, at first, somewhat hesitant reversal of the speculative capital flows into Germany which had taken place on the eve of the January 1987 realignment permitted other EMS member countries to recoup earlier reserve losses and to reduce official lending rates.

Temporary exchange rate pressures and greater role of intra-marginal exchange rate movements

Moreover, in late March and early April the capital reflows helped to shield the Deutsche Mark from the strong upward exchange rate pressures vis-à-vis the US dollar to which the Japanese yen was subject during this period.

Pressures
on the lira

In the course of April, however, the capital flows from Germany to other member countries gradually ceased. In early May exchange rate fears connected with the strengthening of the Deutsche Mark vis-à-vis the dollar and an impending easing of Italian exchange controls resulted in heavy downward pressures on the lira. The Italian authorities responded flexibly and quite successfully not only by extending support in the exchange market, but also by allowing the lira to fall by 2 percentage points against its central rate. Although on 13th May the authorities proceeded with the partial liberalisation of capital flows, the lira did not come under renewed pressures at that time.

During the earlier part of the summer conditions in the EMS remained fairly tranquil, and a firmer undertone of the French franc permitted some reduction of French official lending rates. In August, however, unrest began to re-emerge in conjunction with rumours of an impending EMS realignment and as a result of the renewed weakening of the US dollar. Pressures concentrated particularly on the Italian lira. The Italian authorities reacted not only by intervening in the exchange market, but also by raising the discount rate and implementing tax measures. Nevertheless, a turn-round of capital flows in favour of Italy occurred only after the imposition on 13th September of a policy package comprising a temporary tightening of capital controls and curbs on bank lending.

Strong EMS
tensions and
successful official
counteraction

Conditions were subsequently fairly quiet until the last week of October, when renewed rumours of an impending realignment, fuelled by dollar weakness, led to the re-emergence of strong centrifugal exchange rate pressures within the EMS. These were countered by vigorous official intervention, while at the same time the exchange rates of the French franc and the lira were allowed to ease markedly. In early November concerted cuts in Germany's official lending rates and rises in those in France finally reassured the markets, and the destabilising pressures within the EMS subsided.

Remarkable
stability despite
dollar troubles
and election
uncertainties

Despite continued dollar weakness, particularly towards the end of the year, conditions within the EMS exchange rate mechanism thereafter remained very stable. In late November and early December the Bank of France was able to participate in the concerted rounds of reductions in official key lending rates by European central banks. In January, when the dollar staged a partial recovery in the exchange markets, the earlier capital flows into Germany were partly reversed and other EMS member countries were able to recoup previous reserve losses. This provided scope for cuts in official lending rates in France, Belgium and the Netherlands, and on 20th January — well ahead of the end-March expiry date — Italy revoked the temporary exchange control measures introduced in September 1987. During February the capital reflows from Germany subsided, but except for a short flurry in early March conditions in the EMS remained quite calm despite French election uncertainties. Some pressures did, however, build up against the lira, which in the period from late February to early May was allowed to slide gradually to near the bottom of its wider exchange rate band.

Gold production and the gold market

Despite a further increase in new supplies coming onto the market, the dollar price of gold continued to go up substantially in the course of 1987. Demand for gold was buoyed by a number of factors. During most of the year it was underpinned by exchange rate fears as investors sought to acquire an asset that had risen markedly in dollar terms since that currency started to decline in February 1985. Moreover, during the spring and summer a resurgence of inflationary expectations helped to sustain the demand for gold in the face of the pronounced rise in long-term interest rates. Finally, demand may have benefited from the strong upward trend in other metal prices. On the other hand, the stock market turmoil in October seems to have had only a very limited impact on the gold market.

Buoyant demand for gold underpinned by weak dollar and inflation fears

Whereas under the influence of rising prices the commercial use of gold fell in the course of the year, purchases for investment and hoarding purposes remained strong, benefiting partly from longer-run trends in the demand for gold. In recent years the Pacific rim in Asia has become an important market for gold, supplementing the belt of countries running from the Mediterranean to the South China Sea that have traditionally treated gold as a premier form of holding wealth. In 1987 Japan imported over 240 metric tons, which was roughly a quarter more than was needed to meet fabrication demand. Despite tariffs and taxes, nearly 60 tons of private gold imports were declared in Taiwan during the six-month period from October 1987 to March 1988, and the Taiwanese central bank added 172 tons to its own gold holdings in the fifteen months ending March 1988.



Continuing
increase in mine
output

On the supply side 1987 saw a further increase in western mine production, by over 80 tons to 1,375 tons. The expansion of output was widespread, occurring in all major production areas except South Africa, where, owing to the continuing shift towards lower-yielding ores, output fell for the third year in succession, by 33 tons. The growth in mine production was particularly marked in North America, with the United States and Canada boosting their output by 37 and 14 tons respectively. These two countries now account for a fifth of western gold production, up from under a tenth at the beginning of the decade. Elsewhere, large increases were recorded in Australia (33 tons) and Brazil (17 tons).

World gold production								
Countries	1953	1970	1980	1983	1984	1985	1986	1987
	in metric tons							
South Africa	371	1,000	675	680	683	672	640	607
United States	61	54	31	63	66	80	118	155
Canada	126	75	52	73	86	90	106	120
Australia	33	20	17	31	39	59	75	108
Brazil	4	9	35	59	62	72	67	84
Philippines	15	19	22	33	34	37	39	40
Papua New Guinea	0	1	14	18	19	31	36	34
Colombia	14	7	17	18	21	26	27	26
Chile	4	2	7	19	18	18	19	19
Venezuela	1	1	1	6	10	12	15	16
Zimbabwe	16	15	11	14	15	15	15	15
Japan	7	8	7	6	7	9	14	14
Ghana	23	22	11	12	12	12	12	12
Zaire	11	6	3	6	10	8	8	12
Peru	4	3	5	10	11	11	11	11
Mexico	15	6	6	7	8	8	8	8
Dominican Republic	0	0	12	11	11	10	9	8
Other countries	50	25	33	48	50	63	71	84
World total*	755	1,273	959	1,114	1,162	1,233	1,290	1,373
* Excluding the USSR, other eastern European countries, China and North Korea.								
Source: Consolidated Gold Fields PLC (London).								

Reduced
communist sales

After supplying more gold to western markets in 1986 than at any time in the 1980s, the communist countries (excluding the European IMF members) cut back their exports last year. China, in particular, appears to have supplied less gold to western markets. The Soviet Union, too, which is believed to have drawn on its gold reserves during the past few years, reportedly reduced sales despite the continuing weakness of oil prices. This is partly because the same revenue can be obtained with smaller physical sales when prices are rising, and partly because the country drew on its deposits with western banks. All in all, the supply of new gold by eastern countries can be estimated to have been of the order of 300 tons in 1987.

Decline in official
gold stocks

Official gold stocks, which had shown little change in 1986, decreased by 90 tons last year. This decline was the net result of fairly large purchases and sales by some countries. Taiwan acquired 65 tons, which meant that its gold

reserves, valued at market prices, grew at an even faster rate than its foreign exchange holdings. The Philippines continued its policy of purchasing local production and added 16 tons to its official reserves. The United States bought 11 tons to replace part of the official gold used to mint the "Eagle" in 1986. Countries' official gold sales were mostly motivated by balance-of-payments constraints. In Latin America Colombia and Peru were the largest sellers (41 and 20 tons respectively). Of the eastern European IMF members, Romania and Hungary reduced their holdings by 28 and 22 tons. Among the industrial countries Canada, which has pursued a policy of selling gold from official reserves when prices are high, disposed of 37 tons, while Belgium used 17 tons of its official stock to mint ECU coins.

Estimated market sources and uses of gold					
Items	1983	1984	1985	1986	1987
	in metric tons				
Production	1,115	1,160	1,230	1,290	1,375
Estimated net sales by communist countries ¹	100	150	250	400	300
Estimated changes in official gold stocks through market transactions ² (– = increase)	70	20	–160	–10	90
Total (= estimated non-monetary absorption)	1,285	1,330	1,320	1,680	1,765

¹ Excluding European IMF members. ² Changes in South Africa's gold reserves have been excluded from the movements of official gold stocks in this table, since they are believed to have largely reflected the execution or unwinding of gold swaps between the South African Reserve Bank and commercial banks in other countries.

With production on an upward trend and sales from western official gold stocks roughly offsetting the decline in offerings by communist countries, the total supply of new gold coming onto the market increased again last year. Nevertheless, in the face of strong investment and hoarding demand, the price of gold rose by over 24% in dollar terms, from \$391 per fine ounce at the end of 1986 to \$487 at the close of 1987, and remained quite stable in terms of Swiss francs.

Increasing total supplies

In the first three months of 1987 gold traded mostly in the \$395–420 range, but quotations began to firm and then rose sharply in the spring as the dollar came under heavy pressure in the exchange markets and expectations of inflation revived. The London fixing price rose from about \$420 per fine ounce in early April to a peak of nearly \$480 in the third week of May, but subsequently fell back sharply before firming again to around \$460 in the period from end-July to mid-October. The equity market collapse had no lasting impact on the gold price, as safety considerations were apparently overruled by the dampening effect on inflationary expectations. Although market quotations touched a peak of \$490 on Monday, 19th October, they eased back quite quickly on the days that followed and fell to a level of around \$465 in the first three weeks of November. It was only in the final weeks of the year that the gold price climbed under the impact of increasing dollar weakness, temporarily breaching \$500 on 14th December, its highest level since February 1983.

Firming gold price

When in early 1988 the dollar showed greater stability the gold price started to fall back and reached a low of \$424 at the end of February. However, under the influence of renewed fears about the dollar and inflation it recovered in the second half of March and fluctuated around \$450 up to late-May. One factor that reportedly contributed to the pronounced weakness of the gold price in the early months of 1988 was sales of borrowed gold by mining companies which increasingly favoured gold loans (to be repaid from future production) as a cheap source of finance.

