BANK FOR INTERNATIONAL SETTLEMENTS

FIFTY-SEVENTH ANNUAL REPORT

1st APRIL 1986 – 31st MARCH 1987

BASLE

15th June 1987

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FIFTY-SEVENTH ANNUAL REPORT

submitted to the

ANNUAL GENERAL MEETING

of the

BANK FOR INTERNATIONAL SETTLEMENTS

held in

Basle on 15th June 1987

Ladies and Gentlemen,

I have the honour to submit herewith the fifty-seventh Annual Report of the Bank for International Settlements for the financial year which began on 1st April 1986 and ended on 31st March 1987.

The net profit for the year amounted to 91,081,090 gold francs, after transfer of 4,133,390 gold francs to the Provision for Exceptional Costs of Administration. This compares with a net profit for the preceding year of 80,171,806 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 25,081,090 gold francs in payment of a dividend of 155 Swiss francs per share.

The Board further recommends that 26,400,000 gold francs be transferred to the General Reserve Fund, 4,000,000 gold francs to the Special Dividend Reserve Fund and the remainder of 35,600,000 gold francs to the Free Reserve Fund.

If these proposals are approved, the Bank's dividend for the financial year 1986–87 will be payable to shareholders on 1st July 1987.

I. A LESS AUSPICIOUS OUTLOOK THAN LAST YEAR.

Any review of world economic developments over the past year must acknowledge that the challenges facing policy-makers are in certain respects more formidable now than they were twelve months ago. This applies to both of the main problem areas, which continue to be the external imbalances in the industrial world and the international debt situation. The main industrial countries — which are agreed on the broad analysis of the problems, on the principle of better policy co-ordination and on the desirability of exchange rate stability — are at present confronted with three unpleasant facts: that the risks of a trade war have increased, because payments imbalances are still so large; that economic growth in the surplus countries has slowed down in response to the exchange rate realignments of the past two years; and that it is harder to stabilise than to realign exchange rates through exchange market intervention, so long as markets cannot see the fundamentals clearly moving in the right direction. In the other major problem area, the balances of payments of a number of heavily indebted countries have deteriorated, for external reasons or as a consequence of domestic policy mismanagement. Moreover, signs of fatigue with the current debt strategy have become apparent in certain debtor countries and in parts of the international banking community.

In contrast to these problem areas there are, of course, brighter spots in the overall picture. Some of them, however, are precisely those which were already in evidence a year ago and were then seen as holding out the promise of better things to come: low inflation rates, low nominal interest rates, low oil prices. Disappointingly, they have not given the boost to economic growth which most observers were confident enough to predict. While at first it seemed that this could be attributed to lags being longer than anticipated, the impression has now gained ground that, whatever their net stimulating effects may have been, these were more than offset by stronger-than-expected negative influences emanating from the very large exchange rate changes that have taken place.

A feature common to both explanations which was brought home once again in 1986 and may seem quite obvious in retrospect is this: where rapid, major developments have adverse effects on some and favourable effects on others, reactions to the adverse effects are almost invariably faster than reactions to favourable ones. In part this may simply be a matter of the shorter time it takes to reach a negative decision than a positive one. The decision to cancel or postpone an investment programme, for example, may not take more than a week and has immediate consequences, while the decision to embark on an investment programme may take several months to reach and even more time will pass before that decision starts to have an impact, first on orders and then on output. But psychological elements reinforce this pattern: adverse effects impinge on expectations quickly, whereas there is a tendency for people not to trust their luck, to want to be sure that

favourable developments are lasting before they allow them to influence their behaviour. A decade and a half's experience of frequent external shocks has served to strengthen this "wait and see" attitude.

The sharp decline in oil prices in 1986 was one such development with adverse effects for some and favourable effects for others. The response of the oil producers to the decline in their revenues was quick and clear; the response of consumers to their higher real income was delayed and less clear. The cutback in imports of oil-producing developing countries was a major factor in economic performance in 1986 and beyond. So was the widespread cancellation of investment plans in oil-producing industrial countries. The other major development of this nature occurred, of course, in the exchange markets — adversely affecting exporters in countries with appreciating currencies, on the one hand, and benefiting exporters in countries with depreciating currencies, on the other. While export orders and even export volumes in the United States have risen in the wake of the depreciation of the dollar, there is little evidence so far that investment in plant and equipment has responded to this. Currency *appreciation* has in the past often been seen as a spur which brings out the best in exporters, with higher capital investment as the main means of improving efficiency and thus coping with lower returns and defending market shares. Profit margins of exporters to the United States were no doubt in most cases more than ample when the dollar was at its peak, so that they could take a fair amount of exchange rate adjustment in their stride. But this is obviously a question of degree. By mid-1986, starting in Japan, but before long in Germany and in other European countries too, export industries began to curtail their investment outlays drastically. That tipped the balance and, despite strong private consumption, prevented domestic demand from more than perhaps just compensating the sharp reduction in external demand. Growth prospects in the countries with appreciating currencies have therefore been impaired.

Many observers are concerned about growth prospects in the surplus countries as much because of the links they see with problems elsewhere in the world economy as for their own sake. It is asked, for example, how the United States can hope to reduce its current-account deficit to manageable proportions unless growth in the surplus countries is of the order of at least 2½–3 per cent. and that of domestic demand even greater. How can overall demand in the world economy be sustained at a time when the US fiscal stance is being tightened? How can further protectionist pressures be resisted if the US payments deficit, and the counterpart surpluses, are not reduced? How can the debtor countries hope to export enough to service their debts without sufficient growth in the industrialised countries? It is no doubt a good thing that the awareness of international linkages of this kind has grown over the last few years. At the same time, one should not overlook the fact that the economic performance of each country is first and foremost its own concern; the repercussions on other countries cannot be more than an important additional aspect. Trying to impose policy priorities from outside can only result in irritation and strained relations.

The present deterioration in growth prospects in the main surplus countries is no less worrisome, however, when viewed from inside. In the European countries labour market problems had lately, and at long last, started to ease, with employment growing noticeably, even though unemployment declined less as the

labour force continued to expand as a result of new entries and some re-entries to the labour market. This favourable employment trend seems to have continued until quite recently, but it is difficult to see how it could survive a marked slowdown in economic growth. Moreover, unemployment is now becoming a major issue in Japan, for the first time since the Second World War.

The present situation is thus bound to revive discussion about the role of demand management. If it is true that supply conditions have improved markedly during the last few years and that present difficulties are predominantly due to external factors, some of the familiar arguments against stimulating demand may no longer be valid. Fine-tuning, of course, will find few advocates; quick results are not achievable. But the idea of attempting to use fiscal policy to support economic growth seems to be gaining acceptance. The German tax reduction scheduled for 1988, to give one example, is to be augmented by bringing forward a net relief for taxpayers from the major tax reform envisaged for 1990. In Japan a major fiscal package to stimulate domestic demand is still in the process of being discussed within the ruling party. One of the problems with fiscal policy in some countries in the past was the tendency to use it on a permanent basis but not decisively enough when it was really needed. One of the purposes of, and indeed an important argument for, fiscal consolidation was to give back a cutting-edge to the instruments of fiscal policy. It would be only logical then to use them when the need arises, and it may soon become clear that this is now the case.

There does not seem to be much scope for supporting aggregate demand by means of monetary policy, which would clearly be in danger of over-extending itself. Money growth virtually everywhere has long been high by any standards. Financial markets have responded quickly, and even violently, at least in some countries. In the goods markets "long and variable" lags have been observed often enough for the dangers of prolonged periods of high monetary expansion not to be dismissed lightly. Many no longer accept monetary aggregates as a guide for monetary policy, partly because of the distorting effects of financial innovation, and partly because of unstable money demand functions in general. Chapter VI discusses these issues in detail. The view that one set of monetary policy prescriptions is needed for an inflationary situation and another set when inflation has been conquered is hardly convincing. The two situations succeed one another, and quantitative aspects have to be heeded not only in order to conquer inflation but equally to prevent any recurrence of it. To wait until clear warning signals go up means most certainly waiting too long: of that there can be no doubt. Admittedly, this does not make it any easier for policy-makers to find a good quantitative guide when indicators previously used have become unreliable.

Interest rates, real or nominal, cannot substitute for quantitative indicators. Money market interest rates are well under the control of the authorities and the only question here is "control to what end?" Other interest rates, particularly long-term rates, are not under the close control of the authorities. There seems, nevertheless, to be a certain consensus that lower real interest rates stimulate growth and that whatever central banks can do to bring them about would be welcome. The existence of this stimulative effect seems to be taken more or less for granted, although very little empirical evidence has been gathered to support it. The slowdown in economic growth in the 1970s occurred in most countries under

conditions of negative real interest rates. The return to a fairly long period of moderate growth occurred under conditions of positive and, depending on how they are measured, relatively high real interest rates. As usual, the evidence is not conclusive because of the other things which have not been equal over time and between countries. The question as to whether central banks are in fact able to bring about low real interest rates for any length of time by lowering the short-term nominal rates which they control is no less contentious. No matter how one looks at it, the role of monetary policy in improving growth prospects will be a modest one.

It appears unlikely that the shortfall in demand in the surplus countries produced by the large exchange rate changes of the past two years will be quickly offset by policy-induced demand stimuli. From this, many observers in the United States seem to conclude that the US trade deficit will only be reduced to an acceptable order of magnitude if the dollar comes down further against the Japanese yen and the European currencies. They are quite prepared to see a substantial further devaluation of the dollar. The US trade deficit with the newly industrialised countries, which managed to keep their exchange rates vis-à-vis the US dollar relatively stable, while important, is not considered to be at the heart of the problem. The logic of the argument seems to be as follows. Its premise is that the present size of the imbalance in the US current account is unsustainable. If, of the two possible solutions, one — a sufficient growth differential — is not available as the surplus countries fail to stimulate their economies sufficiently and the United States is not prepared to tolerate a recession as part of the adjustment process, the only alternative appears to be a further decline of the dollar.

However, one could just as well turn that argument on its head: if the substantial devaluation of the US dollar has not yet had any visible impact on the US current-account deficit, owing no doubt in substantial part to so-called J-curve effects, a further exchange rate adjustment will also take a long time to strengthen the equilibrating forces. Somewhere along the way there will be overshooting until the bubble bursts and the now familiar cycle starts all over again, this time in the opposite direction and perhaps at an accelerating pace. At the time of the Plaza Agreement there had been a strong consensus that overshooting exchange rates were harmful to everyone, not just to the countries with appreciating currencies. Misaligned exchange rates give the wrong signals or add to uncertainty because it is understood that they cannot last. While very few people claim to know with any precision where a misalignment begins, such precision is not what is required. What is essential is that US policy-makers accept — as now seems to be the case — that the depreciation of the US dollar can go too far and may require action, even if the trade and/or the current-account deficit has not yet come down to any particular magic number. Chapter III gives a fuller account of what has been achieved so far in the direction of better current-account balance between the industrialised countries. It may not seem much, but it is by no means negligible and demonstrates that exchange rate adjustment is working slowly in the desired direction.

There remains the question of how much longer US current-account deficits not far below the present level are sustainable, the premise from which the argument started. There is, firstly, a political dimension to this. Unless the deficit is reduced

quickly, US legislators may push through strongly protectionist legislation. This protectionist threat is a very serious matter, not least because it is so irrational. It is a major challenge for political leaders to bring home the point that, apart from a certain sense of satisfaction at having "shown them", protectionist measures will not solve anything, certainly not the problem of the current-account deficit; they will damage the world at large and the United States in particular. But sustainability has another dimension, namely whether a deficit of this size can be financed for a number of years to come. Some will already have seen an indication that the limits to financing are not far off in the fact that recently the bulk of the US current-account deficit has no longer been financed by private investors but by foreign central banks, which intervened in the foreign exchange market on a large scale in an attempt to prevent a further devaluation of the US dollar, with mixed success. There is no doubt a danger that if financial markets do not observe an actual decline in the US deficit, they will accept its financing only at a lower dollar exchange rate or at higher dollar interest rates, or a combination of both. Alternative investment opportunities are, however, not that abundant; moreover, there remains a basic, and clearly justified, confidence in the economy of the United States and its long-term growth prospects. It would seem that the objective of maintaining this confidence is best served precisely by preventing a further decline in the value of the dollar so that the real adjustment in the trade figures which is already under way is reflected as quickly as possible in a decline of the trade deficit.

One last point may be worth making in this context, although it will have little appeal to those who believe they know all the elements which determine the size of future current-account balances: anybody looking at the wild fluctuations in these accounts over the last, say, eight years must find it very difficult to accept the proposition that the present structure will persist, largely unchanged, for several years to come. There have been other dilemmas in the past which resolved themselves faster than anybody had dared to imagine at the time, for example the "dollar gap" in the early 1950s. The accuracy of short-term forecasts leaves much to be desired, but extending forecasting into the medium and long-term range becomes even more hazardous. This is not a case of introducing a "deus ex machina" into the debate; it is merely a reminder that circumstances not infrequently change more fundamentally than anybody can reasonably foresee.

The Louvre Accord represents an agreement between major governments with regard to the wisdom of acting against further exchange rate movements, but too little time has elapsed to be sure that these governments also see eye to eye on the measures necessary to support the present exchange rate structure. The initiative towards better policy co-ordination which was launched at the Tokyo summit, taking up elements already contained in the Plaza Agreement, is still in the process of being followed up. While it makes sense to create a new framework in which to pursue policy co-ordination with a medium and long-term view, there is hesitancy on all sides when it comes to making commitments with implications which are difficult to foresee. In the absence of such a framework, however, policy co-ordination is in danger of remaining essentially a short-term exercise in situations of near-crisis, based on a rather simplified model of the interaction between the economies concerned or, even worse, on different models in the minds of different governments. It is now of the utmost importance that the surplus countries react to the challenge of the sharp drop in export demand feeding through to domestic

investment as described above. If they rise to this challenge, the industrialised countries may come closer to a common view on what role economic policy can and should play than they have perhaps been since the early 1960s.

A most pressing matter on the policy-makers' agenda for 1987 is again the debt situation, an area in which, for a number of reasons, a setback occurred in 1986. The impression that the present case-by-case strategy needs further strengthening and elaboration is widespread. A number of commercial banks are clearly no longer prepared to play the role allotted to them in that strategy, and already ways and means have been devised in some cases to allow smaller institutions to opt out. Some indebted countries have made serious efforts to improve the structure of their economies and virtually all are aware that much remains for them to do, namely to enhance efficiency in the productive sector, to remove distortions in the price structure, and to reform the tax system. No debt strategy can possibly succeed without strong and sustained efforts on the part of the debtor countries. But those efforts will not be enough to pull them out of their present difficulties without a reasonably favourable external economic environment and without adequate external financing, preferably not mainly in forms which add further to their indebtedness.

All these questions, and many others, will be discussed in the body of this Report, the structure of which is the same as last year. The following six chapters concentrate on real developments, on financial markets and on monetary policy, in that order, in each case starting with domestic and moving on to international issues. The main problem will be taken up again and conclusions drawn in the last chapter of the Report.

II. THE REAL ECONOMY AND EXTERNAL ADJUSTMENT.

Highlights.

World economic developments in 1986 failed to live up to their advance billing. The growth of output in the Group of Ten countries fell to around 2½ per cent. from 3 per cent. in 1985, and appears to have weakened further this year. Unemployment has remained at a high level — around 7¼ per cent. on average.

The disappointing aggregate growth performance is surprising in the light of the series of favourable events which were expected to have strengthened aggregate demand and supply. These factors include the decline in oil prices, excellent inflation performance and very considerable terms-of-trade gains for several countries. The outcome for consumer price inflation, which for the Group of Ten was down to 1¼ per cent. in December, is a most welcome development, even though it remains to be seen whether price behaviour can remain as good.

There appear to be three proximate reasons for the lower-than-expected output growth in the Group of Ten countries. Firstly, the oil-importing countries reacted sluggishly to the real income gains obtained through improvements in their terms of trade. Secondly, oil exporters reacted relatively rapidly to the decline in their export earnings, while other LDCs had relatively weak import demand. In the United States lower oil prices contributed to a sharp curtailment in business capital spending. Thirdly, countries with current-account surpluses saw exchange rate appreciation reduce foreign demand, resulting in a cutback of capital investment expenditure.

The first signs of the urgently needed international adjustment process also appeared last year. The large depreciation of the US dollar against the currencies of most of the major industrial economies has begun to move trade volumes in the required direction. Here again, however, one cannot help feeling some disappointment at the slowness with which exchange rate adjustments are affecting international trade positions.

Against this background, and particularly in the light of the sharp dollar depreciation, economic policy-makers are now confronted with difficult choices. Most major economies have broadly maintained the medium-term orientation of their policies in the fields of inflation control, public finance and "structural adjustment", but policy-makers now need to face up to growing short-term problems. The balance of risks is shifting to one in which protectionist pressures, exchange rate tensions and the international debt problem weigh increasingly heavily. If temporary compromises are to be made with medium-term goals, one could also argue the sooner the better. One reason is that the longer low growth continues, the worse will medium-term fiscal problems tend to become.

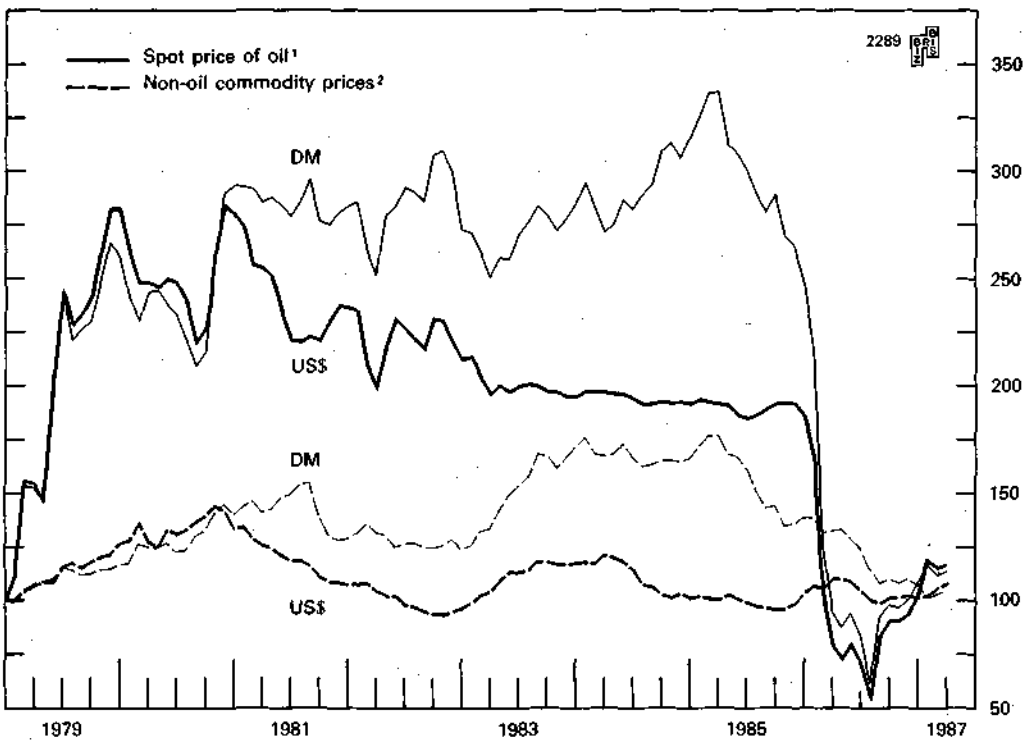
On the more positive side, adjustments in the US external and fiscal imbalances are under way. Some of these imbalances have been beneficial to that country's trading partners for a time, both in promoting external demand and in permitting more fiscal consolidation than might otherwise have been possible. If the United States corrects its imbalances and other countries adjust to the new level of the dollar, there will be a good chance of sustainable longer-run growth. In the short run, however, there is danger ahead, and it must be averted by flexible policy adjustment.