No lasting impact
of stock market
turmoil on the
gold price

Gold has traditionally been viewed as a safe haven and its price has often risen in the face of political adversity or economic uncertainty. In this light the very subdued reaction of the gold price in late October to the most dramatic decline in equity prices for more than half a century is quite remarkable. Even the rise in daily price volatility which characterised virtually all financial asset markets was largely absent from the gold market. How can this be explained?

Part of the answer is surely that the stock price collapse led to expectations of a worldwide slowdown in economic activity, thereby putting to rest earlier fears of rising inflation and interest rates. But there were other factors. Firstly, the bullion price of gold does not reflect activity in all market segments. In the weeks following the crash, purchases of gold coin by small savers picked up dramatically. However, coin purchases constitute such a small proportion of total demand for gold that even a major shift in sentiment amongst small investors was not enough to move the market. Secondly, transactions costs in many countries for buying and selling gold are high relative to those for financial assets, and carrying costs in terms of interest forgone are substantial. Finally, major producers and buyers behave in ways that tend to dampen gold price movements. Important gold-producing countries hold large stocks of the metal and appear to be willing to sell considerable quantities when prices rise above certain levels.

International liquidity

Current reserve developments

Largest official
reserve
expansion since
the abandonment
of fixed parities

One of the more striking features of the international monetary scene last year was the huge increase in international reserves. Total official holdings of reserve assets other than gold rose by \$205 billion, or 40%, greatly surpassing the 15% expansion in the current dollar value of international trade. This was by far the strongest growth recorded since the early 1970s, when massive intervention had been undertaken to shore up the crumbling system of fixed parities. A substantial portion of last year's expansion — roughly a quarter — resulted from the rise in the dollar value of reserve assets held in other currencies. For similar reasons the dollar figures strongly overstate the increase in the real size of official reserves, since the sharp depreciation of the dollar has reduced their international purchasing power. Making approximate allowance for this decline in real value by measuring official reserves in terms of a basket of currencies such as the SDR, their growth amounted to slightly over 20% last year and averaged only 1.5% in 1985–1986.

Changes in global reserves							
Areas and periods	Gold		Foreign ex-change	IMF reserve positions	SDRs	ECUs	Total non-gold reserves
	in millions of ounces	in billions of US dollars at current prices ¹					
Group of Ten countries							
1985	-0.2	13.2	15.9	0.8	2.9	3.4	23.0
1986	-1.0	46.7	38.4	0.3	2.9	7.9	49.5
1987	-1.5	69.7	92.6	0.2	3.1	21.8	117.7
Amounts outstanding ²	735.2	357.7	250.5	26.0	20.9	69.8	367.2
Other developed countries ³							
1985	-1.8	1.0	6.3	0.1	0.4	0.4	7.2
1986	-0.8	5.2	6.4	0.2	0.4	0.0	7.0
1987	-1.9	7.1	28.2	0.6	0.5	5.0	34.3
Amounts outstanding ²	82.1	39.9	85.8	3.1	2.6	5.8	97.3
Developing countries							
1985	4.2	3.5	14.1	0.9	0.6		15.6
1986	2.1	8.5	9.6	0.2	0.5		10.3
1987	0.4	11.9	51.2	0.6	1.2		53.0
Amounts outstanding ²	122.8	59.7	227.5	15.5	5.2		248.2
Middle Eastern oil exporters ⁴							
1985	-0.2	0.4	3.8	0.7	0.2		4.7
1986	-0.1	1.4	-6.5	0.1	0.0		-6.4
1987	-0.1	2.1	3.8	0.5	0.4		4.7
Amounts outstanding ²	22.8	11.1	38.8	12.7	1.6		53.1
Other							
1985	4.4	3.1	10.3	0.2	0.4		10.9
1986	2.2	7.1	16.1	0.1	0.5		16.7
1987	0.5	9.8	47.4	0.1	0.8		48.3
Amounts outstanding ²	100.0	48.6	188.7	2.8	3.6		195.1
Total ³							
1985	2.2	17.7	36.3	1.8	3.9	3.8	45.8
1986	0.3	60.4	54.4	0.7	3.8	7.9	66.8
1987	-3.0	88.7	172.0	1.4	4.8	26.8	205.0
Amounts outstanding ²	940.1	457.3	563.8	44.6	28.7	75.6	712.7

¹ Gold reserves valued at market prices. ² At end-1987. ³ Excluding eastern European countries.

⁴ Iran, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

The rise in the market value of global official gold reserves was also quite pronounced last year. However, the \$88.7 billion gain — the largest recorded in the 1980s — was exclusively the consequence of the development of the dollar price of gold, which rose to a very high level towards the end of 1987 before easing again in early 1988. By contrast, the volume of countries' official gold holdings shrank marginally, by 0.3%.

The unusually strong growth in the volume of official non-gold reserve assets in 1987 was due essentially to the confluence of four factors. The most important one was official dollar purchases by countries other than the United States in order to limit the appreciation of their currencies vis-à-vis the dollar or other key currencies.

Factors behind strong official reserve growth

A second factor was a substantial amount of diversification of official foreign exchange holdings out of dollars into other currencies. Such portfolio shifts will lead to an increase in countries' non-dollar reserves without necessarily entailing a corresponding reduction of total official dollar holdings. The explanation for this asymmetry is that the official dollar sales will concentrate the upward exchange rate pressures on the currencies that are used for diversification purposes. As a consequence, it is the authorities of these secondary reserve currency countries such as Germany and Japan which, in order to avoid excessive appreciation, may have to take the dollars sold by other official holders into their reserves.

A third factor was direct official intervention purchases of currencies other than the dollar. Although these purchases may also have been partly related to the developments in the dollar market, they occurred largely in a European context, as a result of countries seeking to stabilise their exchange rate vis-à-vis the Deutsche Mark.

A final factor, also related to the EMS, was the upward trend of the market price of gold, which resulted in an increase in the amount of official ECUs created against gold, and Spain's initial swap of gold reserves with the EMCF following its accession to the EMS agreement.

Factors
moderating
reserve growth

There were, however, also two influences which somewhat moderated the growth of official non-gold reserve assets last year. Firstly, the US authorities drew on their foreign exchange holdings in order to support the dollar. Secondly, the IMF was not a net new lender in 1987 but a recipient of funds, as debtor countries repaid drawings made in the early years of the international debt crisis. These repayments tended to reduce the IMF reserve positions of other member countries.

Increased
financing of US
current-account
deficit through
official purchases
of US assets

Looking at the structure of official reserve accruals, foreign exchange holdings alone (including ECUs created against dollars and EMS member currencies) accounted for over \$190 billion, or 92%, of the total growth of non-gold reserves of countries other than the United States last year. Exchange rate effects may be estimated to have been responsible for around \$25 billion of this increase, but by far the most important expansionary influence was a further shift in the way in which the US current-account deficit was financed. From 1983 to 1985 private net capital inflows had been more than sufficient to cover that country's large and growing current-account deficit. In 1986 the spontaneous inflows of private funds began to slow down, and, in order to avoid an excessive depreciation of the dollar, the widening US current-account deficit was financed increasingly through official purchases of dollar assets. In 1987 part of this dollar support was provided by the United States itself, which for the first time since the late 1970s intervened heavily in favour of its own currency, thereby drawing down the country's official foreign exchange holdings by \$8.6 billion (in volume terms). But the bulk of official financing came from foreign central banks. Identified foreign official dollar assets in the United States, which had already risen by \$33 billion in 1986, went up by \$47.5 billion last year, thereby covering about 30% of the US current-account deficit.

However, these figures strongly understate the contribution foreign central

banks made last year to the financing of the US payments imbalance. To begin with, in 1987 foreign central banks seem to have channelled into the United States a substantial proportion of their dollar accruals via banks and securities houses in their own countries. Such official funds entering the United States via foreign private financial institutions would not be registered as an increase in liabilities to foreign official holders in the US balance-of-payments statistics. These disguised inflows of official funds seem to have been quite large last year, however, accounting for the bulk of the massive unallocated item of over \$60 billion shown in the table below. Another form of undisclosed flow of foreign official funds to the United States would be the investment of official reserves in securities issued by private US borrowers in the Euro-markets. These, too, would show up under the unallocated item.

Indirect flows of official funds to the United States

US current-account balance and estimated changes in foreign exchange reserves, by types of placement					
Items	1983	1984	1985	1986	1987
	in billions of US dollars				
US current-account balance	-46.3	-107.0	-116.4	-141.4	-160.7
Changes in US non-gold reserves	- 0.2	1.2	8.3	5.4	- 2.7
of which:					
Foreign exchange reserves	- 3.9	0.4	6.2	4.5	- 4.2
<i>in constant dollars</i> ¹ (- = increase)	- 3.1	1.1	4.5	1.1	8.6
Changes in foreign exchange reserves of countries other than the United States ²	8.3	23.1	31.5	54.0	190.9
<i>in constant dollars</i> ¹	15.0	32.0	11.5	31.6	165.5
of which:					
Dollar reserves held in the United States ³	5.3	2.4	- 2.0	33.0	47.5
Dollar reserves held outside the United States ⁴	- 0.6	9.9	- 4.5	- 1.4	22.4
Non-dollar reserves ⁵	1.6	7.9	21.2	5.9	60.2
<i>in constant dollars</i> ¹	7.8	16.2	2.6	- 15.2	35.9
Unallocated	2.0	2.9	16.8	16.5	60.8

¹ Changes computed at constant (end-of-period) exchange rates. ² Includes all ECU positions with the exception of that part of EMS countries' gold reserves that has been swapped against ECUs. ³ Foreign official assets in the United States. ⁴ Deposits by official monetary institutions with Euro-banks reporting to the BIS. Includes all deposits with these banks by China. ⁵ Estimates from IMF and BIS sources.

Another important feature last year was that, in sharp contrast to 1986, central banks added substantially (by \$22.4 billion) to their Euro-dollar deposits with banks abroad. Such deposits with banks outside the United States tend to contribute indirectly to the financing of the US current-account deficit, since as a result of interest arbitrage they will generally be reflected in a nearly equally large increase in the Euro-banks' net claims on the United States.

All in all, it may be estimated that, including the drawing-down of US foreign exchange assets, somewhat over \$100 billion, or more than 60%, of the US current-account deficit was directly financed by the official sector last

year through the acquisition of assets in the United States, with indirect flows of official funds to the United States via the Euro-markets accounting for about another \$20 billion.

Record increase
in both dollar
and other
exchange
reserves

By currencies, exchange reserves denominated in dollars may be estimated to have grown by approximately \$125 billion, or nearly 45%, last year. However, exchange reserves held in other currencies also seem to have shown a record increase of around \$65 billion when measured in current dollars, or by about \$40 billion when exchange rate effects are excluded.

IMF transactions

The decline in outstanding IMF credits that had started in 1986 gained momentum last year. This tended to reduce the reserve positions in the Fund of member countries whose currencies had been used in the disbursements. In current dollar terms such reserve positions in the Fund increased by \$1.4 billion, but this was more than accounted for by valuation effects. Expressed in SDRs, there was a decline of 3.9 billion.

Outstanding Fund credits fell by SDR 4.6 billion to SDR 28.8 billion at the end of 1987, mainly as a consequence of the further repayment of large medium-term balance-of-payments credits granted in the early 1980s when the LDC debt crisis had come to a head. Repayments amounted to SDR 7.9 billion, compared with disbursements of only SDR 3.3 billion. There was, however, some new lending in favour of low-income countries undertaking macro-economic and structural adjustment programmes or encountering temporary shortfalls of export receipts due to circumstances beyond their control. New credits disbursed under the structural adjustment facility expanded from SDR 0.1 to 0.4 billion. The maximum access to this facility has been raised from 47% to 63.5% of a country's quota, and an additional enhanced structural adjustment facility amounting to SDR 6 billion in concessional funds was established at the end of the year.

Geographical
distribution of
reserve growth

The growth of international reserves was, as in the preceding few years, quite unevenly distributed, with nearly 60% of the total increase of \$205 billion in non-gold reserves being accounted for by just four countries: Japan (\$38.7 billion), Taiwan (\$30.4 billion), Germany (\$26.9 billion) and the United Kingdom (\$22.9 billion). By contrast, in many countries, notably those in the developing world, little or no expansion was recorded. Nonetheless, on balance, even when Taiwan is excluded, the developing countries registered a \$22.6 billion increase in the dollar value of their reserve holdings, with accruals being somewhat more widely distributed than in 1986.

Strong reserve
expansion in
industrial
countries

In the Group of Ten countries the growth of reserve holdings was on the whole both marked and broadly based. Only the United States saw its reserves drop, by \$2.7 billion, while in France the \$1.6 billion increase was more than accounted for by exchange rate effects. Japan's very large reserve gains were almost entirely due to outright purchases in support of the dollar. The reserve accruals recorded by Germany reflected both dollar support and substantial EMS transactions, while in the United Kingdom the unusually rapid reserve growth (125%) was related in large measure to official efforts to stabilise sterling against the Deutsche Mark. Among other Group of Ten countries Italy and Switzerland registered the largest absolute reserve increases (\$10.1 and 5.7 billion respectively).

Among the "other developed countries" Spain, with a rise of \$15.9 billion (or 108%) in the dollar value of its non-gold reserves, showed by far the biggest gain. This was largely connected with Spain's entry into the European Economic Community, which stimulated massive capital inflows and entailed considerable ECU creation against gold. The upward pressures on the peseta were contained by large-scale foreign exchange purchases by the Bank of Spain. Exceptionally strong reserve growth was also recorded by Denmark (\$5.1 billion, or 103%) and Finland (\$4.6 billion, or 259%), both countries experiencing unusually large capital inflows in 1987. New Zealand and Yugoslavia were the only countries in this grouping to report significant reserve losses.

The overall expansion of \$53 billion in the reserves of developing countries in 1987 conceals a wide diversity of experiences. Of the total, \$41.2

Changes in individual countries' official non-gold reserves ¹							
Countries	1985	1986	1987	1985	1986	1987	Amounts outstanding at end-1987
	in current US dollars			in percentages			in billions of US dollars
United States	8.3	5.4	-2.7	34.6	16.7	-7.3	34.7
Other Group of Ten countries	14.7	44.1	120.4	9.5	26.3	56.8	332.5
Japan	0.3	15.5	38.7	1.1	58.1	91.6	81.0
Germany	4.1	7.4	26.9	10.1	16.8	52.1	78.6
United Kingdom	3.4	5.6	22.9	35.9	43.4	124.7	41.3
Italy	-5.3	4.4	10.1	-25.2	28.3	50.8	30.1
Switzerland	2.7	3.8	5.7	17.8	20.9	26.1	27.5
Netherlands	1.5	0.4	4.8	16.2	4.0	42.9	15.9
Belgium	0.3	0.7	4.1	5.6	14.4	73.8	9.6
Canada	0.0	0.7	4.0	0.4	29.9	123.9	7.3
France	5.7	4.8	1.6	27.1	18.2	5.0	33.0
Sweden	2.0	0.8	1.6	50.7	13.1	24.8	8.2
Other developed countries ²	7.2	7.0	34.3	14.7	12.6	54.5	97.3
Spain	-0.8	3.6	15.9	- 6.5	32.0	107.7	30.6
Denmark	2.4	-0.5	5.1	80.3	- 8.5	102.7	10.1
Finland	1.0	-2.0	4.6	36.2	-52.3	259.1	6.4
Other	4.6	5.9	8.7	14.6	16.6	21.0	50.2
Developing countries	15.6	10.3	53.0	9.2	5.6	27.1	248.2
Taiwan	6.9	23.8	30.4	44.0	105.3	65.7	76.7
Mexico	-2.4	0.8	6.8	-32.5	15.6	119.8	12.5
China	-4.6	-1.3	4.9	-26.7	-10.0	42.4	16.3
Saudi Arabia	0.3	-6.7	4.4	1.0	-26.7	23.8	22.7
Other	15.4	-6.3	6.5	14.8	- 5.2	5.8	120.0
Total ²	45.8	66.8	205.0	11.6	15.2	40.4	712.7

¹ Including ECU positions. ² Excluding eastern European countries.

billion was accounted for by Asian countries. The \$30.4 billion growth in Taiwan's reserves brought its official foreign exchange holdings to \$76.7 billion, which is the highest figure for any country in the world. Even excluding Taiwan, Asian reserves grew by \$10.8 billion. China, Singapore, Indonesia and Malaysia recorded increases of \$4.9, 1.9, 1.5 and 1.4 billion respectively in their non-gold reserves. The Philippines, the only Asian country covered by the Baker plan, experienced a \$0.8 billion fall in its non-gold assets, after having had one of the largest reserve increases among the developing countries in 1986.

The \$4.5 billion overall reserve accrual recorded for Latin America mainly reflects a \$6.8 billion jump in Mexico's reserves and a \$1.3 billion decline (to October) in the reserves of Argentina, which encountered acute economic and debt service problems in 1987. Peru also suffered a substantial reserve loss of \$0.8 billion, or nearly 60%. Brazil, which had experienced a decline of \$4.8 billion in its reserves in 1986, added \$0.5 billion to its official holdings last year.

The \$1.4 and 4.7 billion increases in the reserves of African countries and of Middle Eastern oil exporters resulted to a substantial extent from exchange rate effects, as these countries tend to hold a significant proportion of their reserves in currencies other than the dollar. In the Middle East, Saudi Arabia, whose reserves had declined markedly over the preceding years, registered a \$4.4 billion reserve gain, whereas Kuwait reported a \$1.4 billion reserve loss.

During the first three months of 1988 the non-gold reserves of the Group of Ten countries declined by \$6.1 billion despite continuing intervention in support of the dollar. There was a \$9 billion drop in ECUs outstanding, which resulted both from the repayment of credits extended under the very short-term financing facility and from a decline in the price of gold used for the ECU swaps. Mainly because of the repayment of ECU credits by other EMS member countries, Germany's non-gold reserves fell by \$5.5 billion during this three-month period. A \$3.3 billion decrease in Switzerland's reserves can be attributed to the unwinding of end-of-year swap operations with domestic banks. Substantial increases in the non-gold reserves of Canada (\$4.4 billion) and Japan (\$3.3 billion), as well as a \$2.6 billion fall in the reserves of the United States, were due largely to further exchange market intervention in support of the dollar. Outside the Group of Ten, Taiwan, which added 107 tons to its official gold stocks, reported a \$1.9 billion decline in its foreign exchange reserves.

Macro-economic implications

What is the significance for the world economy of the very strong increase in official reserves recorded last year? Has it led to an undue expansion in international liquidity which, analogous to excessive monetary growth in a domestic context, carries the danger of a strengthening of worldwide inflationary trends?

It is difficult to answer this question without knowing what an appropriate level of international liquidity would be. In the abstract, this could be defined as that level at which balance-of-payments constraints on countries' policies

would be not so strong as to pose a deflationary threat to the world economy, but strong enough to keep inflationary forces in check.

In this connection it has to be stressed, however, that official reserves constitute only one element of a country's overall international liquidity position. Another element is the ability of the official sector to obtain convertible currencies either by borrowing abroad or by inducing the private sector to borrow abroad and/or to repatriate funds invested abroad. On the negative side of the picture, account must be taken of the country's actual or potential payment obligations arising out of short-term external debts.

Obviously this comprehensive concept of a country's international liquidity position does not lend itself easily to measurement. It depends to a large extent on a rather intangible factor: the country's international credit-standing. Nevertheless, it is fairly clear that in most developed countries, whose credit-standing is usually unquestioned, this access to the international financial markets has very much reduced the importance of official reserves as a constraint on domestic economic policies. At the other end of the spectrum are heavily indebted developing countries with serious external payments problems and without further access to the international financial markets. Here an increase in official reserves which can be used as a kind of collateral for further borrowing could undoubtedly ease policy constraints.