The favourable setting.

Early in 1986 the price of oil fell sharply. It seemed reasonable to expect this development to accelerate the pace of output growth in the industrial countries as a group: both earlier oil price shocks — in the opposite direction — had been followed by recession. More rigorous reasoning supported intuition: in particular, a further reduction in inflation seemed likely to improve economic performance — perhaps directly, but also as a by-product of the maintenance of existing monetary policies aimed at steady growth of nominal magnitudes. Indeed, such an aim was thought to be consistent with an overshooting of monetary targets in several countries, especially as exchange markets imposed pressures on surplus countries

Commodity prices: Oil and non-oil, 1979–87.

Monthly averages, December 1978 = 100.



¹ Arabian light crude in Rotterdam; Saudi Arabian 34° up to 1985, Dubai Fateh 32° as from 1986. ² The "Economist" index.

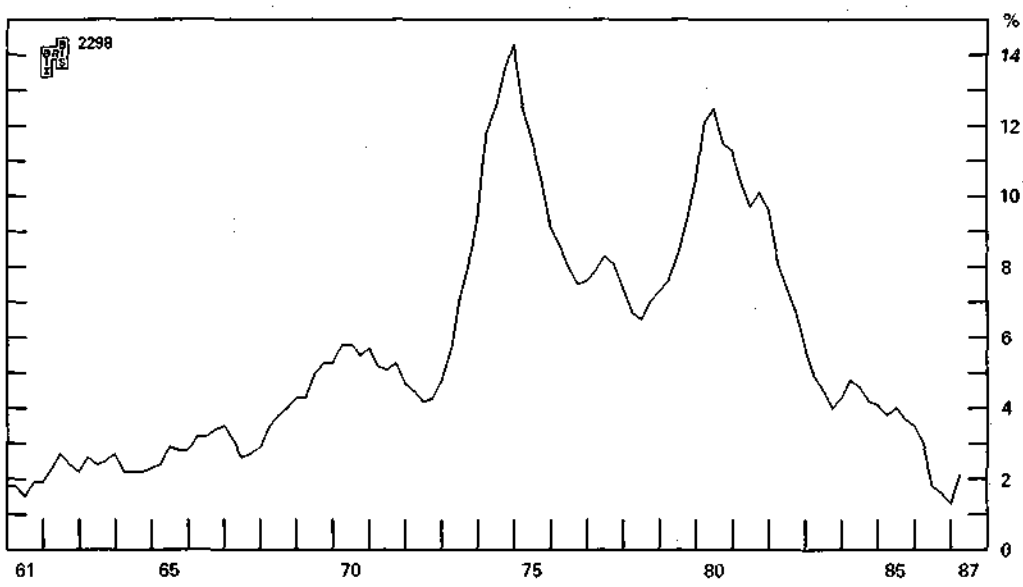
tending to push policy in the same direction. Thus, the terms-of-trade gain should have been fairly fully reflected in an acceleration in the real disposable incomes of economic agents and sectors. In addition, the counterpart loss of real purchasing power in the oil-exporting countries might not — by analogy with the earlier oil shock periods — have been immediately and completely reflected in a reduced volume of spending on imports from the industrial world.

In the event, inflation did indeed fall further — and by a greater amount than in any of the previous three years of disinflation. By December, consumer prices in the Group of Ten countries were showing a weighted average rise of about 1¼ per cent. over the year, compared with a little over 3½ per cent. in December 1985. In some countries consumer prices actually fell.

The terms-of-trade gain and the relatively large decline in inflation in 1986 are, however, rather short-term phenomena. Indeed, in the case of consumer price inflation, it is likely that there will be at least some return towards underlying rates of domestic cost increase. Even so, it is also necessary to recognise that an important part of the favourable background last year was due to earlier developments. It was not only that macro-economic policy had already been set on an anti-inflationary course for a number of years — with an increasingly credible commitment to the continuation of such a non-accommodative stance. Policy had generally come to be set in a more medium-term, supply-side-oriented framework. For example, public finances — if not yet fully under control — have gradually, but generally, been moving in a sounder direction, allowing monetary policy a somewhat greater degree of short-term flexibility last year.

Fiscal consolidation has also begun to open up possibilities for a reduction in the burden imposed by the tax system, at least in terms of improvements to tax

Inflation in the Group of Ten countries, 1961–87.*



* Average percentage change in consumer prices over four quarters. Consumer expenditure weights and exchange rates of the preceding year.

structures. Tax reform is thus becoming an increasingly important issue — particularly after the lead given by the United States, a lead which in itself creates pressures and incentives for other countries to follow.

More generally, policy has been attempting for several years now to facilitate the smoother and more efficient working of the economic machine. A myriad of small actions — individually often relatively minor — have been taken under the general heading of "structural adjustment", the emphasis of which has been very much on improving the functioning of the market mechanism. Deregulation, privatisation and the loosening of constraints have been very much to the fore.

One development of recent years has, however, posed a threat to the beneficial effects of the short and medium-term factors just discussed. This has been the growing international payments imbalance. In the wake of this imbalance have come increased threats and already-visible signs of protectionism. It is also possible that businessmen fear as part of the adjustment process a significant decline in domestic demand in the United States. We have already observed a serious and general reduction in business capital investment activities in 1986 (see also pages 22–23 below). These developments give grounds for suspecting that investment plans might continue to be damagingly scaled back. While the depreciation of the dollar and the improved US budget deficit outlook hold out hope for an improvement in international payments imbalances, it appears that the adjustment will be slower than previously expected, bringing with it risks of continued strains in both financial and output markets.

Nevertheless, the balance of all the factors discussed above seemed to add up to an environment conducive to improved performance in the industrial world's economies last year. Hence, as can be confirmed by comparing individual country forecasts with outcomes, the overall result was disappointing. Not only did the rate of output growth decline in the first half of the year to little more than 2 per cent. per annum; but the hoped-for pick-up in the second half of the year was also anaemic and has since given way to renewed weakness in the early months of 1987.

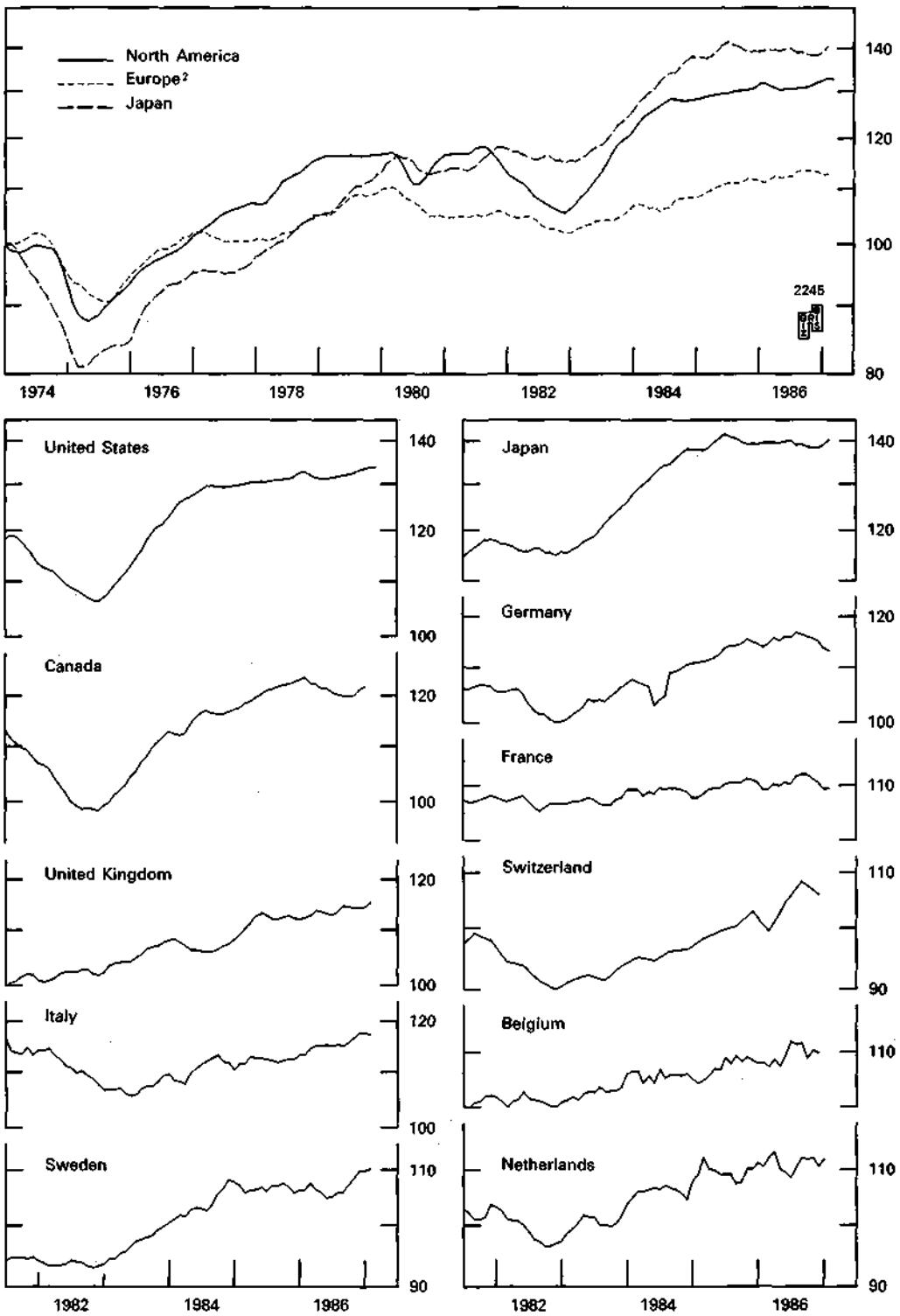
GNP/GDP growth: Forecasts and outcomes in 1986.

Countries	National forecasts[1]	Outcomes
	percentage change	
United States	3.4	2.5
Japan	4.0[2]	2.5
Germany	2.5	2.4
France	2.0	2.1
United Kingdom	3.0	2.4
Italy	2.5–3.0	2.7
Canada	3.7	3.1
Belgium	1.3	2.1
Netherlands	2.0	1.6
Sweden	1.6	1.3
Switzerland	1.5	2.8
Group of Ten countries	3.2	2.5

[1] Forecasts published in late 1985 or early 1986, usually in conjunction with budget proposals. [2] Average for fiscal year: April 1986 to end-March 1987.

Industrial production.[1]

December 1973 = 100.



[1] Three-month moving averages (semi-logarithmic scale); the indices for North America and Europe were calculated using GDP weights and exchange rates of the preceding year. [2] Belgium, France, Germany, Italy, the Netherlands, Sweden, Switzerland and the United Kingdom.

The outcome: overview.

In the sections which follow, an attempt is made first to uncover the main reasons for last year's disappointing growth performance by looking in some detail at income and expenditure movements.

The second section considers some of last year's developments against a medium-term background and with emphasis on some underlying aspects of the

Changes in real GNP/GDP and its components.[1]

Countries	Years	Real GNP/GDP	Consumption		Gross fixed investment			Exports	Imports	Change in stock-building[3]
			private	public	private non-residential[2]	private residential	public			
		in percentages								
United States ...	1983	3.6	4.7	1.1	– 1.5	42.0		– 3.8	9.6	0.6
	1984	6.4	4.7	4.0	16.9	14.3		6.2	23.2	2.0
	1985	2.7	3.5	6.8	9.3	3.9		– 2.0	3.8	– 1.4
	1986	2.5	4.1	3.5	– 1.0	9.4		2.5	10.4	– 0.1
	1986 Q4	2.0	4.0	2.7	– 4.0	10.0		6.3	7.9	– 0.6
Japan	1983	3.3	3.2	3.0	2.6	– 5.9	– 1.5	4.0	– 5.2	– 0.4
	1984	5.0	2.7	2.8	11.5	– 2.2	– 2.8	17.5	11.1	0.4
	1985	4.7	2.6	1.9	12.3	2.6	– 7.0	5.4	– 0.1	0.4
	1986	2.5	2.7	6.6	6.5	10.1	4.6	– 4.8	3.3	– 0.2
	1986 Q4	2.0	2.2	17.3	3.2	17.7	6.7	– 3.7	6.4	– 1.1
Germany	1983	1.8	1.7	0.2	5.0	5.5	– 8.6	– 0.6	0.8	0.6
	1984	3.0	1.5	2.5	0.8	2.0	– 2.1	8.5	5.5	0.4
	1985	2.5	1.7	2.2	5.4	–10.5	– 0.4	7.3	4.7	0.1
	1986	2.4	4.2	2.5	4.6	– 1.2	6.9	– 0.5	3.2	0.0
	1986 Q4	2.4	4.0	1.9		3.8[4]		– 0.9	4.2	0.6
France	1983	0.7	0.9	2.1	– 4.2	– 2.6	– 3.5	3.7	– 2.7	– 0.8
	1984	1.4	1.1	1.2	– 1.4	– 4.3	– 1.5	7.1	2.8	0.1
	1985	1.7	2.4	3.2	1.8	– 2.7	6.1	2.1	4.7	– 0.1
	1986	2.1	3.4	2.7	4.3	– 1.6	7.5	– 0.6	6.5	0.6
	1986 Q4	2.3	2.8	2.9	5.5	– 1.1	7.0	– 2.2	2.8	0.5
United Kingdom .	1983	3.7	3.9	2.0	– 0.6	11.3	18.6	2.2	5.5	0.8
	1984	2.1	2.1	0.7	13.4	8.9	0.3	6.9	9.2	– 0.3
	1985	3.6	3.7	0.2	10.1	– 3.0	–14.3	5.8	3.1	0.3
	1986	2.4	4.6	1.2	– 2.6	13.2	3.9	3.0	5.8	0.0
	1986 Q4	2.9	4.3	2.0	– 3.0	14.2	1.5	7.6	10.0	0.4
Italy	1983	0.5	0.4	2.8	– 3.7	3.9		2.3	– 1.6	– 0.6
	1984	3.5	2.2	2.0	6.0	0.6		7.6	11.3	1.8
	1985	2.7	2.7	3.5	5.6	– 2.4		4.0	5.3	0.2
	1986	2.7	3.2	3.0	2.4	– 2.0		3.1	5.1	0.6
	1986 Q4	2.4	2.8	3.5		1.1[4]		– 4.1	– 1.4	0.4
Canada	1983	3.1	3.0	0.8	– 7.4	15.2	– 3.6	6.4	7.8	2.1
	1984	5.5	3.6	3.1	0.6	– 0.3	4.2	17.5	16.4	1.2
	1985	4.0	5.0	1.9	4.1	12.5	2.7	5.8	7.7	0.0
	1986	3.1	4.0	1.2	– 0.8	13.1	– 4.5	3.1	5.1	0.4
	1986 Q4	1.6	3.2	0.7	– 3.6	8.1	– 6.1	3.3	3.2	– 0.6
Group of Ten countries[5]	1983	2.8	3.3	1.4	– 0.5	15.3		1.1	2.6	0.3
	1984	4.9	3.2	2.9	8.7	5.4		8.9	12.0	1.1
	1985	3.0	3.0	4.6	6.7	1.5		3.2	3.8	– 0.6
	1986	2.5	3.7	3.3	1.9	7.5		0.9	6.4	0.0
	1986 Q4[6]	2.1	3.5	3.9		2.2[4]		1.7	5.7	– 0.4

[1] Figures for 1986 are still preliminary; those for 1986 Q4 refer to changes over four quarters. [2] Including public investment in the case of Italy and the total for Group of Ten countries. [3] As a percentage of the preceding year's GNP/GDP. [4] Total fixed investment. [5] Expenditure weights and exchange rates of the preceding year. [6] Group of Seven countries only.

behaviour of supply. Nominal wage costs have not shown as much moderation as one might have expected in the light of high unemployment and a favourable external price shock. In turn, this implies that doubts persist over the sustainability of a higher rate of output growth, and particularly of one sufficient to reduce unemployment. These doubts are reinforced, especially for some European countries, by both the short and medium-term behaviour of investment. Along with the potential wage inflation risk, this, too, reduces the prospects for a prompt and sizable reduction in joblessness.

The third main section examines the progress made last year in the adjustment of overall trade volumes to the decline in the dollar and changes in the relative growth rates of domestic demand.

With this detailed examination of economic developments last year as a background, the final section of the chapter goes on to discuss some aspects of macro-economic policy, with particular emphasis on fiscal policy.

Anatomy of the outcome: demand and output.

After reaching a peak of 4¾ per cent. in 1984, average output growth in the Group of Ten countries declined to 3 per cent. in 1985 and further to 2½ per cent. last year. A rather lower figure was recorded for the fourth quarter as compared with the same period in 1985.

Taking the terms-of-trade change first, and again considering the Group of Ten as a whole, the improvement in the overall (i.e. goods and services) terms of trade came to something over 7 per cent. — by far the largest single-year gain recorded for more than thirty years. This gain was, however, only about half the size of the losses experienced in 1974 and, cumulatively, in 1979 and 1980. It was also extremely unevenly spread (see the table) as a result of exchange rate changes and because some countries, such as the United States, Canada and the United

Changes in the terms of trade.[1]

Countries	1979	1980	1981	1982	1983	1984	1985	1986
	in percentages							
United States	– 4.0	–11.5	2.1	4.2	3.9	2.3	0.7	2.1
Japan	–13.6	–21.0	0.2	– 0.6	– 1.1	0.4	1.8	26.6
Germany	– 2.7	– 5.1	– 5.0	1.1	1.1	– 1.2	0.5	10.6
France	– 0.1	– 3.9	– 2.3	4.7	1.3	– 0.5	2.4	9.8
United Kingdom	2.6	4.8	0.8	0.0	– 0.2	– 2.0	1.5	– 3.6
Italy	– 1.0	– 3.5	– 5.9	2.3	3.7	– 0.5	0.9	14.1
Canada	6.7	6.6	1.3	– 2.0	– 0.3	– 1.3	– 1.8	– 3.3
Belgium	0.2	– 4.0	– 3.8	0.0	0.2	– 0.2	0.7	4.7
Netherlands	– 2.4	– 1.9	– 0.3	2.6	– 0.5	0.3	0.5	1.7
Sweden	– 1.5	– 2.0	– 2.1	– 2.1	– 1.1	1.9	1.5	6.9
Switzerland	– 4.4	– 5.6	0.8	4.3	2.0	0.0	– 1.1	6.1
Group of Ten countries[2]	– 4.1	– 8.7	– 0.3	2.4	1.9	0.8	0.9	7.3

[1] Goods and services. [2] GDP weights and exchange rates of the preceding year.