This amounts to saying that the global implications of a given growth in international reserves will depend on its geographical spread and that the concept of a global liquidity shortage or surplus is not an operational one. Unlike the situation in the late 1970s, when official reserve growth engendered by the US balance-of-payments deficit was to a considerable extent shared out via the international financial markets to the non-oil developing countries, the vast exchange reserve accruals last year were with few exceptions heavily concentrated on the industrial countries. In the developing countries (excluding Taiwan) the increase in official reserve assets in dollar terms was fully offset by the decline in the international purchasing power of that currency; in SDR terms, for example, the non-gold reserves of those countries did not change appreciably in 1987, after declining in the two preceding years.

In the industrial countries (other than the United States) the massive official reserve accruals presumably exerted an expansionary influence on these countries' monetary policies, but it is doubtful whether the much higher reserve levels will by themselves have a significant impact on their future domestic economic policy stances. This seems particularly true of Japan and Germany, countries which attach prime importance to domestic price stability and where reserve cushions were quite ample to start with. The main implication of the high reserve levels in these countries is probably that they might make it politically less acceptable to indulge in continued large-scale official reserve accumulation and therefore more difficult to resist further appreciation. At the same time, the build-up of huge external liabilities in the United States, much of it in liquid form, may ultimately act as a constraint on US economic policies.

In the developing world, official reserve growth last year was in large measure concentrated on Taiwan, a country which already had an unusually

Official reserves
only one
component of
international
liquidity

Importance of
geographical
distribution of
reserve holdings

Limited
consequences of
strong reserve
growth in the
main industrial
countries

Rapid reserve
growth as a
symptom of
inadequate
adjustment

large reserve cushion. Here again, the main significance of the higher reserve level may be that it could persuade the country to accept a further appreciation of its currency against the US dollar, a development which would almost certainly be in everybody's interest.

In short, there seems to be little immediate danger that the substantially higher level of global reserves resulting from last year's unusually strong growth will push the world economy onto an unduly expansionary path. More generally speaking, the problem is not one of too much or too little international liquidity, but of inadequate macro-economic adjustment. In a system where reserve growth is largely endogenous, excessive liquidity creation and its very unequal distribution will be a symptom rather than the cause of a maladjustment of policies. It is therefore a problem that cannot be separated from the more general need to reduce the vast international imbalances through sound policies and their better international co-ordination.

VIII. 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 met regularly to monitor international banking and capital market developments. In particular it discussed issues relating to the international debt situation and the implications for the international banking system of last year's turbulence in financial markets. Moreover, the Bank continued to assemble, survey and publish statistical data on developments in the international banking and capital markets.

The Committee on Banking Regulations and Supervisory Practices (the "Basle Supervisors' Committee") continued its work of encouraging co-operation in the prudential supervision of international banking. To this end, the Committee devoted much of the year to drawing up proposals, applicable to major banks in all the countries represented on the Committee, for common minimum standards of capital adequacy. In December, following approval by the central bank Governors, the agreed proposals were issued for comment in a consultative document, "Proposals for international convergence of capital measurement and capital standards". The aim of the proposals is to replace the diversity of existing national regulations for measuring capital adequacy by a single internationally accepted standard and, by this means, to help strengthen the soundness of the international banking

system as well as to remove a source of competitive inequality between banks arising from differences in regulation. In the light of comments received from national banking associations and other interested parties, the Committee will review its proposals with the intention of presenting a final agreement to the Governors for their approval in the summer of 1988.

The Group of Experts on Payment Systems is the forum within which the central banks of the Group of Ten countries regularly exchange information on developments in payment media and systems in their respective countries. The Group paid particular attention to current developments in the field of funds transfer and data transmission networks and to securities clearing systems. In addition, it carried out a survey on the prerequisites for an efficient and secure national payment system.

The Group of Computer Experts gave priority throughout the year to the examination of issues relating to the security and continuity of operations in the event of a breakdown. It conducted an analysis of the risks inherent in electronic funds transfer systems and of possible measures to reduce these risks.

The Group of Experts on Monetary and Economic Data Bank Questions continued to focus its attention on the proper functioning and further development of a data bank service for the central banks of the Group of Ten countries and the BIS. All the institutions concerned made concerted efforts to report their international banking statistics in automated form, in several cases via telecommunication links to the BIS Computer Centre. Major advances were also made towards providing for automated central bank access to the BIS data base of international banking statistics. A review of the Group's growing use of the macro-economic blocks of the data bank served as a basis for identifying areas where expanded coverage of data series would be of benefit to central bank economists and statisticians.

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 groups of experts continued to meet in Basle. The sub-committees and groups include in particular:

- the Committee of Governors' Alternates, which systematically prepares the groundwork for the meetings of the Governors;
- a group specialising in matters relating to the foreign exchange markets and intervention policies on these markets (since the beginning of 1976 the composition of this group has varied according to the subject matter under discussion, being confined to representatives from the twelve EEC countries when dealing with the European Monetary System (EMS), for example, and at other times extended to include participants from other industrialised countries such as Austria, Canada, Finland, Japan, Norway, Sweden, Switzerland and the United States); and
- a group commissioned to examine periodically the monetary policies pursued by member states, their Community-wide co-ordination and the implications of developments in public finance; this group is also called upon to make ad hoc studies of particular questions relating to monetary policies.

In the financial year 1987–88 a major part of the activity of the Committee of Governors, and consequently of its sub-committees and groups of experts, was concerned with two issues:

- the functioning of the EMS;
- the implications, in particular for monetary policy and the operation of the EMS, of full freedom of capital movements.

With regard to the first issue, the Committee of Governors carried out a thorough examination of the functioning of the EMS. In September 1987, on the strength of their examination, the Governors of the EEC central banks adopted a comprehensive strategy and measures to strengthen the EMS; these are currently referred to as the “Basle/Nyborg Agreement”. Firstly, it has been agreed to exploit the scope for a more active, flexible and concerted use of the instruments available to central banks, namely exchange rate movements within the fluctuation band, interest rates and interventions. To promote more effective use of these instruments, the Committee has strengthened the procedure for joint monitoring of economic and monetary developments and policies with the aim of arriving at common assessments of both the prevailing conjuncture and appropriate policy responses. Secondly, the operating mechanisms of the EMS have been strengthened in three respects:

- The duration of the very short-term financing mechanism has been extended by one month, taking the maximum duration to three and a half months; the ceiling applied to the automatic renewal for three months of these financing operations has been doubled to amount to 200% of the central bank’s debtor quota in the short-term monetary support mechanism.
- There is now a presumption that intra-marginal interventions in EMS currencies agreed to by the central bank issuing the intervention currency qualify for very short-term financing via the EMCF under the following conditions: (i) the cumulative amount of such financing made available to the debtor central bank shall not exceed 200% of its debtor quota; (ii) the debtor central bank is also prepared to use its holdings of the currency to be sold in amounts to be agreed; and (iii) the creditor central bank may request repayment in its own currency taking into account the reserve position of the debtor central bank.
- EEC central banks will henceforth accept settlement in ECUs of outstanding claims in the very short-term financing mechanism in excess of their obligation as laid down in the EMS Agreement (50%) and up to 100% as long as this does not result in an unbalanced composition of reserves and no excessive debtor and creditor positions in ECUs arise.

With regard to the second issue, the Committee examined the Commission’s proposal for a Directive which provides for the complete removal of all remaining restrictions on capital movements in the EEC countries in the next few years. The Committee’s opinion on this subject was delivered to the Council of the European Communities in April 1988. In addition, the Committee is examining ways and means of improving co-ordination of monetary policies between EEC member countries in a fully liberalised environment.

2. Functions as Agent, Trustee and Depositary

During the past financial year the Bank continued to perform various Agency, Trustee and Depositary functions in connection with international financial settlements.

(a) Trustee for international government loans and Depositary under the terms of the Act of Pledge concluded with the European Coal and Steel Community (ECSC)

As regards the Trustee functions of the Bank for the new bonds which were issued by the Government of the Federal Republic of Germany, in accordance with the London Agreement on German External Debts of 27th February 1953, in respect of the German Government International Loan 1930 (Young Loan), reference should be made to the fiftieth Annual Report, pages 168–169.

The Bank, in its capacity as Depositary under the terms of the Act of Pledge concluded with the ECSC, has since 1954 administered the loans issued by the ECSC under the terms of that Act; the last loan having been redeemed during the financial year 1985–86, all unused funds were returned to the Commission of the European Communities, Luxembourg, during the period under review.

(b) 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 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 EEC member countries.

During the period from 1st April 1987 to 31st March 1988 interventions carried out by EMS central banks in other member countries' currencies were again substantial. They were all effected within the fluctuation margins, some giving rise to financing and settlement operations through the intermediary of the EMCF in accordance with the new rules agreed by the EEC central bank Governors (see Section 1 above).

The volume of ECUs issued by the EMCF through quarterly swap operations with each of the EEC central banks rose from ECU 44.8 billion at 1st April 1987 to ECU 54.6 billion at 31st March 1988, or approximately US\$ 68.3 billion at the rate of exchange prevailing at that date. This increase of almost ECU 10 billion over the year resulted from: (i) initial operations with the Banco de España and the Banco de Portugal following their accession to the EMS Agreement in May and November 1987 respectively; and (ii) a further substantial increase in EEC central banks' dollar contributions, which reflected the expansion of their dollar reserves and was offset only in part by the further appreciable fall in the exchange rate of the US dollar.

Transfers of ECUs between the EEC central banks' "ECU reserves" accounts totalled ECU 6.1 billion in the period under review; they related mainly to mobilisation operations, settlements of outstanding balances under

* For a description of the structure and functions of the Fund, see the fifty-fourth Annual Report, pages 162–164.

the very short-term financing mechanism and voluntary repurchases of ECUs in order to reduce open net positions in ECUs.

As regards the Community borrowing and lending operations referred to in Council Regulations (EEC) No. 682/81 and No. 543/85, 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. It also carried out the financial transactions connected with the following operations relating to the loans on behalf of France:

- at the maturity date of 15th July 1987, repayment in full of the US\$350 million Community loan — in the form of bearer notes 1983–87 at 11% per annum — and of the corresponding credit granted to France;
- at the maturity date of 28th July 1987, repayment of the first ECU 80 million tranche — in the form of notes 1983–87 at 11½% per annum — of the ECU 150 million Community loan and of the corresponding credit granted to France.

The following table shows, as at 31st March 1988, the total of outstanding Community borrowing and lending operations.

Outstanding Community loans as at 31st March 1988					
Borrowing countries	US dollars	Deutsche Mark	Swiss francs	Yen	ECUs
	in millions				
France	590				70
Greece	400	830	227	25,000	700
Total	990	830	227	25,000	770

(c) Agent for the private ECU clearing and settlement system

Throughout the year the Bank continued to perform its functions as Agent for the private ECU clearing and settlement system in accordance with the provisions of an agreement concluded with the ECU Banking Association (EBA). As was mentioned in last year's Annual Report (page 184), the initial agreement of 21st March 1986 between the EBA and the Bank was replaced, with effect from 30th April 1987, by an agreement containing certain amendments aimed chiefly at facilitating the daily execution of the clearing operations.

As from May 1987, the system was opened to new member banks of the Association which, following their formal application, were granted the status of clearing banks by the EBA on the basis of criteria drawn up by that body and the BIS. These new banks joined the System at a rate of about three each month as from July 1987, bringing the number of participating banks to thirty on 31st March 1988.

3. Financial assistance to central banks

In addition to its normal banking operations the Bank was concerned in two publicly announced bridging loans during the year under review:

(a) In March 1987 a three-month bridging facility was set up on behalf of the Banco Central de la República Argentina for a total of US\$ 500 million, of which US\$ 275 million was made available by the BIS and US\$ 225 million by the US Treasury. The BIS's contribution was covered by the guarantee of eleven member central banks.

As mentioned in last year's Annual Report, this facility was linked to an IMF programme which included, in particular, assistance under the Compensatory Financing Facility, which was expected to be in place by 15th July 1987.

The whole US\$ 500 million facility was utilised on 9th March 1987 and was repaid at maturity on 15th July 1987.

(b) On 30th October 1987 a second bridging facility for the same amount was granted to the Banco Central de la República Argentina for a period of two months expiring on 31st December 1987. This facility was financed to the extent of US\$ 250 million by the BIS, again with a guarantee from eleven member central banks, while US\$ 250 million was provided by a consortium comprising the US Treasury and three Latin American central banks (Banco de México, Banco Central del Uruguay and Banco de la República, Colombia).

In setting up this bridging facility, account was taken of financing to be provided under an arrangement with the IMF and of various loans from the World Bank, which were due to be implemented before the end of December 1987.

The facility was made available to the Banco Central de la República Argentina in a single tranche of US\$ 475 million, which was drawn on 12th November 1987 and was fully repaid in the course of December 1987.

4. Operations of the Banking Department

The Balance Sheet of the Bank and the Profit and Loss Account at 31st March 1988, certified by the auditors, are reproduced at the end of this Report; they are expressed in gold francs.*

On 31st March 1988 the balance-sheet total stood at GF 38,150,580,292 whereas at the end of the preceding financial year,

on 31st March 1987, it had amounted to GF 29,944,209,515

The increase came to GF 8,206,370,777
or 27%.

This further rise in the balance-sheet total was the largest recorded in the course of a single financial year. However, whereas in the two preceding years the increase had for the most part reflected an appreciation, in gold franc

* 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.

terms, of the balance-sheet items denominated in currencies other than the US dollar, the movement observed in the financial year just ended was essentially due to the receipt of new deposits in currencies; the incidence of exchange rate variations — in the form of a further appreciation — was only minor.

The new resources, received mainly during the second half of the financial year, consisted for the most part of US dollars, Deutsche Mark and Japanese yen.

BIS: Development of the balance-sheet total over the past five financial years			
Financial years ended 31st March	Total of Balance Sheet	Movement over the year	
	in millions of gold francs	in percentages	
1984	21,276	+ 918	+ 5
1985	22,852	+ 1,576	+ 7
1986	26,558	+ 3,706	+ 16
1987	29,944	+ 3,386	+ 13
1988	38,151	+ 8,207	+ 27

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;
- assets held by virtue of the functions performed by the Bank as Trustee in connection with international loans;
- accounting entries arising from the Bank's functions as Agent for the European Monetary Co-operation Fund as described in Section 2 above;
- gold under earmark held by the Bank for the account of various depositors.

At the end of the financial year 1987–88 this item amounted to the equivalent of 1,225 million gold francs. It had stood at 1,165 million gold francs on 31st March 1987 and 1,155 million on 31st March 1986.

Liabilities (composition of resources)

BIS: Development of the composition 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			
1984	1,088	19,805	383	21,276
1985	1,143	21,323	386	22,852
1986	1,204	24,684	670	26,558
1987	1,270	27,626	1,048	29,944
1988	1,335	35,658	1,158	38,151

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 1987-88 GF 576,352,793

This compares with 550.4 million gold francs on 31st March 1987; the difference of 26 million represents the amount it is proposed to allocate to the Fund from the net profit. The proposed increase in this Reserve Fund is in conformity with the provisions of Article 51(3) of the Statutes.

(3) Special Dividend Reserve Fund

after allocation of the net profit for 1987-88 GF 31,530,055

This compares with 25.5 million gold francs on 31st March 1987. In accordance with the provisions of Article 51(4) of the Statutes it has been proposed that an amount of 6 million gold francs be transferred to this Fund from the net profit.

(4) Free Reserve Fund

after allocation of the net profit for 1987-88 GF 401,530,236

This compares with 368.5 million gold francs on 31st March 1987. It has been recommended that an amount of 33 million gold francs be transferred to this Fund, also from the net profit.

The total of the Bank's reserves, which, after allocation of the net profit for 1987-88, exceeds one billion gold francs for the first time, thus amounts to GF 1,039,483,397

The reserves had been raised to 974.5 million gold francs at the end of the preceding financial year; they thus show an increase of 65 million.

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
	1987	1988	
	in millions of gold francs		
Deposits of central banks	26,229	34,507	+ 8,278
Deposits of other depositors	1,397	1,151	– 246
Total	27,626	35,658	+ 8,032

Examination of this table shows that there was an appreciable rise in the “Deposits of central banks”; the increase in this item amounted to 31.6% and accounted for the greater part of the rise in the Bank’s Balance Sheet.

The decline in “Deposits of other depositors” reflects a decrease in the total of deposits received from various international organisations.

As a proportion of total borrowed funds, the share of central banks’ deposits consequently increased to 96.8%, from 94.9% at the end of the preceding financial year. The share of other depositors’ deposits declined to 3.2% from 5.1%.

BIS: Borrowed funds, by nature and term to maturity									
Term	Deposits in gold			Deposits in currencies			Total		
	Financial years ended 31st March		Move- ment	Financial years ended 31st March		Move- ment	Financial years ended 31st March		Move- ment
	1987	1988		1987	1988		1987	1988	
	in millions of gold francs								
Sight	4,526	4,466	− 60	1,636	2,240	+ 604	6,162	6,706	+ 544
Not exceeding 3 months	8	8	0	20,866	27,125	+ 6,259	20,874	27,133	+ 6,259
Over 3 months				590	1,819	+ 1,229	590	1,819	+ 1,229
Total	4,534	4,474	− 60	23,092	31,184	+ 8,092	27,626	35,658	+ 8,032

There was a decline in resources in gold; this reflected the movement in sight deposits in gold.

On the other hand, there were increases in all the items in currencies, and in particular in deposits with a residual maturity of up to three months. After three consecutive years of decline, the total of deposits with a maturity of over three months recorded an appreciable increase.

Deposits in gold, consisting mainly of sight deposits, accounted for 12.5% of total resources, and deposits in currencies for 87.5%. At the end of the preceding financial year the proportions had been 16.4% and 83.6% respectively.

Analysis of the various categories of deposits shows that sight deposits made up 18.8% of total resources (compared with 22.3% on 31st March 1987), while deposits with a maximum maturity of three months represented 76.1% (compared with 75.6%) and deposits with a maturity of over three months 5.1% (compared with 2.1%).

(a) *Deposits in gold* GF 4,473,626,267

This compares with a figure of 4,534 million gold francs at the end of the financial year 1986–87, representing a decrease of 60 million which was entirely accounted for by the decline in sight deposits in gold.

(b) *Deposits in currencies* GF 31,184,049,767

This compares with 23,092 million gold francs on 31st March 1987. The increase amounted to 8,092 million gold francs, or 35%; it was due for the most part to a further rise in resources in US dollars, which was particularly pronounced during the financial year. Resources in Deutsche Mark and Japanese yen also recorded an appreciable increase.

As shown in the above table, the growth of resources in currencies affected each of the three categories of deposits.

C. *Other liabilities*

(a) *Staff pension scheme* GF 115,992,603

This compares with 97.5 million gold francs on 31st March 1987. This item, which appeared in the Balance Sheet for the first time at the end of the preceding financial year, represents the gold franc equivalent of the amount of the Bank's liability, in Swiss francs, in respect of staff pensions.

(b) The item "*Miscellaneous*" stood at GF 1,010,788,081 against 925.9 million gold francs on 31st March 1987.

A large part of the increase under this heading was due to the rise in the gold franc value of component items denominated in currencies other than the US dollar.

(c) *Profit and Loss Account, before allocation* GF 95,937,052

This figure represents the net profit for the financial year 1987–88.

Details of the proposed allocation of the net profit, in accordance with the provisions of Article 51 of the Statutes, are given in Section 5 below. A sum of 30,937,052 gold francs, compared with 25,081,090 gold francs in the preceding financial year, is being set aside out of the above-mentioned amount in respect of the dividend of 175 Swiss francs per share payable on 1st July 1988. In 1987 the amount of the dividend paid per share was 155 Swiss francs.