Kingdom, are themselves relatively large producers of primary energy and/or other commodities.

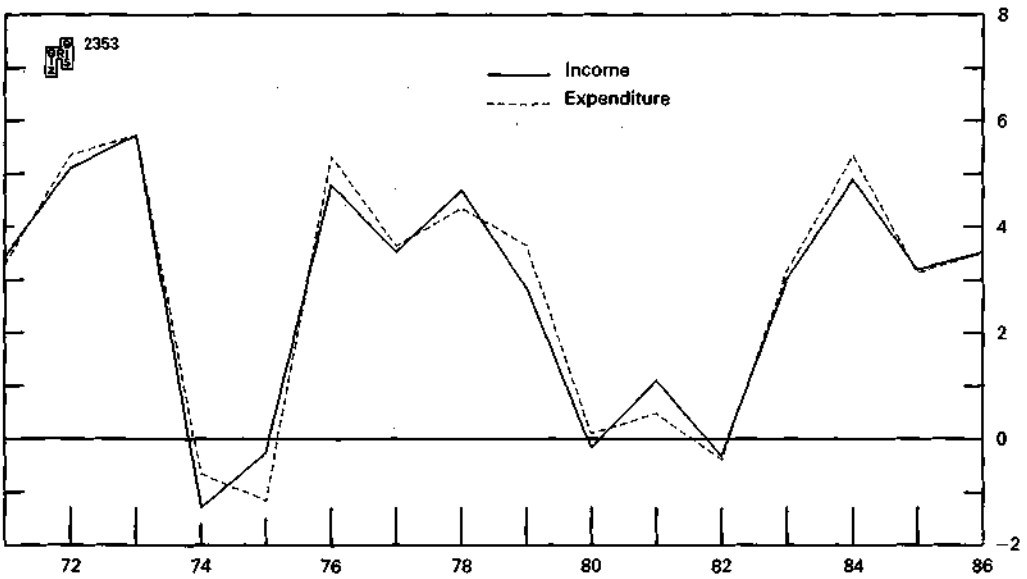
In terms of real disposable national income (measured as total income (GNP) deflated by the price of total domestic demand, including imports), the change in relative foreign prices implied an average gain of 1¼ per cent. As with any change in real income, however, the extent to which it is translated into an actual increase in output depends on the proportion which is actually spent rather than saved. Within the Group of Ten countries a weak impulse to spend necessarily feeds back to income itself as producers reduce production in response to the weak demand. The loss — the weak response — remains largely within the system because the proportion of income changes spent on products from outside the area is relatively small. Thus, it comes about that the available statistics seem to suggest that the income gain was in fact spent, income and expenditure rising by similar amounts (see the graph). But, as the distinction between ex post and ex ante savings makes clear, this fact is not conclusive.

Average (Group of Ten) real national disposable income rose by only about 3½ per cent., and the volume of domestic demand by almost exactly the same amount, both representing an *acceleration* of less than ½ per cent. compared with 1985. Especially in the context of sizable gains in private sector financial wealth, as well as a 1¼ per cent. real income gain from the terms of trade, this result was thus relatively modest.

Foreign trade volume effects worked in a clearly negative direction for the Group of Ten countries as a whole. Export growth declined to negligible proportions as oil exporters and other hard-pressed developing countries restrained

Group of Ten countries: Changes in real national disposable income and in total domestic expenditure, 1971–86.*

In percentages.



* GDP weights and exchange rates of the preceding year.

their imports. At the same time, the Group's import growth accelerated as, for example, oil stocks were apparently increased at the new, lower prices. The overall result was that the real net foreign balance of the Group declined by around 1 per cent. of GNP.

Distribution of income gains, aggregate spending propensities and the composition of domestic demand. The foregoing analysis for the Group of Ten as a whole leaves us with the following puzzle regarding aggregate demand and output. Given the stimulus to disposable incomes through the terms-of-trade gains, and considering the large increases in wealth, why did domestic demand in the Group of Ten countries not rise sufficiently to more than offset the negative impact stemming from the deterioration in their real foreign trade balance and produce an acceleration rather than a slowdown in output growth?

One reason may lie in the uneven distribution of real income growth between the Group of Ten countries. As noted above, countries did not share equally in the terms-of-trade gains, and this unevenness was reflected in the total income gains. Thus, the small rise in average real income growth mentioned earlier was accompanied by a widening of the range of individual country growth rates from 3 to 5.5 percentage points and by more than a doubling of the standard deviation. It is difficult to quantify the domestic demand effect of this development, but it is well known that such divergent trends are associated with adverse asymmetry effects. Thus, experience shows that spending reacts much more quickly to income losses than to gains, and the same is likely to apply to positive and negative changes in growth rates.

Secondly, domestic demand growth depends on how the income gains are distributed between sectors within each country and how quickly the various sectors respond. Normally, when a large proportion of the external gains accrues to the household sector, the spending increase will be relatively large. By contrast, when firms do not pass on the fall in input costs and the profit share rises, the immediate increase in aggregate spending will be lower, as the lag between income and spending tends to be longer for firms than for households. Finally, the domestic demand effects will be particularly low if, as happened in several European countries, the government offsets the fall in oil import prices by increasing energy taxes and applying the additional revenue to the consolidation of its financial balance. A similar effect can be expected when, as in Canada, the fall in oil prices coincides with deregulation of energy prices.

For the Group of Ten countries as a whole, these internal distribution effects are difficult to detect. However, for individual countries, variations in spending propensities are easier to identify and the following table attempts to do so using direct as well as indirect indicators. The first impression to emerge from the table is that the marginal spending propensities, as measured by the ratio between changes in real demand and income, have differed considerably between countries. It is also apparent, however, that these differences can, to a large extent, be related to the size of the external gains and their distribution between households, firms and government:

— in four of the countries (*Germany, Italy, Belgium* and *Sweden*) with the largest gains from international price developments only 60 to 70 per cent. of aggregate real income growth was reflected in higher demand. In Germany, Italy

Developments in factor income and spending.

Countries	Years	Nominal factor income	Marginal spending propensity	Income distribution		Financial balances			Household saving[1]
				Wage earners	Firms	House-holds	Firms	Public authorities	
		percent-age change	ratio[2]	as a percentage of factor income		as a percentage of GNP			as a per-centage of disposable income
Germany	1980–83	4.2	n.a.	63.2	36.8	3.7	– 2.3	– 3.1	13.8
	1984	5.1	0.76	60.6	39.4	3.3	– 1.6	– 1.9	12.9
	1985	5.1	0.56	59.8	40.2	4.1	– 1.9	– 1.1	12.7
	1986	6.0	0.69	59.3	40.7	5.0	– 0.8	– 1.2	13.2
Italy	1980–83	16.0	1.73	50.7	49.3	12.5	– 5.3	–10.5	23.6
	1984	14.1	1.37	50.5	49.5	14.4	– 3.9	–12.7	24.2
	1985	11.8	1.17	50.7	49.3	14.5	– 4.9	–13.6	23.8
	1986	11.0	0.62	49.4	50.6	13.8	– 3.3	–12.5	24.7[3]
Belgium	1980–83	5.8	2.42	65.6	34.4	9.0	1.9	–14.3	18.1
	1984	8.0	0.86	63.1	36.9	8.7	2.7	–12.1	16.5
	1985	6.7	0.70	62.1	37.9	7.7	4.1	–11.6	15.5
	1986	7.2	0.64	59.7	40.3	7.9	5.4	–11.2	16.3
Sweden	1980–83	9.3	1.29	70.6	29.4	– 0.9	– 0.7	– 5.1	2.6
	1984	10.9	0.90	67.6	32.4	– 1.3	0.2	– 2.6	0.5
	1985	8.5	2.65	67.2	32.8	– 1.7	0.6	– 3.9	– 0.1
	1986[3]	8.6	0.63	67.2	32.8	– 1.4	– 0.7	– 0.7	– 0.8
United States	1980–83	7.6	1.58	65.2	34.8	4.3	– 0.8	– 3.5	6.7
	1984	10.5	1.35	64.3	35.7	3.8	– 1.2	– 4.2	6.3
	1985	6.0	1.35	64.8	35.2	2.9	– 0.0	– 5.0	5.1
	1986	5.2	1.27	65.0	35.0	2.0	0.1	– 4.8	3.9
Canada	1980–83	8.7	1.37	63.7	36.3	8.2	– 2.5	– 6.6	14.8
	1984	9.4	1.02	61.7	38.3	9.0	– 0.8	– 8.2	14.7
	1985	7.1	1.50	61.6	38.4	7.6	– 0.8	– 8.1	13.6
	1986	4.8	4.45	62.2	37.8	5.3	– 1.8	– 6.4	11.3
United Kingdom	1980–83	8.9	2.20	67.5	32.5	5.0	1.0	– 3.6	13.2
	1984	6.6	1.68	65.6	34.4	3.9	2.2	– 4.1	12.1
	1985	10.1	0.80	64.6	35.4	3.2	1.6	– 2.9	11.4
	1986	5.4	6.38	66.3	33.7	2.4	0.8	– 2.8	11.0
France	1980–83	12.2	1.16	63.6	36.4	4.1	– 4.6	– 1.8	16.8
	1984	8.3	0.73	63.4	36.6	3.8	– 2.5	– 2.7	14.6
	1985	7.0	1.58	62.5	37.5	2.9	– 2.1	– 2.9	13.8
	1986	6.9	1.04	61.4	38.6	3.5	– 1.5	– 2.9	14.0
Switzerland	1980–83	6.5	0.05	61.4	38.6	– 2.9		– 0.3	5.0
	1984	5.7	0.73	60.9	39.1	5.1		– 0.3	5.8
	1985	6.8	0.72	60.5	39.5	5.3		0.0	6.1
	1986	6.1	0.89	60.4	39.6	4.7		0.7	6.8
Netherlands	1980–83	4.5	n.a.	61.9	38.1	– 1.7		– 5.5	15.8
	1984	4.6	0.60	57.1	42.9	– 0.1		– 5.7	18.6
	1985	4.7	0.95	56.1	43.9	1.7		– 5.1	19.7
	1986	1.5	2.00	57.4	42.6	– 1.4		– 6.7	19.2[3]
Japan	1980–83	5.3	0.70	58.7	41.3	10.0	– 3.4	– 6.9	15.9
	1984	5.9	0.88	59.1	40.9	9.2	– 2.0	– 5.8	14.7
	1985	6.3	0.84	58.3	41.7	9.4	– 2.4	– 4.1	14.7
	1986[3]	4.3	0.89	58.4	41.6	10.3	– 1.3	– 4.2	15.8

[1] National definitions. [2] Change in real domestic demand relative to change in real factor income; "n.a." indicates changes in demand and income of opposite signs. [3] Estimated.

and Belgium the main cause of the low spending propensity appears to have been a change in the primary income distribution in favour of firms, but household spending was also subject to a lag, resulting in higher saving ratios. In the case of Germany, there was an even stronger rise in the household sector's net financial balance, owing to the continued weakness of residential investment. In Sweden the

primary income distribution remained roughly unchanged and the main beneficiary of the external gain — and also the main cause of the relatively small rise in domestic demand — was the Government, which used the additional revenues to reduce its borrowing requirement to less than 1 per cent. of GNP. Improvements in the public sector financial position could also be observed in Italy — mainly owing to higher energy taxes — and, to a smaller extent, in Belgium;

— in the three countries with the smallest benefits or losses from external price developments (the *United States*, the *United Kingdom* and *Canada*) the outcome was almost the reverse of that discussed above: domestic demand increased by more than real factor income, household saving ratios fell and the external balance worsened. In the United States and Canada the deterioration in financial balances was confined to the private sector, and in the case of Canada the buoyancy of aggregate demand should be seen against the background of a marked reduction in the government deficit. In the United Kingdom the financial position worsened in all three sectors, as the Government did not attempt to offset the loss in revenues from oil production, and both households and firms increased their spending relative to income. Developments here may also have been influenced by changes in the primary income distribution, although most — if not all — of the rise in the income share of labour reflected falling profits in oil-related companies;

— in the remaining four Group of Ten countries real factor income and domestic demand increased at approximately the same rates, but the underlying causes were very different. In *France* domestic demand growth rose sharply even though the company sector was the beneficiary of the external gains and used part of the revenue increase to improve its financial position. Households, however, raised consumption almost to the full extent of the income gains and the fiscal position was basically neutral. *Switzerland* enjoyed terms-of-trade gains of about the same relative size as Germany, Belgium, Italy and Sweden, but the aggregate spending propensity was much higher. Companies and households shared the gain in almost equal proportions, and while the latter consolidated their financial position, Switzerland, together with the Netherlands and Belgium, was one of the few Group of Ten countries to record a sizable acceleration in the growth of business fixed investment last year. This probably explains most of the decline in net private financial savings. The *Netherlands* enjoyed only a small terms-of-trade improvement, while spending was less buoyant than in the other three countries with moderate external gains. This outcome seems to be the net effect of two conflicting influences. On the one hand, the Government only partly absorbed the loss of revenue from lower gas prices, so that the rise in the general government deficit masks a deflationary influence. On the other hand, the deterioration in the private sector financial balance points to a strong spending trend, with an especially impressive and welcome rise in business fixed investment of more than 12 per cent.

Finally, owing to an above-average share of oil and raw materials in total imports and an appreciating exchange rate, *Japan's* import prices fell by some 30 per cent. However, despite this favourable external influence, the growth of both nominal and real factor income decelerated, pointing to some weakening of domestic growth impulses. The various indicators for Japan are still preliminary, but, with consumer prices rising in the face of a fall in the aggregate demand deflator, it appears that the pass-through of lower oil prices into final user prices was slower

than in most other countries. According to a recent study by the Bank of Japan this may be largely explained by the fall in Japanese export prices as firms attempted to maintain profit margins by raising domestic prices. Moreover, a particularly slow adjustment may be observed for the prices of certain food products subject to government control. At the same time, the developments in sectoral financial balances, together with the relatively moderate rise in the household saving ratio, suggest that the major cause of the weak trend of domestic demand was the slow growth of business fixed investment. There is also some evidence that the external price gains mainly benefited firms in the non-tradable sectors (including public utilities), while the decline in investment spending occurred in the export sector.

A third reason for the slowdown in real output growth in 1986 compared with 1985 may lie in the composition of domestic demand, as some components are subject to stronger multiplier effects than others. Indeed, one key feature of 1986 developments was the very marked rise in private consumption. For the Group of Ten countries the growth of real household spending exceeded 3½ per cent. and accounted for more than 90 per cent. of total GDP growth, compared with less than 65 per cent. in 1985. Particularly strong increases could be observed in Germany and the United Kingdom and, among the non-Group of Ten countries, in Denmark, Norway and Portugal. In the United States and Canada private consumption continued to be the major source of aggregate demand growth. In both countries, as well as in the United Kingdom, the saving ratio fell sharply, probably reflecting strong wealth effects deriving, inter alia, from the stock market boom, but also an appreciable increase in household gross debt. The strength of household spending could be seen in residential investment as well, although in several European countries the current level is still well below earlier peaks.

The growth of business fixed investment, on the other hand, fell in most countries and was actually negative in the United States, the United Kingdom and Canada. Part of the slowdown can be ascribed to a decline in energy-related investment, though a less unfavourable stock cycle provided a partial offset. Nonetheless, business spending was one of the negative surprises of last year, especially since aggregate wage shares remained largely constant or fell further. Moreover, borrowing conditions were generally favourable, and nominal interest rates fell in most countries compared with 1985. One reason for the weak investment outcome was probably the net effect of exchange rate movements and the fall in energy prices. Thus, in countries with depreciating currencies (the United States, the United Kingdom and Canada) the strengthening of investment spending which can normally be expected from an improved competitive position did not occur because of lower investment in the energy-related sectors and the removal of earlier tax benefits. At the same time, in countries such as Japan and Germany the impulse to investment spending to be expected from terms-of-trade gains and higher profits was apparently offset by the deterioration in competitiveness.

Summary. The preceding discussion of output and demand developments in the Group of Ten countries has identified several causes of the disappointing outcome. In the first place, a deterioration in the real net foreign balance of the Group as a whole exerted a negative influence, mainly due to a faster-than-expected curbing of import expenditures by developing countries in response to falling export revenues. Secondly, the growth of business fixed investment was well below the

expected rate as well as the outcome for 1985. Although buoyant consumer spending served as a compensating factor, the net output effect of this change in the composition of aggregate demand may have been negative, owing to different multiplier effects. Thirdly, the distribution of the real disposable income gains between countries as well as between sectors is likely to have reduced their net effective demand effects compared with the expected outcome. Owing to differences in energy imports, the terms-of-trade gains associated with the fall in oil prices varied widely across countries, and these divergences were accentuated by exchange rate changes. It also appears that in countries where only a small part of the terms-of-trade gains was passed through to the consumers — either because firms raised profit margins or because governments increased energy and other taxes — the overall spending propensities were lower than in countries with a more equal distribution of the external gains.

Anatomy of the outcome: domestic inflation, capacity and the labour market.

On the face of it, at least, and given the favourable external price developments, 1986 seems to have been something of a disappointment with respect to further progress in reducing domestic inflation. Changes in the GNP deflator are often considered to be the most comprehensive measure of domestic inflation, GNP being overwhelmingly made up of the two domestic factor incomes, wages and profits. But as the table shows, domestic inflation fell on average by only ½ percentage point from 3½ per cent. to about 3 per cent. In Germany, Japan and Switzerland the domestic rate of inflation even accelerated — albeit marginally in the case of the latter two countries.

To the extent that part of this development represented an expansion of the share of profits in national income, it could be that the GNP deflators are, temporarily, giving an overly pessimistic indication of the inflationary situation. Final prices tend to be set on the basis of a mark-up on input costs, including the cost of imports. If, as is likely, this process is subject to a lag, then a sudden fall in

Changes in the GNP/GDP deflator.

Countries	1980	1981	1982	1983	1984	1985	1986
	in percentages						
United States	9.1	9.6	6.4	3.9	3.9	3.4	2.6
Japan	3.8	3.2	1.9	0.8	1.2	1.5	1.8
Germany	4.8	4.0	4.4	3.3	1.9	2.2	3.1
France	12.2	11.8	12.6	9.7	7.5	5.8	4.6
United Kingdom	18.9	10.3	7.0	5.7	4.7	6.2	3.0
Italy	20.7	18.6	16.2	15.3	10.2	8.8	8.1
Canada	10.6	10.8	8.9	4.9	3.6	3.4	2.8
Belgium	3.7	5.1	7.0	6.3	5.5	5.1	4.6
Netherlands	5.5	5.5	6.3	1.8	2.2	2.5	0.3
Sweden	11.7	9.5	8.6	9.8	7.9	6.8	6.8
Switzerland	2.7	6.9	7.3	3.3	2.8	2.7	3.0
Group of Ten countries*	9.1	8.7	6.8	4.6	3.9	3.5	3.1

* GDP weights and exchange rates of the preceding year.

import prices will not be fully and immediately passed through into final prices. The result will be a temporary rise in profits which will tend to increase nominal, but not real, GNP. Consequently, the GNP deflator will tend to rise — despite the apparent paradox that imports do not, in an accounting sense, enter into domestic value added at all. As and when readjustment of profit margins occurs, this effect will tend to fade. The reverse process was probably at work during the earlier oil price shocks.