Assets (employment of resources)

The table overleaf gives a breakdown of the main items of the assets according to their nature.

(a) *Gold* GF 4,980,714,027

This compares with 5,072 million gold francs at the end of the financial year 1986–87, representing a decrease of 91 million gold francs.

BIS: Distribution, by nature, of sight assets and other investments

Nature	Financial years ended 31st March				Movement	
	1987		1988			
	in millions of gold francs					
Sight assets						
Gold	5,072		4,981		—	91
Currencies	16	5,088	15	4,996	—	1 — 92
Treasury bills						
Currencies		558		1,952		+ 1,394
Time deposits and advances						
Gold	117		145		+	28
Currencies	21,064	21,181	26,888	27,033	+ 5,824	+ 5,852
Government and other securities at term						
Currencies		3,111		4,165		+ 1,054
Total						
Gold	5,189		5,126		—	63
Currencies	24,749	29,938	33,020	38,146	+ 8,271	+ 8,208

This movement reflects the reduction in central banks' gold holdings and, to a minor extent, the increase in investments in gold made on the market.

(b) *Cash on hand and on sight account with banks* GF 14,474,885

This compares with 16 million gold francs on 31st March 1987.

(c) *Treasury bills* GF 1,951,979,207

This compares with 558 million gold francs on 31st March 1987.

This portfolio, which had been drawn down in the previous financial year, was expanded appreciably; the increase amounted to 1,394 million gold francs. Purchases of Treasury bills were made on a number of markets.

(d) *Time deposits and advances* GF 27,033,004,510

This compares with a figure of 21,181 million gold francs at the end of the preceding financial year, giving a rise of 5,852 million.

The movement in this item is a direct reflection of the marked increase in resources in currencies.

Given the currency composition of new resources received, the largest proportion of new investments made was in US dollars, followed by Deutsche Mark and Japanese yen.

An appreciable decline in investments in SDRs was due to the repayment by the International Monetary Fund of a large part of the facility of SDR 2,505 million which the Bank had granted to it in 1984.

(e) *Government and other securities at term* GF 4,165,282,966

This portfolio, which expanded by more than one billion gold francs, had stood at 3,111 million on 31st March 1987. It consists of public and private sector securities purchased on various markets.

A breakdown according to residual term to maturity of investments in time deposits and advances (in currencies and gold) and in government and other securities at term is given in the following table.

BIS: Time deposits and advances and government and other securities at term, by term to maturity			
Term	Financial years ended 31st March		Movement
	1987	1988	
	in millions of gold francs		
Not exceeding 3 months	20,088	26,385	+ 6,297
Over 3 months	4,204	4,813	+ 609
Total	24,292	31,198	+ 6,906

The share of investments with maturities not exceeding three months, which had fallen to 82.7% during the preceding financial year, amounted to 84.6%, and thus returned to the same percentage level as at the end of the financial year 1985–86.

On the other hand, investments with maturities of over three months constituted 15.4% of the total, compared with 17.3% on 31st March 1987.

(f) *Miscellaneous* GF 5,124,696

This compares with a figure of 6 million gold francs on 31st March 1987.

Forward gold operations

These operations, which are mentioned in Note 2 to the Balance Sheet, resulted in a positive balance of GF 10,317,182 compared with a positive balance of 7 million gold francs at the end of the preceding financial year.

The increase in this item was due to the conclusion of a new swap of gold (delivered spot) against currency.

5. Net profits and their distribution

The accounts for the fifty-eighth financial year ended 31st March 1988 show a net operating surplus of 118,901,393 gold francs, compared with 95,214,480 gold francs for the preceding financial year. The principal factors underlying the improved financial result for the year under review were again the increased volume of the Bank's funds available for investment, and profits arising from transactions in securities.

The net operating surplus is shown after deduction of 28,821,525 gold francs in respect of costs of administration, which increased by 18% over the year largely as a result of the rise 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 rose by less than 2%.

The Board of Directors has decided to transfer 964,341 gold francs to the Provision for Exceptional Costs of Administration, and to establish — by means of a further transfer of 22,000,000 gold francs — a new "Provision for Modernisation of Premises and Renewal of Equipment", the main purpose of which is to cover the cost of projects involving capital expenditure, which appear to be taking on ever-increasing dimensions as the Bank's building becomes older and as technological advance quickens the pace of obsolescence. As a result of these two transfers, the net profit amounts to 95,937,052 gold francs, against 91,081,090 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 95,937,052 gold francs be applied by the General Meeting in the following manner:

- an amount of 30,937,052 gold francs in payment of a dividend of 175 Swiss francs per share;
- an amount of 26,000,000 gold francs to be transferred to the General Reserve Fund;
- an amount of 6,000,000 gold francs to be transferred to the Special Dividend Reserve Fund; and
- an amount of 33,000,000 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 1988 to the shareholders whose names are contained in the Bank's share register on 20th June 1988.

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 Messrs. Price Waterhouse & Co., Zurich, 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 1988 and of its profit for the year ended on that date. Messrs. Price Waterhouse & Co.'s report is appended at the foot of the Balance Sheet.

6. Changes in the Board of Directors and in the Management

At the meeting of the Board held on 10th November 1987 M. Jean Godeaux recalled that his three-year period of office as Chairman of the Board of Directors and President of the Bank for International Settlements would expire at the end of December 1987 and announced that he had decided to

relinquish these offices. Prof. Paolo Baffi, as the most senior member of the Board, expressed the Board's deep gratitude for the outstanding services that M. Godeaux had rendered to the Bank and the important contribution he had made to the advancement of co-operation among central banks. The Board then elected Dr. W.F. Duisenberg, President of the Netherlands Bank, as Chairman of the Board of Directors and President of the BIS under Article 38 of the Statutes for a period of three years as from 1st January 1988.

In September 1987 Prof. Paolo Baffi, whose mandate as a member of the Board was due to expire on 7th November 1987, was re-appointed under Article 27(2) of the Statutes by Dr. Ciampi, Governor of the Bank of Italy, for a further period of three years ending on 7th November 1990.

Likewise, in December 1987 Dr. Johann Schöllhorn, whose mandate as a member of the Board was due to expire on 31st December 1987, was re-appointed under Article 27(2) of the Statutes by Herr Pöhl, President of the Deutsche Bundesbank, for a further period of three years expiring on 31st December 1990.

At the meeting of the Board held on 9th February 1988 Baron de Strycker, whose mandate as a member of the Board was due to expire on 29th February, was re-appointed under Article 27(2) of the Statutes by M. Godeaux, Governor of the National Bank of Belgium, for a further period of three years ending on 28th February 1991.

The mandate of Dr. W.F. Duisenberg, who had been elected to the Board under Article 27(3) of the Statutes, was due to expire on 31st March 1988. He was re-elected for a period of three years ending on 31st March 1991 at the meeting of the Board held on 8th March 1988.

At the end of April 1988 M. Pierre Languetin relinquished his appointment as Chairman of the Governing Board of the Swiss National Bank and at the same time gave up his seat on the Board of Directors of the BIS. At the Board Meeting on 12th April 1988 the Chairman thanked M. Languetin for his eminent services to the Bank during a period of more than three years. At the same meeting Dr. Markus Lusser, who had been appointed to succeed M. Languetin as Chairman of the Governing Board of the Swiss National Bank, was elected under Article 27(3) of the Statutes to be a member of the Board for the unexpired period of M. Languetin's term of office, namely until 31st March 1989.

At its meeting on 10th May 1988, the Chairman informed the Board that Mr. Leigh-Pemberton had appointed Mr. L.D.D. Price, in place of Mr. J.E.W. Kirby, to act as his Alternate in the absence of Mr. A.D. Loehnis. The Chairman expressed the Bank's appreciation of Mr. Kirby's valuable services.

On 31st December 1987 Herr Paul Hauser, Assistant Manager in the General Secretariat, and on 31st May 1988 M. Robert Chaptinel, Deputy Manager in the Banking Department, retired, after more than thirty-six and forty years respectively of valuable and devoted service.

At the meeting of the Board on 8th March 1988 the Chairman announced that the Bank had decided to promote as from 1st April 1988 Dr. H.W. Mayer and Dr. Kurt Spinnler to the rank of Deputy Manager and M. Jean-Claude Dagassan, Mr. P.C. Bridge and Sig. Tullio Pollonio to that of Assistant Manager.

The Bank learned with deep regret of the death of Lord Cobbold on 1st November 1987, of Dr. Edwin Stopper on 17th February 1988 and of Dr. M.W. Holtrop on 1st April 1988. Lord Cobbold had been Governor of the Bank of England and an ex officio member of the Board from March 1949 until June 1961. He had previously been an Alternate on the Board from November 1934 until February 1949. Dr. Stopper had been Chairman of the Governing Board of the Swiss National Bank and a member of the Board of the BIS from September 1966 until April 1974. Dr. Holtrop had been President of the Netherlands Bank from April 1946 until April 1967. He had been a member of the Board from July 1946 until June 1967 and Chairman of the Board and President of the BIS from July 1958 until June 1967.

Conclusion

It was said in Chapter I, looking back over the past year, that most of the major problems for economic policy in evidence a year ago are still with us. By far the most important of these, from the point of view of central banks, is the continuation of the large payments imbalance in the industrial world. Looking ahead now, the question is whether this imbalance still poses the same risks to financial stability and to non-inflationary growth prospects as it did a year ago and, to the extent that it does, how these risks can be minimised. And what of other problems which require policy responses?

Recent developments in the financial markets have underlined the relevance of these questions. After a period of relative calm during the first two months of this year, the markets have begun to remind us that stabilisation should not be taken for granted. With occasional interruptions, long-term interest rates in the United States have now been on a rising trend since early March, and since mid-April long-term Deutsche Mark rates have also been moving upwards. The equity markets have more than once been subject to sudden downward pressure. There have also been brief periods of dollar weakness. More generally, the day-to-day volatility of financial asset prices has remained high. While central banks have successfully resisted the slide of the dollar and managed to contain its short-term volatility, and while none of the other disturbances has so far been remotely comparable in either scale or speed to those of last year, all these developments demonstrate the extent to which financial market participants are still uncertain about the outlook for such key macro-economic variables as inflation and the dollar exchange rate. Moreover, at least some of them are wondering whether we are set on the same course as last spring.