The implication of this is that there may be more inflation-reducing effects of the oil price fall still in the pipeline. Final judgement should therefore be withheld for the moment. Nevertheless, it is worth noting that, while there was a tendency for nominal wage gains to decline further last year (see page 27 below), this was not true in Germany, although the magnitude of the acceleration there was relatively small.

Meanwhile, any temporary increase in profits was not sufficient, and probably too short-term, to have any noticeable impact on fixed investment spending.

Investment and the capital stock. The slowdown in the growth of business fixed investment further accentuates the concern expressed in last year's Report that existing capacities are not compatible with full employment of the labour force. In conditions where earlier factor shares of income have been largely restored in most countries, and nominal and real interest rates have also fallen, this weakness of investment spending is particularly disappointing.

There are, however, reasons for qualifying that judgement, though more so in North America and Japan than in Europe. In the first place, the rise in gross profit shares exaggerates the improvement in profitability, since profits net of depreciation and interest payments have increased less rapidly than gross profits. Owing to a steady rise in capital/output ratios, the rates of return on the capital stock are also still low by past standards despite some recent improvements. Secondly, when seen in an historical perspective (see the table opposite), the growth of business fixed investment has been comparatively high in relation to the rate of capacity utilisation in manufacturing. This was particularly evident in the United States during 1984–85, but can also be observed during 1978–80 in Japan and Canada. In Germany, on the other hand, the historical relationship between investment growth and capacity utilisation is much weaker, and for the other two European countries included in the table the recent growth in business investment has only followed the rise in capacity utilisation. Thirdly, while the ratio of *total* fixed investment to GNP has shown a marked decline in all countries, the share of *business* fixed investment has fallen much less and has actually increased in North America and Japan. Hence much of the weakness in overall investment trends has been confined to residential construction and public investment, of which the first is less important from the point of view of increasing output potentials. Fourthly, the fall in energy prices and in prices of non-energy raw materials has reduced costs and thereby reconstituted economic production capacities in firms and sectors that were previously constrained by low profitability. It is difficult to quantify this effect, and current estimates range from increases of 1 to 5 per cent. of total capacity depending on assumptions made with respect to the underlying production function. Finally, the decline in real labour costs relative to productivity and the real price of capital should encourage substitution of labour for capital and hence a rise in the number of jobs that a given

Capacity utilisation and business fixed investment.

Countries and items	1964–66	1968–70	1972–73	1978–80	1984–85	1986
United States						
Capacity utilisation (percentage)	88.8	84.3	84.9	82.7	80.3	79.8
Change in business fixed investment (percentage, annual rate)	12.4	2.6	10.9	5.4	13.1	– 1.0
Business fixed investment as a percentage of GNP	10.8	11.0	11.2	12.1	12.6	12.5
Japan						
Capacity utilisation (index: 1980 = 100)	.	111.7	106.4	98.1	101.6	97.3
Change in business fixed investment (percentage, annual rate)	15.4[1]	22.4	8.5	8.3	11.9	6.5
Business fixed investment as a percentage of GNP	11.9[1]	17.1	17.1	15.1	17.3	18.6
Germany						
Capacity utilisation (percentage)	.	90.5[2]	86.1	82.8	82.1	84.8
Change in business fixed investment (percentage, annual rate)	4.7	13.2	– 1.2	6.1	3.1	4.6
Business fixed investment as a percentage of GNP	12.7	12.3	12.8	12.0	11.7	12.1
Italy						
Capacity utilisation (percentage)	.	80.9	76.9	74.9	73.1	75.3
Change in business fixed investment (percentage, annual rate)[3]	.	7.2	5.1	5.6	5.8	2.4
Business fixed investment as a percentage of GNP[3]	.	15.0	14.6	12.8	15.7	15.8
Canada						
Capacity utilisation (percentage)	94.7	90.2	93.0	89.0	84.4	85.4
Change in business fixed investment (percentage, annual rate)	15.3	1.7	7.5	11.6	2.4	– 0.8
Business fixed investment as a percentage of GNP	11.7	10.9	10.6	12.8	12.4	12.0
Netherlands						
Capacity utilisation (percentage)	.	.	84.8	80.5	83.7	84.2
Change in business fixed investment (percentage, annual rate)	10.3	7.9	1.8	– 1.1	7.3	11.9
Business fixed investment as a percentage of GNP	13.3	13.9	12.2	11.6	10.7	12.3

[1] 1965–66 only. [2] 1970 only. [3] Including public investment; break in series after 1980.

capital stock can support. This process may take place within as well as between sectors, and especially from capital-intensive manufacturing industries to the more labour-intensive service sectors. As noted below, recent trends in employment and productivity suggest that it may have already begun.

Since the favourable factors are most pronounced in North America and Japan, the risk of capacity shortages and/or high medium-term unemployment seems highest in the European countries. This is also apparent in the table overleaf. Thus, the recession in the early 1980s led to slower growth of the capital stock, and, since the labour force continued to expand, all countries, except for the United States, have seen an even sharper decline in the growth of capital relative to the total labour force. This fall will reduce the output and employment levels that are consistent with a stable rate of inflation, unless the corresponding decline in labour productivity growth is "matched" by real wage moderation.

Labour market developments: employment and unemployment. The slow growth in domestic output also meant that little progress was made in reducing unemployment last year. Employment growth, at 1.5 per cent. in the OECD area,

Growth in capital stocks, capital/output and capital/labour ratios.

Countries	1965–80			1980–85		
	K	K/Y	K/L	K	K/Y	K/L
	percentage changes, annual averages					
United States	3.9	1.1	1.5	3.1	0.7	1.6
Japan	9.7	2.8	8.6	6.5	2.5	5.4
Germany	4.5	1.3	4.5	2.9	1.6	2.4
France	5.2	1.0	4.4	3.5	2.4	3.1
United Kingdom	3.4	1.3	3.1	1.9	0.0	1.3
Canada	5.2	0.6	2.1	3.2	0.7	1.4
Sweden	3.9	1.2	2.9	2.9	1.1	2.4

Key: K = gross capital stock in industry and services.
K/Y = ratio of gross capital stock to GDP.
K/L = ratio of gross capital stock to total labour force.

Sources: Flows and Stocks of Fixed Capital, OECD 1983, and national data.

was only slightly higher than in 1985 and continued to be led by the United States and Canada. In Europe, Denmark recorded an employment increase of 2 per cent., and growth rates of 1 per cent. or more were seen in Germany, the Netherlands and Switzerland, while Spain had positive employment growth for the first time since 1974.

However, an unwelcome aspect of the development in countries with more buoyant employment trends was a simultaneous and seemingly related slowdown in productivity growth. There may be several explanations for this development. Thus, demand for labour in the private services sector continued to be the main stimulus to the overall rise in employment. Because of the lower capital intensity of the services sector and the more widespread use of part-time employment, this sectoral shift was one factor contributing to the slower rate of aggregate productivity growth. Moreover, in the latter phase of a business cycle, when labour hoarding has been worked off, productivity gains typically decline. Finally, as mentioned earlier, firms may have substituted labour for capital, which is also likely to have reduced labour productivity growth.

Overall unemployment (see the following table) remained largely unchanged at the high rate recorded in 1985, but fell slightly during the first quarter of this year. Among the major countries, the United States, Germany, the United Kingdom and Canada succeeded in reducing the number of unemployed. At the same time, the unemployment rate in Japan, though low by international standards, reached a record post-war level and is forecast to rise further. Progress in reducing unemployment has been made in Belgium, Denmark and the Netherlands, but France and especially Italy have experienced further increases in the number of jobless.

Taking a longer view, a sharp contrast has emerged between labour market developments in Europe, on the one hand, and in the United States and Japan, on the other. Since the trough in 1982, employment in the United States has increased by more than 10 per cent., compared with 3.8 per cent. in Japan and only 1 per cent. in Europe. During the same period the US unemployment rate has fallen by 3 percentage points, while in the EEC countries it has increased by 2 points. This

Unemployment.*

Countries	Previous cyclical peaks			1982	1985	1986	1987 first quarter
	1968–69	1972–73	1978–79				
United States	3.5	5.2	5.9	9.5	7.1	6.9	6.6
Japan	1.2	1.3	2.1	2.4	2.6	2.8	2.9
Germany	1.0	1.0	3.5	6.7	8.3	7.9	7.9
France	2.5	2.6	5.6	8.1	10.2	10.5	11.0
United Kingdom	2.0	2.6	4.9	10.4	11.5	11.6	11.0
Italy	5.6	6.4	7.0	8.6	10.3	11.1	11.6
Canada	4.4	5.9	7.9	10.9	10.5	9.6	9.6
Belgium	2.6	2.3	7.2	11.7	12.0	11.4	11.3
Denmark	1.2	0.9	7.2	9.8	9.0	7.8	7.8
Netherlands	1.2	2.2	5.3	11.4	14.3	13.3	12.8
Sweden	2.1	2.6	2.1	3.1	2.8	2.7	2.2
Switzerland	0.0	0.0	0.3	0.4	1.0	0.8	0.8
Spain	1.0	2.1	8.4	16.2	21.9	21.5	22.3
EEC countries	2.7	2.8	5.7	9.5	11.4	11.4	11.5
OECD Europe	3.3	3.6	6.1	9.5	11.1	11.1	11.0
OECD countries	3.0	3.7	5.4	8.3	8.4	8.3	8.2

* For all countries measured as a percentage of the total labour force. Figures for the first quarter of 1987 are seasonally adjusted but still preliminary.

Sources: OECD Labour Force Statistics, and national data.

divergence has stimulated a lively debate concerning the behavioural characteristics of European labour markets compared with those of the United States and Japan. In this context attention has been drawn to two aspects of the adjustment process:

(i) the relationship between unemployment (or employment), output and real wage costs; and

(ii) the flexibility of nominal and real wages with respect to the rate of unemployment.

Looking first at historical relationships between changes in unemployment and output, there is a clear contrast between the United States and Japan, while the EEC countries occupy an intermediate position. Reflecting a high degree of labour mobility but also the relative absence of job protection measures, the response of US unemployment to changes in output is comparatively strong (with an elasticity of almost −0.5) and subject to only a short time lag. By contrast, owing to the lifetime employment system (even if only covering some 20 per cent. of the employed labour force), and with job changes mainly taking place within firms, unemployment in Japan is only weakly influenced by output changes and the time lag is longer than in the United States. Another feature of the historical trends is that the annual growth rate required to prevent a rise in unemployment is only 2.5 to 3 per cent. in the United States, compared with over 3.5 per cent. for the EEC and as much as 6 per cent. for Japan.

Even though such relationships are useful as a proximate explanation of recent unemployment trends, they may give an oversimplified and possibly biased picture. Changes in unemployment depend on labour supply as well as labour demand. As can be seen from the table below, the reduction in US unemployment since 1982 has been helped by demographic developments, though partly offset by a rising

participation rate, especially for women. Moreover, despite the rapid employment growth and the favourable demographic factors, the current US unemployment rate is higher than at previous cyclical peaks, suggesting that structural problems are not entirely absent. In this context, the fact that it takes a relatively low output growth to prevent a rise in unemployment is also of interest, since it implies that the rate of productivity growth has been very low. This has, of course, been a helpful factor in creating new jobs, but has weakened real income growth and international competitiveness.

Labour supply developments.

Countries	Population of working age			Participation rate			Labour force		
	1960–82	1982–85	1986*	1960	1975	1986*	1960–82	1982–85	1986*
	percentage changes, annual rates			in percentages			percentage changes, annual rates		
United States	1.6	0.9	1.4	66.2	69.1	74.8	2.1	1.6	2.0
Japan	1.3	1.1	1.3	75.8	70.4	72.0	1.1	1.1	1.0
Europe	0.8	1.1	0.7	69.7	67.2	65.4	0.6	0.7	0.9

* Preliminary or estimated figures.

Sources: *OECD Labour Force Statistics, and national data.*

In Europe demographic developments have been unfavourable from the point of view of reducing unemployment. Although falling participation rates have prevented a stronger acceleration in labour force growth, this is likely to be only temporary owing to "discouraged worker" effects. In fact, several countries (Germany, the United Kingdom, Italy, the Netherlands and Denmark) which in 1986 experienced relatively strong employment growth saw only a small fall (or a rise) in unemployment as previously discouraged workers re-entered the labour force.

Real labour costs must also be considered in order to understand the unemployment/output relationship. Looking at output alone gives the impression that Europe could have prevented the rise in unemployment through faster output growth. However, as noted in earlier years' Reports, nominal and real wages in Europe accelerated strongly in the early 1970s, opening up a large "gap" between real labour costs and the level of labour productivity and rendering demand stimulus less effective as a means of reducing unemployment. Influenced by more restrictive policies and higher rates of unemployment, this gap has subsequently been reduced or eliminated so that in several countries pre-1970 gross profit shares have been restored. It is also at this point that the degree of wage flexibility enters the adjustment process, since the extent to which restrictive policies had to be pursued to achieve the necessary adjustment of factor price ratios has depended on the degree of wage flexibility.

Nominal and real wage flexibility. The following table contrasts unemployment rates for various periods with changes in nominal and real wages. Between the first two periods both unemployment and the rate of nominal wage growth increased, giving the impression of a general breakdown of the Phillips-curve relationship and casting doubt on the "trade-off" concept as a tool for policy

Developments in unemployment and wages.[1]

Countries	1965–73			1973–82			1982–85			1986[2]			"Trade-offs"[3]	
	U	dW	dRW	U	dW	dRW	U	dW	dRW	U	dW	dRW	Nominal	Real
United States	4.4	6.3	2.1	7.2	8.1	0.2	8.1	4.4	0.6	6.9	2.8	0.7	−0.54	−0.42
Japan	1.2	14.7	7.9	2.0	10.1	2.1	2.7	3.4	1.3	2.8	3.5	2.9	−8.10	−4.70
Germany	0.9	9.6	5.6	4.0	6.8	1.7	8.2	3.4	0.7	7.9	3.9	4.3	−0.85	−0.67
France	2.1	9.8	4.4	6.1	14.5	3.1	9.4	8.2	0.6	10.5	4.4	1.8	−0.22	−0.51
United Kingdom	2.1	9.7	3.8	5.3	16.1	1.5	11.3	7.0	1.9	11.6	7.5	3.6	−0.28	−0.19
Italy	5.8	11.4	6.0	6.9	19.8	1.8	9.9	12.6	0.7	11.1	7.8	1.6	0.33	−1.33
Canada	4.8	7.4	3.1	7.7	10.7	1.4	11.2	4.5	−0.3	9.6	2.2	−1.8	−0.45	−0.53
Belgium	2.1	9.9	5.7	7.0	10.7	2.7	12.6	5.6	−0.5	11.4	2.3	1.0	−0.41	−0.60
Denmark	1.0	10.4	2.7	7.1	11.7	0.7	9.9	5.5	−0.6	7.8	4.0	0.5	−0.54	−0.36
Netherlands	1.3	12.0	6.0	6.1	8.4	1.4	14.9	1.8	−0.8	13.3	2.2	2.2	−0.76	−0.51
Sweden	2.0	7.9	2.3	2.1	11.5	0.7	3.0	7.5	−1.1	2.7	8.7	4.1	−0.36	−3.00
Spain	1.4	14.2	6.7	8.7	20.2	3.2	20.1	11.5	1.0	21.5	9.7	1.0	−0.14	−0.31
Average[4]	2.5	10.3	4.7	5.7	12.4	1.6	10.2	6.3	0.3	9.7	4.9	1.8	−0.54	−0.58
of which: European countries[4]	*2.1*	*10.6*	*4.9*	*5.8*	*13.3*	*1.7*	*11.1*	*7.1*	*0.2*	*10.8*	*5.6*	*2.2*	*−0.39*	*−0.53*

[1] U = number of unemployed as a percentage of total labour force, annual average; dW = percentage change in compensation per employee, annual average; dRW = dW less percentage change in consumption deflator, annual average. [2] Preliminary or estimated figures. [3] Change in dW and dRW, respectively, between 1965–73 and 1982–85 relative to change in U between same periods. Calculated from unrounded wage and unemployment changes. [4] Unweighted averages.

Sources: OECD Labour Force Statistics, OECD National Accounts, and national data.

analysis. However, the growth of real earnings declined, implying that the contractionary policies had some impact and that the acceleration of inflation did not yield any real gains. Between the second and the third periods average unemployment rose to more than 10 per cent., and this time the increase was accompanied by a marked fall in both nominal and real wage gains, suggesting that the trade-off had been restored and that earlier distortions were mainly due to the external price shocks.

A comparison of the first and the third periods may give a tentative impression of the long-run trade-off and the flexibility or rigidity of wages. The table gives two measures and their appropriateness depends on the policies being pursued. If policies are attempting to reduce the rate of inflation, the "nominal" trade-off is the relevant concept, as it indicates by how much inflation falls when the rate of unemployment increases by one point. On the other hand, when policies attempt to reduce real wage growth relative to productivity, the "real" trade-offs are more appropriate.

In several countries the nominal trade-off is more favourable than the real trade-off, and in some cases (the United States, Japan and Germany) this seems to indicate lags in the adjustment of nominal wages to prices. In other cases (Denmark and the Netherlands) the difference probably shows the effect of the modification or abolition of indexation systems in the latter period. There are also instances (Italy, Sweden, Belgium and France) where the nominal trade-off is less favourable than the real trade-off and these are more difficult to interpret. They may reflect the influence of special measures taken to reduce real wage growth in conditions of relatively inflexible nominal earnings. They may also, however, merely result from the very crude approximations used in the table.

Whatever indicator is used, Japan stands out as the country with the most flexible wage behaviour, as a one point rise in unemployment is accompanied by a fall in nominal wage growth of about 8 points and in real wage growth of 4.5 points. The United States, on the other hand, has mainly benefited from very moderate and relatively stable wage increases. Consequently, the favourable employment performance does not seem to reflect a particularly high degree of wage flexibility but rather the absence of distortions induced by excessive real wage growth.

The average trade-off for the European countries is somewhat below the overall average, but this masks very large differences between the individual countries. Germany, the Netherlands and Denmark have relatively favourable trade-offs, whereas wage flexibility is low in France, the United Kingdom and Spain. In Italy the new general settlement, which is likely to raise real private earnings by some 2.5 per cent. this year and public sector pay by even more, suggests that the large real trade-off shown in the table is probably only transitory. For Sweden, the introduction of a price freeze to prevent a reopening of wage negotiations also appears to indicate that the real measure overstates the trade-off. On the other hand, numerous policy initiatives to promote labour mobility and keep the number of long-term unemployed to a minimum have given Sweden a labour market flexibility which is higher than in most other countries.

Turning to the more recent developments and the outlook for the future, a crucial question is whether the low rates of wage increase observed in 1986 and the sharp fall in the number of working days lost owing to strikes can be interpreted as a change in underlying wage behaviour. There are two contrasting views on this point.

Significant moderation of earlier wage behaviour has taken place in the United States. New and more flexible pay systems, deregulation and the decline of the relatively highly unionised manufacturing industries appear to have changed the historical relationship between wages and unemployment. A comparison of the 1986 outcome with that of 1982–85 is consistent with this view, as a fall in unemployment was accompanied by lower nominal wage growth and only a moderate rise in real wages. A similar shift can be observed in Canada and in Denmark, though in the latter case a recent general settlement points to a strengthening of underlying wage pressures.

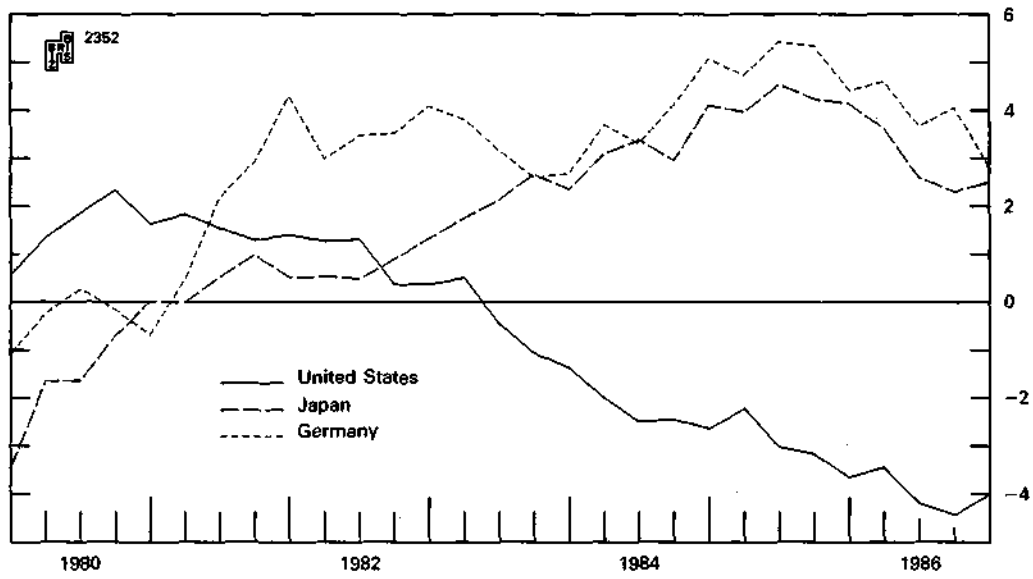
At the same time, the absence of further nominal wage moderation in countries with above-average unemployment rates suggests that the anti-inflationary effects of high unemployment are gradually fading. Alternatively, the rate of inflation may depend more on *changes* in unemployment than on its *level*. In support of this view it is argued that the long-term unemployed, who in several European countries account for 50 per cent. or more of total unemployment (compared with only 10–15 per cent. for the United States and Canada), have very little influence on the outcome of the wage bargaining process. Instead, annual wage increases are determined by those in employment, or the "insiders" as they are sometimes known. A comparison of 1986 with 1982–85 could suggest that such factors have been at work in the United Kingdom, since both nominal and real wages rose faster in the face of worsening unemployment. Moreover, the acceleration of real wage growth in several countries with rising and/or high unemployment may be indicative of more ambitious wage targets.

Real external adjustment.

The correction of the present external imbalances is complicated by the fact that the deficit country is the United States, a large industrial economy upon whose real growth and financial stability much of the industrial and developing world is dependent. It is important for the world economy as a whole that the United States does not suffer a severe decline in domestic demand. Exchange rates have therefore borne most of the burden of adjustment, with the dollar depreciating by as much as 50 per cent. against the currencies of some major trading partners. While substantial, exchange rate adjustments have not yet resulted in a significant turn-round in the US external balance, although signs of incipient adjustment are certainly present. However, the negative consequences of the dollar's decline have been readily apparent in the weakening domestic conditions of the United States' trading partners, particularly Japan and Germany. Rather than "taking up the slack" left by the weakening in overall growth in the United States, other large economies appear to be in difficulties with their attempts to maintain earlier growth objectives.

As is well known, in the early aftermath of large exchange rate changes the first beneficial adjustment signs are masked by J-curve effects which tend for a time to worsen existing imbalances expressed in nominal terms, especially when the initial imbalances are large. The situation in 1986 was also somewhat complicated by the negative foreign impulse (in volume terms) experienced by the industrial countries as a group, as previously described (see pages 16–17 above). Thus, for example, the volume of US net exports of goods and services declined last year by about 1 per cent. of GDP, a rather larger deterioration than that experienced in 1985. However, the movement elsewhere tended to be greater (and, for these countries, in the desired direction), especially when looked at on a quarterly basis. With some

Selected countries: Net foreign balance as a percentage of GDP, 1980–86.*



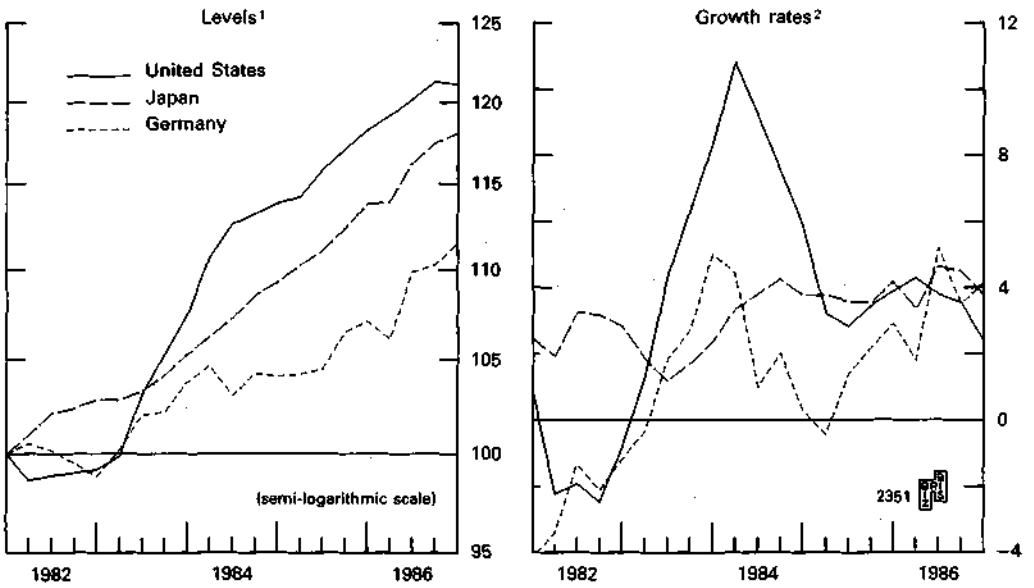
* Net exports of goods and services in constant prices.

improvement occurring towards the end of the year, the US net foreign balance fell by only 0.5 per cent. of GDP between the fourth quarters of 1985 and 1986, while those of both Japan and Germany fell by 1.6 per cent. (see the graph above).

Part of the reason for these first signs of adjustment is no doubt to be found in the further convergence of the growth rates of real domestic demand last year (see the following graph). A particularly marked acceleration was seen, for example, in Germany. Convergence of growth rates does not, of course, reduce demand differences in terms of levels; it merely serves to keep these differences proportionately constant. This arithmetic logic has been at the heart of attempts to encourage countries to go further than a mere convergence of demand growth rates and to try to stimulate growth *differentials* — that is, faster growth in the surplus countries. It is not clear to what extent such new — reversed — demand growth differentials could contribute to adjustment. By the end of last year, the volume of domestic demand in the United States was some 23 per cent. higher than at the start of the recovery in the fourth quarter of 1982 (see the graph). But, on the same base, domestic demand levels in Japan and Germany were respectively only about 8 and 10 per cent. lower than that in the United States. The corresponding figures for the differentials in the levels of imports were 51 and 44 per cent. respectively. This situation will not be easy to resolve. Recent estimates suggest that the US import demand elasticity (with respect to domestic demand) is well above those of Japan and Germany — something which the above figures would seem to support.

In addition, operators of international econometric models have reported simulation exercises suggesting disappointingly small balance-of-payments effects of plausible demand growth differentials. In contrast, greater responses should — eventually — come from exchange rate changes of the magnitudes experienced in

Selected countries: Levels and growth rates of domestic demand, 1982–86.



¹ Fourth quarter 1981 = 100. ² Changes over four quarters, in percentages.

Changes in the real foreign balance.

Countries	1979	1980	1981	1982	1983	1984	1985	1986
	as a percentage of GDP							
United States	1.0	1.7	– 0.3	– 0.7	– 1.4	– 1.8	– 0.6	– 1.0
Japan	– 1.4	3.5	1.5	0.3	1.4	1.2	1.0	– 1.5
Germany	– 1.5	0.4	2.7	1.0	– 0.5	1.0	1.1	– 1.2
France	– 0.7	– 1.0	0.9	– 2.2	1.4	0.9	– 0.5	– 1.6
United Kingdom	– 1.4	0.9	0.5	– 1.1	– 0.8	– 0.6	0.7	– 0.8
Italy	– 0.5	– 2.9	2.3	– 0.1	0.9	– 0.9	– 0.3	– 0.5
Canada	– 1.3	– 0.5	– 1.0	3.3	0.0	1.0	– 0.2	– 0.5
Belgium	– 1.1	1.6	2.9	1.4	2.1	– 0.1	0.2	– 0.8
Netherlands	0.6	1.0	3.9	– 0.5	– 0.1	0.9	– 0.5	– 1.0
Sweden	– 1.6	– 0.3	2.6	0.1	3.3	1.0	– 1.6	0.5
Switzerland	– 2.1	– 1.2	2.7	– 0.1	– 1.6	– 0.5	1.4	– 2.5
Group of Ten countries*	– 0.3	1.1	0.9	– 0.3	– 0.3	– 0.5	– 0.1	– 1.1

* GDP weights and exchange rates of the preceding year.

recent years. And, given the large decline in the dollar over the past two years, it is probably not too early to look for signs of exchange rate effects. One obvious quantity to examine in this regard is the share of domestic demand accounted for by imports (see the table on page 32). Here, however, the evidence is not entirely clear. It is true that import ratios have been on a rising trend over many years in most countries. Nevertheless, in the case of the United States the ratio rose more rapidly last year than it had done in 1985. Indeed, although there was no further change after the third quarter, the volume of US imports rose last year by more than in any other Group of Ten country (see the table on page 14). One factor here was no doubt the widely reported tendency for exporters to the United States to absorb the effect of the initial depreciation of the dollar in their profit margins, rather than quote higher prices to US customers. In Japan, where the import ratio has,

Changes in real domestic demand.

Countries	1982	1983	1984	1985	1986
	in percentages				
United States	– 1.9	5.1	8.3	3.3	3.5
Japan	2.8	1.8	3.8	3.8	4.1
Germany	– 2.0	2.3	1.9	1.5	3.7
France	4.1	– 0.7	0.5	2.2	3.7
United Kingdom	2.0	4.6	2.7	2.8	3.2
Italy	0.3	– 0.4	4.4	3.1	3.2
Canada	– 6.6	3.3	4.7	4.4	3.7
Belgium	0.3	– 2.4	1.7	1.3	3.1
Netherlands	– 0.9	1.5	1.5	2.2	3.3
Sweden	0.8	– 0.8	3.1	3.9	1.8
Switzerland	– 1.0	2.3	2.3	2.6	5.1
Group of Ten countries					
Arithmetic average	– 0.2	1.5	3.1	2.9	3.4
Standard deviation	2.8	2.5	2.1	1.1	0.9

atypically, been rather constant since the mid-1970s, no significant upward movement has yet been recorded. And in Germany the ratio in fact stagnated last year rather than continuing its secular rise.

On the import side at least there is thus as yet little hard evidence of the expected exchange rate effects. No doubt trade patterns take time to adapt to exchange rate changes which are spread out over as long a period as two years (especially when, as in this case, they were preceded by equally large changes in the opposite direction), and non-US exporters' profit margins cannot be squeezed indefinitely. Moreover, as the following chapter notes, changing competitiveness in third markets does already seem to be having an effect on the export side. Even so, the apparent delay in the real adjustment process on the import side does inevitably tend to throw the spotlight back onto macro-economic policy.

Imbalance, adjustment and policy.

In this connection, one positive factor which seems to have become established last year is that the US Federal budget deficit is beginning to be brought under control. It is true that the deficit in fiscal 1986 (the year to end-September 1986), which reached nearly $221 billion, was well over the target of $172 billion set in the 1985 Balanced Budget Act. It is also estimated that the current year's target may be exceeded, though the Office of Management and Budget calculates that this will nevertheless result in a decline in the actual deficit of some $40–45 billion, as the initial effects of the 1986 Tax Reform Act are likely to increase revenue. In his recent budget proposals for the fiscal year 1988, the President has also projected a deficit of only $107.8 billion for that year, a figure which would bring the budget within the original Gramm-Rudman target path. And, while some observers doubt whether such a large reduction is feasible — or even wise — in one year, it seems clear that the Administration at least is intent on further significant improvement.

Imports as a proportion of domestic demand.*

Periods	United States	Japan	Germany	France	United Kingdom	Italy	Canada
	in percentages						
1971–75	9.3	15.8	24.1	17.7	23.6	17.8	22.0
1976–81	10.7	16.1	27.4	21.9	24.9	20.6	24.3
1982–83	10.9	15.5	29.4	21.6	26.4	22.0	24.6
1984	12.7	16.0	30.1	21.9	28.2	23.4	27.9
1985 first quarter	12.4	15.8	31.3	22.2	28.4	23.8	28.3
second quarter	12.8	15.7	31.1	22.1	23.6	23.6	28.6
third quarter	12.6	15.2	30.9	22.4	27.8	23.6	28.9
fourth quarter	13.2	14.7	30.9	22.9	28.6	24.4	29.3
1986 first quarter	13.1	14.6	30.3	22.2	27.6	24.7	29.4
second quarter	13.5	15.7	32.0	23.4	28.5	24.0	28.2
third quarter	13.9	15.6	30.6	23.7	29.5	25.0	29.2
fourth quarter	13.9	15.1	31.0	22.7	30.4	23.4	29.8

* At constant prices. The price base year for the data differs from country to country, and in the case of Italy and France has been changed over the period.

For the United States itself, the ideal outcome would be that, as the budget is brought under control, improvements in the foreign balance stemming from the lower dollar offset the negative domestic demand effects of budgetary correction (and, perhaps, some recovery of the personal sector's saving ratio). It is worth noting that this benign combination is necessary not only to avoid either recession or overheating as such. The possibility of recession must be avoided also because adverse automatic effects of slower growth would themselves tend to hinder the process of budgetary consolidation. Given the uncertainty surrounding the magnitude and timing of exchange rate effects, the appropriate path for the reduction of the budget deficit is difficult to calculate in advance (even assuming a relatively stable private sector financial balance). It is, though, almost certainly a rather narrow path.

For other industrial countries, in particular those with large external surpluses, the analysis begins in the same way as for the United States, mutatis mutandis. The correction of external imbalance — the counterpart of the US improvement — will necessarily involve a withdrawal of demand in the absence of any compensating influences. And as it would seem unlikely that the private sector would reduce its financial surplus (i.e. raise its spending) pari passu, the responsibility seems logically to fall on the public sector. One problem, however, is that, whereas both parts of the required adjustment process in the United States — changes in the external and public sector imbalances — are highly desirable in their own right, in the rest of the world only the first change is desirable per se. Indeed, in most cases consolidation, not relaxation, of the present budgetary situation is thought to be required. In addition, especially in the case of Japan, a major structural adjustment and reorientation of industry are necessary if international balance is to be restored. And such a process is bound to take time.

On the other hand, there may have been some tendency to exaggerate the degree of fiscal stimulus being urged on surplus countries, most notably by the US Administration. It has been unclear as to whether an acceleration in *output* growth, rather than only in *domestic demand*, is being suggested. Of itself the international adjustment process clearly only requires a rise in domestic demand of roughly the same magnitude as the decline in the foreign balance. Not only would this involve a smaller fiscal stimulus, it would also not accelerate the growth of output, but merely alter its composition. In this respect, fears of inflationary consequences stemming from fiscal action targeted on external adjustment are probably exaggerated. To a first approximation, output would be what it would have been in the absence of adjustment, and the demand inflationary risks would be neither increased nor reduced. Put differently, action would seem to be required outside the United States merely to maintain output growth, not to increase it. In addition, however, the same argument about the risks and consequences of recession can be made as in the US case: any slowdown in growth would tend to worsen fiscal situations. Indeed, there is an awkward paradox here, given that budget deficits remain widespread: the greater the need to support demand and activity, the worse the budgetary starting-point is likely to be.

As already noted, the constraint is not necessarily one of excessive demand pressures and inflationary risks. It is the more immediate one of the state of the public finances themselves. This is seen most clearly in continuing increases in the

General government budget balances.[1]

Countries	1973	1981	1982	1983	1984	1985	1986[2]
	as a percentage of GNP						
United States	0.6	− 1.1	− 3.5	− 3.8	− 2.7	− 3.4	− 3.4
Japan	− 2.7	− 7.2	− 6.9	− 6.8	− 5.8	− 4.1	− 4.2
Germany	1.2	− 3.7	− 3.3	− 2.5	− 1.9	− 1.1	− 1.2
France	0.9	− 1.8	− 2.7	− 3.1	− 2.7	− 2.9	− 2.9
United Kingdom	− 2.6	− 2.8	− 2.3	− 3.6	− 3.9	− 2.6	− 3.1
Italy	− 7.0	−11.5	−11.3	−10.7	−11.5	−12.3	−11.3
Canada	1.0	− 1.5	− 5.7	− 6.6	− 6.6	− 6.6	− 5.4
Austria	1.3	− 1.7	− 3.2	− 4.1	− 2.7	− 2.1	− 2.7
Belgium	− 5.5	−16.4	−14.4	−15.0	−12.1	−11.6	−11.2
Netherlands	1.8	− 5.2	− 6.7	− 6.1	− 5.7	− 5.1	− 6.7
Spain	1.1	− 3.9	− 5.6	− 4.8	− 5.6	− 6.4	− 5.6
Sweden	4.1	− 4.9	− 6.3	− 5.0	− 2.6	− 3.9	− 0.7
Switzerland	− 1.1	0.1	− 0.5	− 0.5	− 0.3	− 0.0	0.7
Average[3]	− 0.3	− 3.5	− 4.6	− 4.8	− 4.0	− 3.6	− 3.4

[1] Including the social security sector but excluding capital transactions of a financial nature. For Japan, including public non-financial enterprises. [2] Preliminary. [3] GDP weights and exchange rates of the preceding year.

Sources: OECD Economic Outlook, and national data.

ratio of public debt outstanding to GNP in many countries, and a corresponding increase in the debt service burden which then gets built into future budgets as well (see the table opposite). In some cases, though, there are the first signs of some alleviation of this situation, especially in countries where the budget deficit has been reduced to very low levels.