There can be little doubt that much of this uncertainty is fuelled by the imbalances in the current accounts of the United States, Japan and the Federal Republic of Germany. While these imbalances — even in dollar terms — have by now clearly passed their peaks, they are still, and are expected to remain, high by historical standards. With foreign investors playing such a large role in the US bond market, the persistence of these imbalances is directly responsible for some of the uncertainty concerning future long-term dollar interest rates and, obviously, for most of the apprehension about the future value of the dollar. But the US external deficit is also important as a symptom of what are perceived as domestic imbalances in the US economy: in the financial sector, the insufficiency of private savings to finance the budget deficit; and, in real terms, the continued buoyancy of domestic spending, which, together with the welcome upswing in exports, is pushing the economy more and more towards capacity constraints. This feeds inflationary expectations,

which, in turn, influence bond prices. Finally, market participants harbour misgivings about policy-makers' reactions (or inaction) in these circumstances, both in the United States and in the surplus countries, adding another element of uncertainty to financial and exchange market developments. Anyone who is inclined to be sceptical about the truth of these assertions should watch on a dealer's screen how fast and how far asset prices and exchange rates move in response to news concerning the US trade deficit, employment data and inflation indicators or to comments made by policy-makers from the major countries. It is understandable, in such an environment, that, with the dollar values of the external imbalances still not much changed from those of last year, many market participants should yield to the temptation of reasoning by analogy with the sequence of events that culminated in 19th October.

They will very likely prove to be wrong — not simply on the general grounds that history never exactly repeats itself, but for quite specific reasons too. A number of changes have occurred during the past twelve months that have made the world a different place from what it was a year ago. Unfortunately for those who like a neatly defined set of problems, with tidy solutions, none of these changes has been clear-cut. Progress in real external adjustment has been broadly confirmed, although domestic adjustment in the United States appears inadequate; the period since the stock market crash has shown the resilience of markets and of financial institutions, but the crash itself raised questions that call for answers; the authorities have demonstrated their crisis-handling ability and also their readiness to co-operate, although co-operation on fiscal policies has not matched the success achieved by exchange market and monetary policy co-operation; the risk to global financial stability inherent in the international debt situation has been alleviated, though the debt burden continues to weigh heavily on the chances of recovery for most indebted countries; finally, growth prospects in the industrial world have improved, but inflationary expectations have, rightly or wrongly, rekindled. Let us look briefly at each of these developments.

The most significant, and the most favourable, news from the point of view of the adjustment process has been the broadly based statistical confirmation of encouraging progress in real terms. In the United States a \$21½ billion rise in the real non-oil trade deficit in 1986 was followed in 1987 by a decline of more than \$11½ billion — mostly as a result of a 16% jump in the volume of exports of manufactured goods, equal to two and a half times the estimated growth of US manufacturers' export markets. The international competitiveness of US industry has clearly much improved. The real Japanese non-oil trade surplus, which had already declined by \$20½ billion in 1986, narrowed further by \$14½ billion in 1987 — and by much more if exceptional gold imports in 1986 are left out of account. At constant dollar trade unit values, Germany's non-oil trade surplus shrank by about \$6 billion in each of the last two years. Terms-of-trade developments have offset much of this adjustment, but these will not last for ever, and at least some further reduction in the dollar value of the imbalances is bound to take place.

The qualification "at least some" is unfortunately made necessary by the uneven success of the domestic adjustment policies that underpin the process

of real external adjustment. These policies have led to remarkable results in Japan, where the rate of growth of domestic spending came close to 7% during the last quarter of 1987 compared with the previous year. Results have been much more modest in Germany, with the same aggregate expanding by 3%. The main problem appears to be in the United States, where the vigour of domestic demand, against the background of a high degree of capacity utilisation in the traded goods sectors, calls for further fiscal restraint, going well beyond what has already been achieved. Failing this, the decline in the US current-account deficit will remain modest.

The major financial event of last year — the stock market crash in the United States, followed by a rapid, broad-based and steep downward adjustment of stock prices worldwide (except in Japan) — calls for three comments. Firstly, stock prices except in Japan are now well below their previous peaks and seem less vulnerable to the shock of “bad news”. Secondly, the markets have displayed a remarkable resilience: quite uncharacteristically by historical standards, they have more or less stabilised rather quickly at a lower level. While the drop was alarmingly sharp and widespread, subsequent events have not confirmed the fears of “tail-spin” reactions that formed part of the doomsday scenarios. Notwithstanding some heavy losses, securities houses have weathered the storm relatively well; more importantly, perhaps, with some minor exceptions no large-scale problems have resulted for individual banks, and none for banking systems as a whole. Thirdly, however, both the speed and the “globalisation” of reactions, despite very different fundamentals and price/earnings ratios, have thrown up questions that have yet to be answered and which pose challenges for market participants, governments and supervisory authorities alike.

The response of the monetary authorities to the stock market crash was swift and efficient — so much so that historians will have ample scope for debating whether the stabilisation of prices should be ascribed to built-in market brakes or to the prompt supply of liquidity (and also some more direct intervention) by the monetary authorities during the days that followed the price collapse. It can probably be attributed to both — but this is also part of the good news. So is the fact that active, visible and co-ordinated intervention in the foreign exchange markets has gradually become more effective in dampening excessive volatility and countering downward pressure on the dollar exchange rate. Part of the explanation for this effectiveness may possibly lie in the fact that trading has come to dominate exchange market transactions and that traders, for good reasons, work with a very short time horizon. In such a context, central bank intervention, even on a scale that looks small in relation to total market turnover, is likely to be quite effective, even beyond whatever effectiveness can be derived from the traditional “signal” effect — but this does not mean, of course, that intervention alone can be expected to stabilise exchange rates. There has also been progress in the co-ordination of monetary policies, although the limits to co-ordination that is confined to monetary policies have been made evident by the lack of sufficient contrast between the US and the German fiscal policy stances.

Time has been working effectively to alleviate the risk to global financial

stability inherent in the international debt situation. Banks' exposure to problem debtor countries has for years been declining in relation to their capital base, and more and more of them have been able to set aside sizable provisions against country risk. Time has not, it is true, been working to the same extent in the debtor countries' favour. Their aggregate current account has improved substantially and at least some of them have been able to build up some foreign exchange reserves. But on the whole their ability to service their debt has not improved to the point where they can hope to become sufficiently creditworthy again in the foreseeable future to allow them to speed up their capital formation. Still, the years since 1982 have not been wasted. There is now a growing awareness among debtor countries that their external debt problems are part of larger internal problems. Many of them, the middle-income countries, seem willing to reassess their domestic approach to development, taking into account what has been learnt worldwide about the beneficial role of market mechanisms. These same countries may also benefit from the acceleration, during the last twelve months, in the "learning process" on the creditors' side — their greater readiness to call a problem by its name and to cut losses when this seems to lie in their own interest just as much as in that of the debtors.

The growth performance of the industrial countries as a group has improved since the spring of 1987, and growth prospects are now also better than a year ago. This is not, however, an entirely unmixed blessing. The sharp revival of activity in Japan has been remarkable; the strength of domestic demand in the United States (not so much when compared with the rate of growth of domestic spending in the surplus countries but in relation to capacity) has not been such good news — not only because of balance-of-payments considerations but also because of its potential inflationary implications. Domestically generated inflation has so far remained surprisingly subdued in the United States, despite the decline in the external value of the dollar, growing capacity constraints and steadily declining unemployment. But to count on a continuation of this windfall would not be the most enlightened policy, especially in an environment of rising commodity prices and with some of the effects of the earlier depreciation of the dollar perhaps still in the pipeline. The US bond markets have been flashing a warning signal in this direction since early March. This particular constellation does not apply to Japan and the Federal Republic of Germany, but both have been experiencing a very fast expansion of domestic liquidity — by practically any standards. The fact that this has not prevented the more recent rise in long-term interest rates, in particular in Germany, cannot be dismissed out of hand. It may have something to do with a belief on the part of German investors that intra-European exchange rate stability is here to stay; but it may also mean that market participants, rightly or wrongly, do not extrapolate the current price stability into the future.

Three broad conclusions would seem to emerge from this summing-up of events which have created a new environment for those policy decisions which directly, or indirectly, concern central banks. Firstly, the western financial system as a whole (and within it the banking system) has come through last

year's turbulences in better shape than might have been expected. Lessons will nevertheless have to be drawn from the stock market break. Secondly, while the external adjustment process is well under way in real terms, large nominal current-account imbalances will in all probability remain with us for some time to come, and policies will have to be devised to minimise the risk that the realisation of this fact will trigger shocks that would be anything but positive for the financial system, robust as it may seem. Thirdly, in framing these policies it will have to be borne in mind that while global growth in the industrial world is quite satisfactory, inflation risks cannot be disregarded. A few final comments may be called for on these three points.

Lessons are already being learnt from the October crash, which, while not deeply disruptive, was severe enough to elicit salutary reactions from the business community. Securities market participants have not only become more cost conscious, they are also taking a harder look at the usefulness or otherwise of new financial techniques, strengthening internal controls and discovering, or rediscovering, the virtues of specialisation. Banking supervisors have gained more direct experience of the implications of securitisation for banking, and are adjusting their supervisory techniques accordingly. Supervisors of the securities industry have realised the full extent of the interdependence between the various components of the securities markets. And both groups of supervisors are aware of the need for co-operation in the domestic context and internationally.

Much remains to be done, however, beyond these healthy first reactions. The lightning speed with which markets interacted domestically and across borders raises questions about the cost/benefit balance of certain innovations and of the globalisation of markets. These questions have to be answered, but the answers must be based not on political bias but on a thorough technical analysis of what has happened; and for this, time is needed. It would be a great pity if the a priori belief that financial markets work harmoniously as long as they are left to themselves were to be replaced by the equally a priori belief that a legislative push towards re-regulation would avert the risk of repeating the experience of 19th October. If there is one conclusion that can already be drawn from the fascinating analytical reports published in the United States, it is that our financial world has become far too sophisticated and far too complex for simplistic answers.