It is not possible to be precise about what limits ought to be set on public debt ratios. Sustainable ratios may well vary from country to country and over time. In principle it is clear, however, that this is a number which should not, and indeed cannot, be allowed to rise indefinitely. There is an awkward conflict between the need for flexibility in the short term and the requirements of policy sustainability in the medium term.

This conflict is thought to be the more acute for some countries — especially Japan, but also Germany — because over the coming decades a rising proportion of old people in the population is going to impose large and growing burdens on fiscal and other systems. It is not, however, obvious that this development is best prepared for by maintaining fiscal austerity now, especially if growth in general (including that of investment) is then likely to be weak.

In addition, looking outside the fiscal area, it is not easy to see a major domestic demand contribution from monetary policy. Here it is only necessary to note the imperative of maintaining as credible a stance as possible against inflation, and that at a time when some asset prices (both real and financial) have been rising rapidly and when monetary aggregates are already widely overshooting their targets — in part for justifiable, though unquantifiable, reasons. Adverse exchange rate effects might also be more of a risk with any further relaxation of monetary stance, while the strength of real demand effects of purely monetary policy changes is in any case still the subject of debate.

General government debt and interest payments.

Countries	1973	1983	1984	1985	1986	1973	1983	1984	1985	1986
	Gross debt[1] as a percentage of GNP					Gross interest payments as a percentage of government expenditure				
United States	39.9	45.1	46.8	52.4	56.2	7.2	12.2	13.6	13.9	13.9
Japan	30.9	87.9	89.9	89.7	90.9[2]	4.1	12.9	13.9	14.5	14.7
Germany	18.6	40.0	40.7	41.2	41.1	2.8	6.4	6.5	6.6	6.6
France	25.4[3]	30.7	32.9	35.2	36.9	2.4	5.2	5.5	5.6	5.6
United Kingdom	71.8	60.8	61.7	59.7	57.7[2]	9.5	10.6	10.8	11.3	10.5
Italy	52.7	72.6	78.2	85.2	88.9	6.9	15.6	16.3	15.6	16.6
Canada	45.6	58.2	60.9	65.9	68.8	10.6	15.6	16.8	18.1	18.2
Austria	10.8	45.3	47.9	49.4	55.9	2.5	6.2	6.8	7.1	7.5
Belgium	54.0	107.2	115.1	120.6	123.2	8.0	15.0	16.4	17.4	18.6
Netherlands	43.2	61.9	66.3	70.0	72.2	6.3	9.6	10.2	11.1	11.2
Spain	13.8[3]	32.1	39.3	46.3	49.0	2.8	3.3	5.5	8.8	8.8
Sweden	22.5	66.9	69.5	70.9	68.8	4.3	11.3	12.2	13.4	12.2
Switzerland	30.3	36.5	36.1	34.7	32.5	5.6	4.8	4.5	4.4	4.2
Average[4]	37.5	54.1	56.6	59.9	62.1	6.1	11.0	12.2	12.7	12.8

[1] For Japan, Italy and the United Kingdom, including public non-financial enterprises. [2] Third quarter 1986. [3] Average 1974–80. [4] GDP weights of the preceding year.

Sources: EEC European Economy, and national data.

With the use of traditional macro-economic policy tools thus open to some question, it is not surprising that policy-makers have been increasingly looking elsewhere for more fundamental remedies with less harmful side-effects. Unfortunately though, while it is logically sound to suggest, for example, that more efficient market mechanisms should assist the adjustment process — especially when the signalling device involves, as in the present case, changes in relative prices — it is not possible to predict either the scale or the timing of the possible effects on the basis of past experience. Even worse, it is often not easy to decide, for example in the labour market area, what actions would be both feasible and effective.

To take another area, tax reform should clearly help to remedy international imbalance, in principle. The United States, for example, is moving away from a system which encouraged private spending at the expense of savings. Japan may be moving in the opposite direction, from a tax regime which gave sizable encouragement to savings to one under which, for example, a withholding tax has been proposed for forms of interest income previously untaxed. In the former case, these changes should in theory help to ensure that US residents finance a greater proportion of their country's budget deficit — directly or indirectly. In the latter, if some reform is eventually implemented, Japanese residents should spend a greater proportion of their income, especially as the proposals also include measures to encourage housing investment. Again, however, the timing and magnitude of the responses to such policy changes cannot be known with precision. In the area of savings incentives and disincentives, economists have long found it difficult to produce clear and consistent evidence as to the size of the effects of changes in after-tax returns.

All this means that, with growth in the short term again threatening to slip below recent expectations, and with intermittent but heavy pressures appearing in

the exchange markets, responsibility is being thrown back willy-nilly onto macro-economic policy — and onto fiscal policy, in particular. In such circumstances the conflict between short-term needs and medium-term public finance goals becomes less clear-cut. The medium term is, after all, a summation of short-term outcomes; if the latter become sufficiently adverse, they inevitably influence the former.

III. INTERNATIONAL TRADE AND PAYMENTS.

Highlights.

Developments in international trade and payments last year were strongly marked by the repercussions of lower oil prices and the depreciation of the dollar. Both factors produced substantial changes in the relative prices of traded goods as well as significant, though much less pronounced, changes in trade volumes, the latter partly as a consequence of large gains and losses in real income generated by the price effects.

The volume responses varied greatly among different groups of countries but resulted, on balance, in a modest acceleration in the growth of the volume of world trade in 1986, to around 4½ per cent. The price changes manifested themselves primarily in a redistribution of current-account positions among the main groups of countries last year. Owing largely to lower oil prices, the aggregate current-account deficit of the industrial countries declined by $36 billion, while that of the developing countries increased by $26 billion. In addition, the world current-account discrepancy decreased by $7 billion, mainly because lower interest rates appear to have reduced the discrepancy in the reported investment income balance.

The shifts in the global pattern of aggregate current-account positions were accompanied by a considerable widening of external imbalances within the two main groups. Among the industrial countries there was a further rise in the current-account deficit of the United States and substantial increases in the surpluses of Japan and Germany. The unprecedented disequilibria in these three countries in 1986 must be attributed mainly to the first-round price effects of movements in exchange rates. The deterioration in the combined current account of the developing countries was borne fully by the oil exporters in the group. Other developing countries registered an aggregate improvement, all of which, however, accrued to a few countries in South-East Asia, whereas the current-account position of the other oil-importing debtor countries worsened last year.

International capital movements among industrial countries showed two noteworthy features in 1986. Firstly, while securities transactions remained the principal vehicle for international capital flows, in a number of countries large-scale short-term banking flows re-emerged, in part related to cross-border portfolio transactions. Secondly, capital outflows from surplus countries, most notably Japan, continued to expand, but private sector flows no longer fully matched the US current-account deficit, a significant share of which was covered for the first time since 1978 by an accumulation of US liabilities to foreign official holders.

Among the oil-exporting developing countries a number of deficit countries with large international investment positions were able to finance their deficits by drawing down foreign assets; however, oil-exporting countries with large debt burdens were faced with serious financing problems. In a number of non-oil-

exporting countries terms-of-trade gains tended to ease financing pressures, but some of the main debtor countries encountered financing difficulties because of unduly expansionary domestic policies. There was again no spontaneous private sector lending to the problem debtor countries, and most of the developing countries had to rely in 1986 almost exclusively on funds provided by official creditors.

World trade.

Preliminary data suggest that the growth in the volume of world trade quickened last year to 4½ per cent., about 1 percentage point more than in 1985. The rise in volume was accompanied by an increase of about 5 per cent. in average dollar prices of traded goods, so that the value of world trade in current dollars expanded by almost 10 per cent. to a level of more than $2,100 billion.

Notwithstanding the modest pick-up in world trade in 1986, protectionist pressures persisted and restrictive practices continued to impede international trade. It is, however, extremely difficult to measure either the extent to which protectionism has increased or the extent to which it has acted as a drag on world trade growth or hampered a more efficient allocation of resources. This is particularly so because protectionist practices have shifted in past years from the use of customs duties — in fact, several rounds of GATT negotiations on multilateral tariff reductions have succeeded in lowering tariffs substantially — to a widespread application of various kinds of non-tariff barriers. So far protectionism appears to have concentrated primarily on certain areas. The impact of restrictions is particularly pronounced in trade in agricultural products, where government policies, especially through domestic price support programmes, have contributed to excess supplies of subsidised agricultural products on the world market. Trade frictions are mounting in trade in manufactured goods. The restrictions currently in force affect in particular steel and clothing and textiles, and the tightening of the Multifibre Agreement in 1986 will certainly pose serious problems for actual and potential exporters of clothing and textiles in the developing world. In other areas of manufactured goods trade the degree of protectionism so far appears to have risen only moderately, not least because governments have withstood domestic protectionist pressures. The threat of further restrictive measures, however, is prevalent, and the chances of defusing that threat will depend to a significant extent on the success of efforts to reduce the size of international trade imbalances.

Last year's changes in the volume and the value of world trade were strongly influenced by the oil price decline and the depreciation of the dollar. The fall of almost 50 per cent. in the dollar price of oil was a major determinant of shifts in the pattern of trade in volume terms, partly because the lower oil prices increased the demand for oil, and partly because they generated real income effects which significantly affected the import behaviour of different groups of countries. The depreciation of the dollar restrained the expansion of real world trade, as the concomitant rise in real effective exchange rates fairly quickly dampened export volume growth in western Europe and Japan without initially producing a compensatory increase in the volume of exports in the United States and some other countries whose currencies depreciated in real terms. On the other hand, the lower

nominal exchange rate of the dollar raised the dollar value of trade denominated in appreciating currencies, such as intra-European trade. It was, for instance, entirely on account of such valuation effects that in 1986 Germany replaced the United States as the world's largest exporter of merchandise.

As can be seen from the graph on the following page, the expansion of aggregate real world trade in 1986 owed most to import demand in the industrial countries, which is estimated to have risen by 8½ per cent. last year, compared with 6 per cent. in 1985. By the second half of 1986 the level of real imports of the industrial countries is estimated to have exceeded that of the corresponding period of 1985 by 10 per cent. While for the year as a whole the strength of the industrial countries' import demand predominantly reflected the buoyancy of import growth in North America, the quickening of growth in the second half of the year stemmed primarily from rising real imports in other industrial countries. The increase in real import growth in the industrial countries in 1986 was in large measure attributable to higher oil imports. The fall in oil prices not only caused consumption to increase by 3 per cent. but also induced a reconstitution of oil stocks, by about 4 per cent., or nearly twice the rate at which they had been drawn down in 1985. Moreover, oil production in the industrial countries declined by 2 per cent. last year, as unprofitable wells were shut down and drilling activity was reduced.

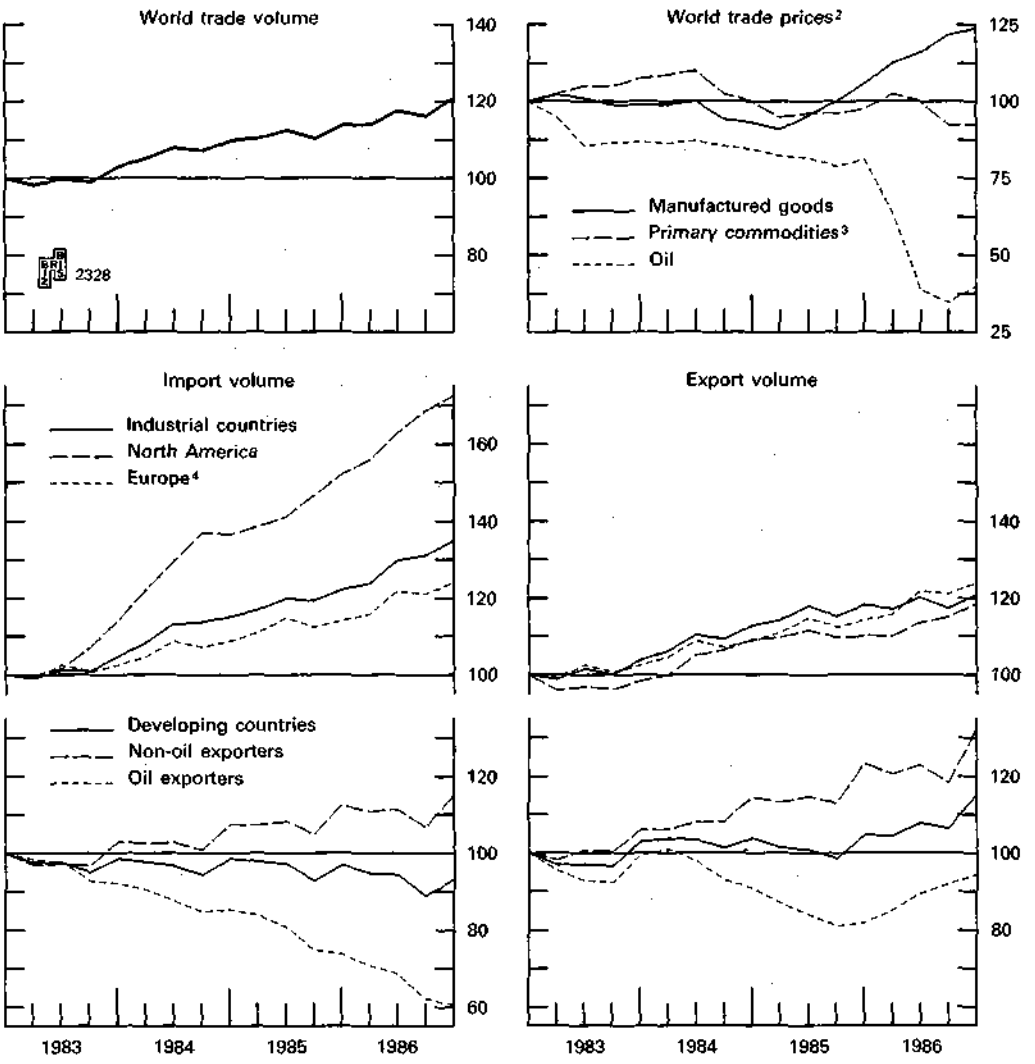
The volume of imports into the developing countries, by contrast, declined by 3½ per cent. last year, the largest fall since 1982. The oil-exporting countries, faced with a loss of one-third of their export earnings, pared real imports by an unprecedented 18 per cent. The non-oil-exporting countries as a group, on the other hand, continued to expand the volume of their imports, though the rate of expansion, at around 2½ per cent., was only half that registered in the two preceding years. Moreover, this average increase was heavily influenced by brisk import growth in a few newly industrialised countries in South-East Asia, which, on the strength of rapidly rising export earnings, were able to boost the volume of imports by 8 per cent. Most other non-oil-exporting countries recorded only modest import growth or were forced by balance-of-payments constraints to curtail the volume of their imports in 1986.

In the industrial countries only a surprisingly small part of import growth was mirrored in an expansion of real exports, which in fact slowed down from about 4½ per cent. in 1985 to only 2 per cent. in 1986. While export volume growth in North America increased from 2 per cent. in 1985 to 6 per cent. in 1986, with a notable acceleration in the course of the year, it declined in other industrial countries, from 5 to only 2 per cent. The relatively modest rise in the industrial countries' aggregate export volume was in part the reflection of the shortfall in demand from the oil-exporting countries. In addition, however, it appears that in 1986 an increasing part of the industrial countries' demand for foreign manufactured products, which has traditionally been met from within the group, was met by producers in the developing world, especially newly industrialised countries in South-East Asia.

Indeed, the main beneficiaries of the strong import demand in the industrial countries last year were the developing countries, whose export volume rebounded from stagnation in 1985 to an increase of 9 per cent. However, these volume gains mainly accrued to two groups of developing countries: real exports from the oil-exporting countries, which had shrunk by 6 per cent. in 1985, expanded by 10 per

World trade, 1983–86.[1]

Fourth quarter 1982 = 100.



[1] Volume data: uncentred three-quarter moving averages. [2] In US dollar terms. [3] Excluding oil. [4] Belgium, France, Germany, Italy, the Netherlands, Sweden, Switzerland and the United Kingdom.

cent. in 1986; and exporters of manufactured products (i.e. those developing countries whose exports of manufactured products accounted for 50 per cent. or more of their total exports in 1980) were able to step up the growth of their exports from around 4 per cent. in 1985 to about 14 per cent. in 1986, with well-above-average increases recorded by countries in South-East Asia.

The marked divergences between import and export volume growth in the different country groups were related to differing developments in trade in the main categories of commodities. The volume of trade in oil and other mineral products, which had declined in 1985 by about 1 per cent., registered the most pronounced growth, of 7 per cent., with all of the expansion stemming from oil trade. Trade in agricultural products grew modestly, by 1 per cent., but continued to fall short of

its average growth of 4½ per cent. during the past decade. While this sluggishness may in part have been the result of the relatively good harvests in 1985–86, which allowed the substitution of domestic supplies for imports, the persistent weakness of trade in agricultural products in recent years appears to be related primarily to protectionist measures shielding many markets from foreign competition. Finally, the growth of trade in manufactured products slowed down in volume terms from 5 per cent. in 1985 to only 3 per cent. in 1986. Apart from major periods of recession, this was the lowest rate of growth in three decades. This poor performance was partly the result of policies of import restraint in countries with declining export earnings but also, as mentioned above, the consequence of the asymmetric effects of real exchange rate changes on export behaviour in major industrial countries.

The volume changes in trade in the main product groups were accompanied by sharply divergent price movements. The price of oil was virtually halved on an annual average basis in 1986, at times dropping well below the level that prevailed before the 1979–80 oil price shock. Prices of non-oil primary commodities, which had fallen by 10 per cent. in 1985, remained depressed and, despite the dollar's depreciation, declined further by 1 per cent. in 1986. The pronounced weakness of commodity prices contrasted with an 18 per cent. rise in the unit value of manufactured products, all of which, however, reflected the valuation effect of the depreciation of the dollar; measured in the exporting countries' domestic currencies, the average prices of manufactured goods in fact declined somewhat.

These price movements were translated into substantial terms-of-trade changes which dwarfed the movements in relative trade volumes and, as will be discussed in the following section, were the principal determinants of changes in trade and current-account balances of individual countries and groups of countries in 1986.

Unprecedented external imbalances in the three largest industrial countries.

The collective imbalance in the external positions of the United States, Japan and Germany, measured as the sum of these countries' current-account balances irrespective of their sign, widened last year by an enormous $80 billion, far more than in the preceding year. More than two-thirds of the increase stemmed from the rise in the surpluses of Japan and Germany and the remainder from a further increase in the US current-account deficit. While last year's oil price fall had a pervasive influence on the distribution of current payments positions among the main groups of countries, only a minor part, about $10 billion, of the increase in the collective imbalance of the three largest economies can be ascribed to lower oil prices. All three countries are net importers of oil, but the oil balance improved somewhat more strongly in Japan and Germany than in the United States. The fact that the bulk of the growing disequilibrium resulted from non-oil transactions suggests that last year's changes in exchange rates in the wake of converging relative demand pressures have not yet set in motion a forceful adjustment process. In reviewing balance-of-payments developments in the United States, Japan and Germany, this section will focus in particular on the reasons for the rather modest progress in external adjustment in 1986. The current-account balances of individual countries and groups of countries are shown in the table on page 53.

The current-account deficit of the *United States* widened further in 1986, by $22.9 to 140.6 billion, equivalent to more than 3½ per cent. of GNP. All of the deterioration occurred in the trade balance, whereas the balance on invisible transactions showed hardly any change, as a $2.5 billion decline in net investment income was slightly more than offset by small improvements in various other balances on services transactions. The modest decrease in net investment income is somewhat surprising in the light of the sharp deterioration in the US net international investment position, which, after having moved into a net debtor position of $107.4 billion by the end of 1985, certainly worsened further in 1986. As can be seen from the table below, the main reason for the moderateness of the decline in overall investment income in 1986 was that the depreciation of the dollar produced for the second consecutive year valuation gains on the stock of US direct investment abroad which considerably boosted the reported direct investment income figures. By contrast, the balance on other investment income (reflecting net interest payments), which for the first time since such data have been compiled had shown a deficit in 1985, deteriorated further in 1986, by $8.7 billion.

United States: Net investment income.

Items	1985	1986				
		year	first quarter	second quarter	third quarter	fourth quarter
	in billions of US dollars					
Direct investment income (net)	26.3	32.5	8.1	7.7	7.5	9.2
of which: capital gains	*4.3*	*8.2*	*1.7*	*2.3*	*2.3*	*1.9*
Other investment income (net)	− 1.0	− 9.7	− 1.8	− 2.3	− 2.2	− 3.4
Private investment income (net)	14.8	6.4	2.3	1.9	1.5	0.7
Government investment income (net)	−15.8	−16.1	− 4.1	− 4.2	− 3.7	− 4.1
Total (as reported)	25.3	22.8	6.3	5.4	5.3	5.8
Total (excluding capital gains)	21.0	14.6	4.6	3.1	3.0	3.9

Note: Individual items may not add up owing to rounding.

The rise in the merchandise trade deficit, from $124.4 billion in 1985 to $147.7 billion in 1986, occurred despite savings in oil import payments. The oil bill was reduced by $16.6 billion, entirely as a result of a decline in oil import costs. At the same time the volume of oil imports expanded by 25 per cent.

The non-oil trade balance deteriorated in 1986 by $40 billion to a record deficit of $113.8 billion. This performance was particularly disappointing for two reasons. Firstly, the adverse influence on the trade balance of the more vigorous rise in real domestic demand in the United States than in the rest of the world began to diminish in 1985 and practically disappeared last year. Secondly, the depreciation of the dollar continued in 1986; in comparison with its peak in February 1985 the dollar had by the end of last year fallen by 30 per cent. vis-à-vis a basket of currencies of major industrial countries. Even if allowance is made for developing countries' currencies, most of which were either pegged to the dollar or depreciated against it, the overall decline in the dollar's effective exchange rate, if adjusted for changes in relative wholesale prices, still amounted to 20 per cent. during that period. Such large exchange rate movements should have helped US producers to recoup a significant part of the losses in price competitiveness suffered during the period of dollar strength.

United States: Estimated components of changes in the trade balance.[1]

Items	1985	1986[2]				
		year	first quarter	second quarter	third quarter	fourth quarter
	in billions of US dollars					
Changes in the trade balance	−11.9	−23.3	−11.5	− 5.4	− 5.4	− 1.0
reflecting changes in:						
oil imports	6.8	16.6	0.4	5.7	4.4	6.1
non-oil trade	−18.7	−40.0	−11.9	−11.2	− 9.8	− 7.1
due to:						
export volume	3.7	16.5	0.0	3.4	6.0	7.1
import volume[3]	−22.2	−38.7	− 9.7	−10.4	−10.5	− 8.1
due to non-oil terms of trade	− 0.2	−17.8	− 2.2	− 4.2	− 5.3	− 6.1

[1] On the basis of balance-of-payments data. [2] Quarterly changes are measured against the corresponding quarter of the previous year, using seasonally adjusted data. [3] A minus sign indicates a rise in import volume.

Against the background of these demand and exchange rate developments, it is indeed perplexing that the US non-oil trade balance should have continued to worsen in 1986, both in nominal and in real terms. While the large adverse impact of a 7 per cent. decline in relative trade prices, which accounted for $17.8 billion, or nearly one-half, of the rise in the non-oil trade deficit, is not unusual in the wake of a sharp decline in the nominal exchange rate, the rise of $22.2 billion in real net non-oil imports was clearly at variance with the response normally to be expected from a large real exchange rate depreciation.

The increase in the non-oil trade deficit was entirely attributable to developments on the import side. Total non-oil imports soared in 1986, by $47.3 to 335.6 billion; this reflected an expansion of 12½ per cent., or $38.7 billion, in import volume and a 3½ per cent. rise in unit value which contributed $8.6 billion to the increase in import value. As only about $22 billion of the import volume increase can be attributed to the income effect of a 3½ per cent. growth in US domestic demand, the residual volume change of close to $17 billion suggests that US producers were still not able to compete successfully with foreign suppliers. The apparent failure of demand to switch to domestically produced import substitutes must be ascribed in large measure to the modest extent of the rise in import prices. Exporters to the United States refrained from substantially raising their dollar export prices — either because suppliers, e.g. from South-East Asia, did not need to do so since their domestic currencies followed the movement of the dollar, or, in those instances where the exporters' domestic currencies appreciated against the dollar, because the foreign suppliers accepted lower profits and raised their dollar export prices only slightly in order to protect their shares of the US market. Moreover, the evolution of import prices and volumes of different categories of products varied greatly in response to market conditions and the price elasticity of demand. For example, exporters of cars from areas other than Canada not only passed on in higher prices a considerable part of the exchange rate rise — the unit value of imports of cars and other motor vehicles increased by more than 10 per cent. in 1986 — but were also able to expand the volume of their sales by 9 per cent. On the other hand, capital goods imports expanded in volume terms by 19 per cent. at virtually unchanged prices, probably under the influence of the stiff competition in this market, not least from suppliers in South-East Asia. The strong increase in real non-oil imports persisted throughout the year, although some modest decline in their

growth rate occurred in the final quarter of 1986, when the level of real non-oil imports exceeded that of the corresponding period of 1985 by 10 per cent., compared with an annual average volume growth of 12½ per cent. It should, however, be noted that real imports were boosted in the second and third quarters by exceptional imports of gold, which were re-exported to Japan later in the year and which added approximately 1½ percentage points to non-oil import volume growth in 1986.

On the export side the influence of exchange rate effects was much more in line with expectations: all of the rise of $7.3 billion in the export value, to $221.7 billion, was attributable to an expansion in volume, equivalent to $16.5 billion, which was, however, partly offset by the 3½ per cent. fall in export unit values. The volume gain can be traced entirely to sales of non-agricultural products; agricultural exports stagnated in volume, and, owing mainly to supply conditions in the world market, export prices declined, reducing the value of US agricultural exports to the lowest level since 1977. By contrast, non-agricultural exports grew at constant prices by 8½ per cent., and, even excluding the exceptional re-export of gold to Japan, real exports expanded by more than twice the rate of US export market growth. This was a marked improvement compared with the meagre volume growth of less than 2 per cent. in 1985, but, as indicated by a reduction of 3 per cent. in non-agricultural export prices in dollar terms, there was not yet scope for US exporters to raise prices despite the decline of the dollar. As on the import side, the situation differed considerably among different categories of export commodities. For example, while the export prices of consumer goods increased by 2½ per cent., those of capital goods were lowered by over 5 per cent. During the year the positive influence of the exchange rate on export performance became much more pronounced. Real non-agricultural exports in the final quarter were 13 per cent. above their level of a year earlier, compared with an annual volume growth of 8½ per cent.

The weakness of the dollar in the exchange markets and the narrowing of its interest rate premium vis-à-vis other major currencies reduced its attractiveness as an investment currency for non-residents in 1986. Net inflows of private capital into the United States, although still large, no longer fully covered the current-account deficit, almost one-quarter of which was financed by foreign central banks' placements of official reserves in the US market. Accordingly, the US net official monetary position deteriorated last year by $32.6 billion, virtually all of which reflected the build-up of official foreign liabilities. The financing of the current-account deficit through official dollar purchases in the exchange markets apparently increased strongly in the first quarter of 1987.

Last year's $107.9 billion net inflow of funds into the United States originated essentially from the same three main types of capital movements as in 1985. Almost two-thirds of the total represented net portfolio inflows, and the remainder stemmed from net inflows through the banking system and from unidentified inflows of funds, as reflected in the statistical discrepancy of the balance of payments. However, as can be seen from the following table, the sources of net capital inflows became considerably more diversified in the final quarter of the year, when a marked rise in inward direct investment and net imports of capital on inter-company accounts (included in other non-bank capital) also produced sizable net inflows of capital.

United States: Capital-account transactions.

Items	1985	1986				
		year	first quarter	second quarter	third quarter	fourth quarter
	in billions of US dollars					
Capital-account balance	123.4	107.9	29.0	21.4	24.4	33.1
US Government transactions (net)[1]	− 2.3	− 0.9	− 0.1	0.5	− 0.6	− 0.8
Direct investment (net)[2, 3]	− 5.2	− 4.5	− 5.7	− 4.4	− 0.1	5.7
Securities transactions (net)[3]	60.4	69.6	18.5	23.0	17.0	11.1
Banking flows (net)	39.7	20.1	14.8	− 10.9	10.8	5.4
Other non-bank capital (net)[3]	7.8	− 3.5	− 7.5	− 0.9	− 0.7	5.6
Errors and omissions	23.0	27.1	9.1	13.9	− 2.1	6.1
Changes in net official monetary position	− 5.7	32.6	2.1	14.0	14.8	1.7
of which: liabilities to foreign official monetary institutions	− 1.8	32.3	2.2	14.0	14.5	1.6
Memorandum item:						
Current-account balance	*−117.7*	*−140.6*	*− 31.0*	*− 35.5*	*− 39.2*	*− 34.9*

Note: A minus sign indicates an outflow of capital; individual items may not add up owing to rounding.

[1] Excluding transactions in US Government securities. [2] Net capital flows between US corporations and their finance affiliates in the Netherlands Antilles are included in securities transactions and excluded from direct investment. [3] Inter-company flows are excluded from direct investment and included in other non-bank capital.

The increase in net inflows of capital from securities transactions, from $60.4 billion in 1985 to an unprecedented $69.6 billion, was predominantly attributable to a further steep rise in non-residents' investment in US non-Treasury securities, net purchases of which went up sharply from $50.9 to 70.7 billion (see table on the following page). Net inflows from bond sales to non-residents increased by $7.4 billion, to $53.4 billion; about three-quarters of this total was in the form of newly issued Euro-bonds by US corporations, partly because declining interest rates continued to stimulate refinancing activity in the Euro-bond market, but also because financing demand for acquisitions remained strong. Net inflows from sales of stocks to non-residents more than tripled last year, to $17.3 billion, with most of the inflows occurring in the first half of 1986 when US share prices increased particularly rapidly. However, foreign interest in the US stock market waned in the final quarter, when, basically on account of net sales by European investors, the balance on transactions in stocks showed a small net outflow of $0.3 billion. For the year as a whole, the rise in net purchases of bonds and stocks owed most to the continuing demand for such assets from Japanese investors, whose purchases accounted directly for nearly 40 per cent. of the increase in non-Treasury securities sales to foreigners. Non-resident investment in US Treasury securities, by contrast, fell to $9.3 billion, less than half the level recorded in 1985. This decline was apparently entirely the result of a shift in Japanese investment behaviour: in 1986 less than one-fifth of total net purchases of US Treasury securities was accounted for by Japanese residents, compared with 85 per cent. in 1985. Outflows of funds from US residents' net acquisitions of foreign securities decreased in 1986 to $4.8 billion. After mid-year US investors began to make net sales of foreign stocks, especially Japanese stocks, partly perhaps because such equities were perceived to be overvalued in relation to their earning prospects, but also in order to realise substantial net gains from exchange rate changes. Finally, the unwinding of the operations of US companies with their finance affiliates in the Netherlands Antilles continued in 1986 and resulted in net outflows of $5.6 billion, reflecting mainly the redemption of earlier Euro-bond borrowing.

United States: International securities transactions.

Items	1985	1986				
		year	first quarter	second quarter	third quarter	fourth quarter
	in billions of US dollars					
Total securities flows (net)	60.4	69.6	18.5	23.0	17.0	11.1
Foreign securities	− 8.0	− 4.8	− 6.1	− 1.7	0.3	2.7
Stocks	− 4.0	− 1.6	− 2.1	− 2.2	1.0	1.7
Bonds	− 4.0	− 3.2	− 4.0	0.5	− 0.7	1.0
US Treasury securities	20.5	9.3	7.7	3.8	0.5	− 2.7
Bills and certificates	− 0.9	− 1.3	1.2	− 0.2	− 1.5	− 0.8
Bonds	21.4	10.6	6.4	4.0	2.1	− 1.9
Other US securities	50.9	70.7	18.7	23.0	17.2	11.8
Stocks	4.9	17.3	6.1	7.0	4.5	− 0.3
Bonds	46.0	53.4	12.6	16.0	12.7	12.1
Other securities-related flows*	− 3.0	− 5.6	− 1.8	− 2.1	− 1.0	− 0.7

Note: A *minus* sign indicates an outflow of capital.

* Transactions between US corporations and their finance affiliates in the Netherlands Antilles.

Net inflows of capital through banks in the United States, which are discussed in greater detail in Chapter V, were practically halved in 1986, to $20.1 billion. Foreign liabilities expanded by $77.4 billion, or almost twice the amount recorded in 1985, but at the same time foreign assets, which had hardly changed in 1985, rose steeply by $57.3 billion last year. The changes on both the liabilities and the assets sides of the banks' balance sheets were dominated by the operations of foreign-owned banks in the United States, with the result that almost 80 per cent. of last year's banking inflows into the United States originated from the international business of foreign banks' US subsidiaries and branches, most of which reflected interbank operations.

In *Japan* the current-account surplus soared in 1986 by $36.6 to 85.8 billion, or almost 4½ per cent. of GNP. This result was entirely due to a steep increase in net exports; the traditional deficit on invisible transactions remained practically unchanged at $7 billion, as higher net receipts from investment income were offset by larger net travel expenditure. Approximately one-half of the rise in the trade surplus, from $56 billion in 1985 to $92.8 billion in 1986, was attributable to savings in energy import payments, which, benefiting from a 36 per cent. fall in import prices, declined by $18.9 billion, despite a 3½ per cent. growth in import volume. The $17.7 billion rise in the non-energy trade surplus resulted from sharply contrasting movements in relative trade prices and volumes, as a positive effect of $32.4 billion deriving from a 16 per cent. improvement in the terms of trade was halved by a $14.7 billion decline in the non-energy trade surplus at constant prices.

The substantial gain in the non-energy terms of trade must be ascribed in large part to the sharp rise in the yen, which appreciated on average by 30 per cent. in effective terms and by as much as 41½ per cent. against the dollar in 1986. Export unit values in dollar terms increased by 21 per cent., whereas non-energy import unit values rose by only 4 per cent. However, given the size of the yen's appreciation, the change in dollar export unit values implied that only about one-half of the increase in the exchange rate was passed on in export prices. The other half was absorbed in profits as Japanese exporters attempted to limit their loss of

market shares. The impact on profits was, however, dampened by the marked reduction in yen import prices, which declined by almost the full amount of the yen's appreciation.

The different export and import price changes clearly contributed to the divergent trade volume changes. The price impact was considerably stronger on the import side, where the growth in the volume of non-energy imports accelerated markedly from 2½ per cent. in 1985 to 17 per cent. in 1986 and that of imports of manufactured products from 2 to 24 per cent. These volume figures were, however, significantly affected by the exceptional gold imports for the issue of the commemorative Hirohito coin, which increased the volume growth of non-energy imports and manufactured imports by an estimated 4½ and 7 percentage points respectively. Nonetheless, the buoyancy of real imports in the face of broadly unchanged domestic demand growth in 1986 would seem to suggest that the yen's rapid appreciation in 1986 had a significant effect on Japanese import behaviour.

Japan: Estimated components of changes in the trade balance.[1]

Items	1985	1986[2]				
		year	first quarter	second quarter	third quarter	fourth quarter
	in billions of US dollars					
Changes in the trade balance	12.5	36.6	6.5	10.1	11.9	8.1
reflecting changes in:						
energy trade	4.5	18.9	0.8	5.4	5.9	6.8
non-energy trade	8.0	17.7	5.7	4.7	6.0	1.4
due to volume changes:						
export volume	6.2	– 2.3	– 0.9	– 0.5	– 0.1	– 0.8
import volume[3]	– 1.8	–12.4	– 0.3	– 3.9	– 3.7	– 4.5
due to non-energy terms of trade	3.6	32.4	6.9	9.0	9.8	6.7

[1] On the basis of customs data. [2] Quarterly changes are measured against the corresponding quarter of the previous year. [3] A minus sign indicates a rise in import volume.

On the export side the attempt to defend market shares through price restraint appears to have been partially successful. The volume of exports declined by less than 1½ per cent., compared with an increase of 4 per cent. in the preceding year. On the one hand, exports to countries experiencing balance-of-payments constraints — for example China, the USSR, oil-exporting countries and other developing countries outside Asia — fell considerably in 1986. On the other hand, exports to the US market, where Japanese exporters presumably made the biggest price concessions, continued to increase, although apparently by much less than the 12½ per cent. rise in the overall volume of US non-oil imports. At the same time, Japanese exporters made significant inroads into the western European market. The volume of sales may well have risen by around 20 per cent. in 1986, suggesting that the relatively modest appreciation of the yen against these countries' currencies — in 1986 the yen rose on average by 9 per cent. vis-à-vis the ECU — did not impair Japanese exporters' performance in this market.

There was a further substantial increase, of $21.5 billion, in total net capital outflows (including the balancing item) from Japan in 1986, but this was less than the rise in the current-account surplus. The net official monetary position, excluding valuation adjustments, strengthened by $13.7 billion, the largest improvement since 1978.

Japan: Capital-account transactions.

Items	1985	1986				
		year	first quarter	second quarter	third quarter	fourth quarter
	in billions of US dollars					
Capital-account balance	− 54.6	− 74.6	− 13.1	− 20.2	− 20.4	− 20.9
Long-term capital (net)	− 64.5	−131.5	− 19.0	− 28.9	− 38.4	− 45.2
Securities transactions	− 43.1	−101.4	− 13.6	− 22.9	− 31.0	− 33.9
Foreign securities	− 59.8	−102.0	− 19.6	− 26.6	− 28.6	− 27.2
Domestic securities	16.7	0.6	6.0	3.7	− 2.4	− 6.7
Direct investment (net)	− 5.9	− 14.3	− 2.3	− 2.4	− 3.5	− 6.1
Other long-term capital (net)	− 15.5	− 15.8	− 3.1	− 3.6	− 3.9	− 5.2
Short-term capital (net)	9.9	56.9	5.9	8.7	18.0	24.3
Banking flows (net)	10.8	58.5	7.0	10.2	16.5	24.8
Other short-term flows (net)	− 0.9	− 1.6	− 1.1	− 1.5	1.5	− 0.5
Errors and omissions	4.0	2.5	1.7	2.6	2.5	− 4.4
Changes in net official monetary position (− = improvement)	1.4	− 13.7	− 1.3	− 5.5	− 6.5	− 0.4

Note: A minus sign indicates an outflow of capital; individual items may not add up owing to rounding.