The continuation of large US current-account deficits implies a corresponding accrual of net claims on the United States by the rest of the world. Will foreign holders of financial assets be ready to accommodate the necessary change in their financial portfolios — and, if so, at what cost to financial stability? It is the historically very large size of the expected deficits that raises doubts about this accommodation taking place without disruption in the financial markets. But another quantitative assessment from a different angle does not support such pessimism. Admittedly, the share of private claims on the United States in the total financial assets held by the enterprise sector in the other industrial countries has risen quite a lot since the emergence of the US current-account deficit, but it still amounted to little more than perhaps 3½% at the end of 1986. And this calculation does not take into account the

very large financial wealth of the household sector, nor does it include that of the non-industrial countries. The financial wealth accumulated outside the United States is very considerable, and persistently high saving ratios ensure that it will grow further. Add to this the fact that the process of liberalisation of foreign exchange and capital markets has far from run its course, and that a very large proportion of financial assets even in countries with complete freedom of capital movements has not yet been exposed to the temptation of international diversification, and the quantitative problem appears much more manageable than may be suggested by a simple reference to an impressive number of dollars.

The other side of the coin is, of course, that a world dominated by high-speed capital mobility is also one governed by expectations, which are the prime movers of financial asset prices. Should investors entertain misgivings about policy commitments, they will not want to add to their holdings of dollars, and may even be tempted to sell them. However, give owners of financial wealth good reasons to believe that the authorities remain fully committed to the stabilisation of the dollar, and that credible policies are being pursued that will lead to a gradual, even if slow, reduction of the payments imbalances, and they will be quite willing to diversify their portfolios further in favour of claims on the United States.

The first condition for continued diversification is that market participants have confidence in the willingness and ability of the authorities both of the United States and of the surplus countries to resist downward pressure on the dollar. Considerable progress has been made in this direction since the spring of last year (with some slippages in the late summer), in terms both of actual intervention and of contrasting monetary policy stances, as may be seen from the interest rate differentials at the short end of the market and the divergent trends in money supply figures.

But there is also the second condition to be satisfied — confidence that policies are being implemented to ensure continued progress in external adjustment. Even on the assumption that financial market participants come to realise the extent of the real adjustment that has already taken place, and that the downward drift of nominal imbalances is confirmed in the coming months, meeting this second condition demands more — in the form of resolute assistance from contrasting fiscal policies.

Such fiscal action is also required from the point of view of avoiding a re-emergence of inflation in the United States. Expansionary policies have been implemented with notable success in Japan, although less so in Germany; but in the United States the contrary movement has been inadequate. Yet restoring a better ratio between the budget deficit and domestic savings and containing domestic spending well within capacity constraints are necessary for the sake of both internal and external balance in the United States. Part of this task can be, and will have to be, performed by monetary policy; but leaving it all to the monetary authorities would not be good for the stability of financial markets. Conversely, stronger domestic expansion would be helpful for both internal and external balance in the Federal Republic of Germany. And while part of this task can be performed by monetary policy — as, indeed, it already

has been — the build-up of liquidity through monetary ease has limits in terms of efficiency as well as of desirability in a longer-term perspective. A single policy tool surely cannot be expected to work the miracle of achieving a complex set of policy objectives: external balance, internal balance in the short run and in the longer term and, on top of this, financial stability.

The great challenge to the monetary authorities of both countries (and also to those of a number of others), given the political difficulties in changing fiscal policies and the unavoidable waiting period due to the US elections, is to perform a delicate balancing act by guessing how far they can go without overstepping certain limits — or, as the colloquial French saying goes, “jusqu’où elles peuvent aller trop loin”. But this is a situation which central banks are, by tradition, accustomed to handling.

ALEXANDRE LAMFALUSSY
General Manager

Balance Sheet and Profit and Loss Account

at 31st March 1988

Balance Sheet at 31st March 1988

(in gold francs – see Note 1)

Assets		
Gold		4 980 714 027
Cash on hand and on sight account with banks		14 474 885
Treasury bills		1 951 979 207
Time deposits and advances		
Gold		
Not exceeding 3 months	79 606 905	
Over 3 months	64 923 062	
Currencies		
Not exceeding 3 months	23 836 993 704	
Over 3 months	<u>3 051 480 839</u>	
		27 033 004 510
Government and other securities at term		
Not exceeding 3 months	2 468 298 103	
Over 3 months	<u>1 696 984 863</u>	
		4 165 282 966
Miscellaneous		5 124 696
Land, buildings and equipment		<u>1</u>
		<u>38 150 580 292</u>

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 1988, gold receivable against currencies on forward contracts amounted to 10 317 182 gold francs.

Before 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

295 703 125

Reserves

Legal Reserve Fund 30 070 313

General Reserve Fund 550 352 793

Special Dividend Reserve Fund 25 530 055

Free Reserve Fund 368 530 236

974 483 397

30 070 313

576 352 793

31 530 055

401 530 236

1 039 483 397

Deposits (gold)

Central banks

Sight 4 466 156 947

Not exceeding 3 months 7 468 921

Other depositors

Sight 399

4 473 626 267

4 473 626 267

Deposits (currencies)

Central banks

Sight 2 209 723 087

Not exceeding 3 months 26 006 283 420

Over 3 months 1 817 050 103

Other depositors

Sight 30 250 965

Not exceeding 3 months 1 118 850 589

Over 3 months 1 891 603

31 184 049 767

31 184 049 767

Staff Pension Scheme 115 992 603

115 992 603

115 992 603

Miscellaneous 1 010 788 081

1 010 788 081

1 010 788 081

Profit and Loss Account 95 937 052

95 937 052

—

Dividend payable on 1st July 1988 —

30 937 052

38 150 580 292

38 150 580 292

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 1988 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.

Zurich, 29th April 1988

PRICE WATERHOUSE & CO.

Profit and Loss Account

for the financial year ended 31st March 1988
(in gold francs)

Net interest and other operating income		147 722 918
Less: Costs of administration		
Board of Directors	346 356	
Management and Staff	20 950 961	
Office and other expenses	<u>7 524 208</u>	<u>28 821 525</u>
Net operating surplus		118 901 393
Less: Amounts transferred to		
Provision for Exceptional Costs of Administration	964 341	
Provision for Modernisation of Premises and Renewal of Equipment.....	<u>22 000 000</u>	<u>22 964 341</u>
Net Profit for the financial year ended 31st March 1988		95 937 052

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: 175 Swiss francs per share on 473 125 shares	<u>30 937 052</u>
	65 000 000
Transfer to General Reserve Fund	<u>26 000 000</u>
	39 000 000
Transfer to Special Dividend Reserve Fund	<u>6 000 000</u>
	33 000 000
Transfer to Free Reserve Fund	<u>33 000 000</u>
	<u> </u>

Movements in the Bank's reserves

during the financial year ended 31st March 1988
(in gold francs)

I. Development of the Reserve Funds resulting from allocations for the financial year 1987-88

	Legal Reserve Fund	General Reserve Fund	Special Dividend Reserve Fund	Free Reserve Fund
Balances at 1st April 1987, after allocation of Net Profit for the financial year 1986-87	30 070 313	550 352 793	25 530 055	368 530 236
Add: Allocations for the financial year 1987-88	—	26 000 000	6 000 000	33 000 000
Balances at 31st March 1988 as per Balance Sheet	30 070 313	576 352 793	31 530 055	401 530 236

II. Paid-up Capital and Reserve Funds at 31st March 1988 (after allocation) were represented by:

	Paid-up Capital	Reserves	Total
Net assets in			
Gold	295 703 125	366 231 784	661 934 909
Currencies	—	673 251 613	673 251 613
	295 703 125	1 039 483 397	1 335 186 522

Board of Directors

Dr. W. F. Duisenberg, Amsterdam
Chairman of the Board of Directors,
President of the Bank

The Rt. Hon. Lord Richardson of Duntisbourne, London
Vice-Chairman

Prof. Paolo Baffi, Rome
Dr. Carlo Azeglio Ciampi, Rome
Bernard Clappier, Paris
Bengt Dennis, Stockholm
Jean Godeaux, Brussels
Jacques de Larosière, Paris
The Rt. Hon. Robert Leigh-Pemberton, London
Dr. Markus Lusser, Zurich
Karl Otto Pöhl, Frankfurt a/M.
Dr. Johann Schöllhorn, Kiel
Baron de Strycker, Brussels

Alternates

Dr. Lamberto Dini, Rome, or
Dr. Rainer Masera, Rome
Prof. Dr. Leonhard Gleske, Frankfurt a/M.
Georges Janson, Brussels
A. D. Loehnis, London, or
L. D. D. Price, London
Jacques Waitzenegger, Paris, or
Francis Cappanera, Paris

Management

Alexandre Lamfalussy	General Manager
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
M. G. Dealtry	Deputy Head of the Monetary and Economic Department, Manager
Marten de Boer	Manager, Banking Department
Jean Vallet	Deputy Secretary General
André Bascoul	Deputy Manager, Secretariat of EEC Governors
Joachim Mix	Deputy Manager, Banking Department
Dr. H. W. Mayer	Deputy Manager, Monetary and Economic Department
Dr. Kurt Spinnler	Deputy Manager, Banking Department
Kevin J. Kearney	Assistant Manager, General Secretariat
Dr. Joseph R. Bisignano	Assistant Manager, Monetary and Economic Department
Dr. Gunter Baer	Assistant Manager, Monetary and Economic Department
Prof. Mario Giovanoli	Head of the Legal Service
Jean-Claude Dagassan	Assistant Manager, EMCF Agent
P. C. Bridge	Assistant Manager, Banking Department
Tullio Pollonio	Assistant Manager, General Secretariat