The contrast between large-scale net outflows of long-term funds and net imports of short-term capital which has marked Japan's capital account since 1984 became even more pronounced last year. Net long-term capital outflows soared by $67 to 131.5 billion. As in the past two years, the overwhelming part, a staggering $102 billion, reflected investment in foreign securities, the bulk of which, $93 billion, was in bonds. A major part of these bonds is believed to be denominated in dollars, although it appears that Japanese investors began to move into non-dollar bonds in the latter months of the year. While the prominence of dollar bonds may in part have been related to expectations of capital gains from declining US interest rates, the general weakness of the dollar and the further narrowing of the interest differential in its favour in 1986 would seem to suggest that the persistently strong demand for bonds continued to be motivated mainly by a desire for portfolio diversification. Indeed, this process received an additional stimulus in 1986 from the authorities' decision to relax further the prudential guidelines limiting insurance companies' and trust banks' investment in foreign securities. These limits were raised in two steps and since August 1986 amount to 30 per cent. A second factor appears to have been that Japanese banks attempted to exploit the interest differential between short-term dollar interest rates and yields on dollar bonds by borrowing short-term funds in the Euro-market and investing them in bonds. Indeed, balance-sheet data indicate that both factors played a significant role in 1986: insurance companies and trust banks apparently more than doubled their investment in foreign securities, and commercial banks may have stepped up their purchases by around 50 per cent. However, in spite of the dominance of outflows of long-term funds into foreign currency bonds, Japanese residents' investment behaviour became more diversified in two respects in the course of last year. Firstly, purchases of foreign equities increased to $7 billion, or more than the cumulative total of all net purchases of such securities in the preceding ten years. Secondly, there was also a substantially larger outflow in the form of direct investment, which increased two and a half times to $14.3 billion in 1986.

The rise in net long-term outflows was accompanied by a sharp increase, from $9.9 billion in 1985 to $56.9 billion, in net short-term capital inflows. Practically all of the increase represented inflows through the banks — reflecting in part, as mentioned above, the financing of bond purchases but in part also the borrowing of short-term funds which were used in currency and interest rate swaps in order to obtain fixed rate yen financing.

Germany's current-account surplus more than doubled from $15.8 billion in 1985 to $35.7 billion in 1986. After peaking in the third quarter of last year, the seasonally adjusted quarterly surplus declined by nearly $2 billion in the final three months of the year, but at $9 billion it still exceeded the quarterly average for the year as a whole. The sharp rise in the current payments surplus was entirely attributable to an increase in net exports of merchandise, while the traditional invisibles deficit widened by $7 to 19 billion, partly as a result of increased net travel expenditure. In addition, despite the growth of Germany's net external assets, net investment income declined by $2 billion: the improved earnings position of German enterprises resulted in substantially higher dividend payments to non-residents, but lower interest rates also reduced residents' income from foreign currency investment.

The $26.9 billion surge in the trade surplus to a record figure of $54.7 billion can be traced entirely to price developments. Customs data indicate that roughly one-third of the increase in net exports reflected a $8 billion decline in the oil bill, as the effect of a 7½ per cent. rise in the volume of imports of crude oil and petroleum products was far outweighed by a 40 per cent. drop in the dollar price of oil imports. More importantly, the rise of $19 billion in the non-oil trade balance was also fully attributable to price factors: a 6 per cent. improvement in the non-oil terms of trade boosted the nominal surplus by $23.6 billion, only a relatively small part of which was offset by the $4.6 billion deterioration in the non-oil trade balance in volume terms.

Germany: Estimated components of changes in the trade balance.[1]

Items	1985	1986[2]				
		year	first quarter	second quarter	third quarter	fourth quarter
	in billions of US dollars					
Changes in the trade balance	6.7	27.0	5.5	6.4	8.0	7.1
reflecting changes in:						
oil trade	0.2	8.0	0.5	1.5	3.2	2.8
non-oil trade	6.5	19.0	5.0	4.9	4.8	4.3
due to volume changes:	4.5	– 4.6	– 0.6	– 1.2	– 1.1	– 1.7
export volume	10.0	2.7	– 0.3	2.1	0.4	0.5
import volume[3]	– 5.5	– 7.3	– 0.3	– 3.3	– 1.5	– 2.2
due to non-oil terms of trade	2.0	23.6	5.6	6.1	5.9	6.0

[1] On the basis of customs data. [2] Quarterly changes are measured against the corresponding quarter of the previous year. [3] *A minus sign indicates a rise in import volume.*

While the decline in real net exports was a first indication of a movement towards better balance in Germany's external accounts, several factors would seem to suggest that the adjustment process did not gain full momentum in 1986. The

slowdown in the growth of the volume of exports from 6 per cent. in 1985 to less than 1½ per cent. in 1986, while rather striking against the background of an expansion in real world trade of 4½ per cent., appears to have owed more to the regional distribution of Germany's trade and its heavy reliance on exports of investment goods than to the loss of competitiveness arising from the Deutsche Mark's real effective appreciation of 10 per cent. Indeed, the bulk of the decline in export volume can be traced to sharp cutbacks in imports by oil-exporting countries, other developing countries and countries in eastern Europe. All these countries, which have a high import propensity for capital goods, were subject to balance-of-payments constraints. By contrast, German exports to other industrial countries are estimated to have risen by more than 3 per cent. in volume terms. Most of these volume gains occurred in the earlier part of 1986, and after mid-year real exports began to stagnate. German exporters raised their export prices in dollar terms by 31 per cent., or almost in line with the Deutsche Mark's annual average appreciation of 35½ per cent. against the dollar in 1986, but the maintenance of export prices in Deutsche Mark was certainly also a reflection of the relative stability of the Deutsche Mark vis-à-vis most other European currencies.

On the import side the volume response to the exchange rate change appears to have been even more sluggish: while the growth in the volume of non-oil imports quickened from 4½ per cent. in 1985 to 5½ per cent. in 1986, most of this must be ascribed to the buoyancy of domestic demand conditions in Germany and, despite a 9 per cent. fall in non-oil import prices in Deutsche Mark, foreign suppliers do not seem to have made appreciable gains in the German market.

In addition to the surplus of $35.7 billion on current account, Germany experienced an unprecedented net inflow of long-term capital of $17.2 billion in 1986. But the total of such inflows was nearly matched by a huge net outflow of short-term capital (including errors and omissions) of $49.8 billion; Germany's net official monetary position, excluding valuation adjustments, improved only moderately, by $3.1 billion.

Germany: Capital-account transactions.

Items	1985	1986				
		year	first quarter	second quarter	third quarter	fourth quarter
	in billions of US dollars					
Total identified capital (net)	−17.5	−29.9	− 4.6	−12.1	− 3.6	− 9.6
Long-term capital (net)	− 3.4	17.2	9.0	− 0.2	4.8	3.6
Securities transactions	3.5	24.1	9.1	1.2	6.1	7.7
Foreign securities	−11.1	− 9.7	− 1.8	− 5.2	− 1.3	− 1.4
Domestic securities	14.6	33.8	10.9	6.4	7.4	9.1
Direct investment (net)	− 4.3	− 6.4	0.0	− 1.2	− 1.4	− 3.8
Banking flows (net)	0.8	4.7	0.6	1.3	1.4	1.3
Other long-term capital (net)	− 3.4	− 5.1	− 0.7	− 1.5	− 1.3	− 1.6
Short-term capital (net)[1]	−14.1	−47.1	−13.6	−11.9	− 8.4	−13.2
of which:						
Banking flows (net)	−10.0	−27.8	− 3.3	− 6.0	− 5.8	−12.7
Non-bank flows (net)[2]	− 4.3	−18.8	− 9.7	− 6.2	− 2.3	− 0.7

Note: A minus sign indicates an outflow of capital; individual items may not add up owing to rounding.

[1] Includes public sector flows. [2] Excludes public sector flows.

On long-term capital account the most striking feature was the sharp increase in net portfolio inflows, from $3.5 billion in 1985 to $24.1 billion in 1986, the bulk of which reflected non-residents' demand for Deutsche Mark securities. Foreign investment in German bonds nearly tripled to $27 billion, and purchases of shares and investment fund units almost doubled to $6.8 billion in 1986. The strong interest in Deutsche Mark securities seemed to be related in particular to two factors. Firstly, investors apparently expected that exchange rate gains from an appreciating Deutsche Mark would more than offset the interest rate disadvantage of Deutsche Mark investment, which in fact narrowed as the long-term interest differential in favour of the dollar fell, from over 3 percentage points in the first quarter to less than 2 percentage points in the final quarter of 1986. Secondly, throughout the year there existed a relatively steep yield curve for Deutsche Mark interest rates, which made it attractive to borrow short-term Euro-Deutsche Mark and to invest them in higher-yielding Deutsche Mark securities.

The huge net outflow of short-term capital reflected record capital exports by both the banking and the non-bank sectors. The increase in net banking outflows to $27.8 billion in 1986 resulted entirely from a rise in assets; about 80 per cent. represented short-term Deutsche Mark claims on banks in the Euro-markets, which borrowed in order to compensate for the withdrawal of balances used either for the acquisition of Deutsche Mark securities or, at times, for intervention purposes in the context of the EMS. The expansion of net outflows through the non-bank sector to $18.8 billion in 1986 predominantly reflected transactions with foreign banks. The high degree of liquidity in the German enterprise sector and the existence of particularly attractive terms apparently prompted non-banks to place their short-term funds with Euro-banks.

Why has there not been more progress in external adjustment in the three largest industrial countries? The preceding section has shown that the increase in these countries' external imbalances was predominantly the result of large movements in relative non-oil trade prices which strongly boosted the current-account surpluses in Japan and Germany and contributed to the rise in the US deficit. However, rather than indicating a lack of adjustment, these price effects must in fact be considered as a first step in the direction of adjustment. Changes in exchange rates tend to affect traded goods prices quickly, but induce a corrective response in trade volumes only with considerable time lags. The impact of the so-called J-curve effect, which increases the trade surplus in a country with an appreciating currency and the deficit in a country with a depreciating currency, was clearly evident in Japan and Germany. In the United States, by contrast, the J-curve effect was less pronounced, as foreign suppliers, willing to bear some of the exchange rate costs in the form of lower profits, held down the increases in the price of their exports to the US market. While this mitigated the adverse terms-of-trade effect on the US trade balance, it also, of course, postponed the desirable volume reaction, which was one of the reasons for the continuing deterioration in the US real trade balance. In addition, the fact that producers in countries whose currencies had not strengthened against the dollar were able to a certain extent to take the place of suppliers from countries with appreciating currencies also hindered the process of adjustment in the US trade balance — although it contributed to adjustment in Japan, where the competition from South-East Asian countries inhibited export growth.

While the exchange rate is an important instrument for adjustment, its effectiveness depends crucially on the support of macro-economic policy in two interrelated respects. Firstly, as relative demand pressures exert significant income effects on trade balances, the convergence of domestic demand growth in the major industrial countries in 1986 eliminated one of the factors that had exacerbated external imbalances in the past. However, as discussed in Chapter II, there was no reversal of relative demand pressures which would have supported external adjustment in the three economies. Secondly, a permanent adjustment necessitates a reduction in the gap between national saving and investment. Changes in exchange rates on their own have at best only a relatively small direct impact on the level of national saving and investment; if external adjustment is to be more rapid, more forceful direct action will be required in this area than was seen last year.

Finally, even when trade volume responses begin to assert themselves more strongly than in 1986, the magnitude of the present trade-account imbalances implies that it will take a fairly long period of differential growth in exports and imports before a correction of external disequilibria becomes more clearly visible. To illustrate this point, for the US trade deficit not to deteriorate any further, exports will have to expand more than one and a half times faster than imports, or, to put it differently, for the US trade deficit to disappear in five years, exports will have to grow 11 percentage points faster than imports each year.

Balance-of-payments developments in the other Group of Ten countries.

Among the other Group of Ten countries, the five net importers of energy — Italy, France, Belgium, Sweden and Switzerland — recorded improvements in their current-account positions in 1986. In general, all these countries benefited from sizable terms-of-trade gains, largely because of lower oil prices, but to some extent also because of the rise in their currencies' effective exchange rates. The appreciations basically reflected the downward movement of the dollar, whereas the bilateral cross rates between these countries' currencies showed, on the whole, relatively little change. The favourable effects of terms-of-trade improvements were, however, offset in varying degrees by deteriorations in real trade balances. The underlying divergences in the growth of export and import volumes were in part related to movements in real effective exchange rates; in addition, the shortfall in demand from developing countries with balance-of-payments constraints contributed to a slowdown in real export growth, whereas real import growth accelerated generally, though by different percentages, in response to domestic demand developments (see Chapter II).

The largest improvement, of $8.1 billion, was recorded in *Italy,* where the effect of a terms-of-trade gain of 11½ per cent. was only slightly tempered by a deterioration in the real trade balance. Most of the strengthening occurred in the second half of the year, when the current-account surplus was running at a seasonally adjusted annual rate of over $11 billion. *France* benefited from a terms-of-trade improvement similar to that of Italy, but as real exports stagnated and real imports expanded by about 9 per cent., the current account improved only by $4 billion. Moreover, as neither exchange rate nor demand factors appear to explain fully the deterioration in the real trade balance in 1986, it would seem that France's

International current-account balances.

Countries and areas	Trade balance (f.o.b.)			Invisibles balance			Current-account balance		
	1984	1985	1986	1984	1985	1986	1984	1985	1986
	in billions of US dollars								
BLEU[1]	− 1.2	− 0.5	0.5	1.1	1.1	2.9	− 0.1	0.6	3.4
Canada	16.0	12.8	7.3	−13.5	−13.2	−13.6	2.5	− 0.4	− 6.3
France	− 4.7	− 5.3	− 2.1	3.7	5.1	5.9	− 1.0	− 0.2	3.8
Germany	21.1	27.8	54.7	−13.0	−12.0	−19.0	8.1	15.8	35.7
Italy	− 5.8	− 6.2	3.9	3.4	2.7	0.7	− 2.4	− 3.5	4.6
Japan	44.3	56.0	92.8	− 9.3	− 6.8	− 7.0	35.0	49.2	85.8
Netherlands	5.5	5.3	7.0	− 0.3	− 0.0	− 2.2	5.2	5.3	4.8
Sweden	3.5	2.5	5.3	− 3.1	− 3.7	− 4.5	0.4	− 1.2	0.8
Switzerland	− 3.6	− 3.2	− 3.5	8.0	8.4	11.0	4.4	5.2	7.5
United Kingdom	− 5.7	− 2.7	−12.1	7.5	6.7	10.5	1.8	4.0	− 1.6
United States	−112.5	−124.4	−147.7	6.0	6.7	7.1	−106.5	−117.7	−140.6
Group of Ten countries	*−43.1*	*−37.9*	*6.1*	*− 9.5*	*− 5.0*	*− 8.2*	*−52.6*	*−42.9*	*− 2.1*
Australia	− 0.9	− 1.3	− 2.0	− 7.6	− 7.4	− 7.2	− 8.5	− 8.7	− 9.2
Austria	− 3.8	− 4.0	− 4.4	3.2	3.7	4.4	− 0.6	− 0.3	0.0
Denmark	− 0.2	− 0.8	− 1.1	− 1.4	− 1.9	− 3.2	− 1.6	− 2.7	− 4.3
Finland	1.5	0.9	1.6	− 1.5	− 1.6	− 2.4	0.0	− 0.7	− 0.8
Greece	− 4.2	− 5.1	− 4.4	2.1	1.8	2.6	− 2.1	− 3.3	− 1.8
Iceland	0.0	0.0	0.1	− 0.1	− 0.1	− 0.1	− 0.1	− 0.1	0.0
Ireland	0.2	0.5	1.3	− 1.1	− 1.1	− 1.7	− 0.9	− 0.6	− 0.4
New Zealand	− 0.2	− 0.2	0.0	− 1.3	− 1.3	− 1.6	− 1.5	− 1.5	− 1.6
Norway	5.1	4.7	− 2.2	− 2.1	− 1.8	− 2.3	3.0	2.9	− 4.5
Portugal	− 2.0	− 1.5	− 1.3	1.5	1.9	2.6	− 0.5	0.4	1.3
South Africa	2.2	5.8	7.0	− 3.8	− 3.2	− 3.8	− 1.6	2.6	3.2
Spain	− 4.0	− 4.4	− 6.3	6.3	7.1	10.6	2.3	2.7	4.3
Turkey	− 2.9	− 3.0	− 3.1	1.5	2.0	1.6	− 1.4	− 1.0	− 1.5
Yugoslavia	− 0.8	− 0.6	− 0.9	1.3	1.4	2.0	0.5	0.8	1.1
Other industrial countries	*−10.0*	*− 9.0*	*−15.7*	*− 3.0*	*− 0.5*	*1.5*	*−13.0*	*− 9.5*	*−14.2*
Total industrial countries	*−53*	*−47*	*− 9*	*−13*	*− 6*	*− 7*	*−66*	*−52*	*−16*
Oil-exporting developing countries	69	68	18	−74	−65	−54	− 5	3	−36
Middle Eastern countries[2]	33	36	9	−43	−35	−30	−10	1	−21
Other countries[3]	36	32	9	−31	−30	−24	5	2	−15
Non-oil-exporting developing countries	−15	−19	− 8	− 9	− 7	− 5	−24	−26	−13
South-East Asian countries[4]	4	9	19	2	1	5	6	10	24
Other countries	−19	−28	−27	−11	− 8	−10	−30	−36	−37
Total developing countries	*54*	*49*	*10*	*−83*	*−72*	*−59*	*−29*	*−23*	*−49*
Eastern European countries[5]	18	8	4	− 5	− 4	− 3	13	4	1
Total	19	10	5	−101	−82	−69	−82	−71	−64

[1] Belgium-Luxembourg Economic Union. [2] Iran, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia and the United Arab Emirates. [3] Algeria, Bahrain, Congo, Ecuador, Gabon, Indonesia, Mexico, Nigeria, Syria, Trinidad and Tobago, Tunisia and Venezuela. [4] Hong Kong, Korea, Singapore and Taiwan. [5] Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, Romania and the USSR.

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

relatively poor trade performance points to a more deep-seated structural weakness in some industrial sectors. Terms-of-trade improvements of around 9 per cent., coupled with a less sharp deterioration in the real trade balances, were the principal reasons for the strengthening of $2.8, 2.3 and 2 billion, respectively, in the current-account positions of the *Belgium-Luxembourg Economic Union*, *Switzerland* and *Sweden*.

The other three countries in the Group of Ten, which are all net exporters of energy, experienced a deterioration in their current-account positions, which was, however, only partly related to the fall in oil prices. In *Canada* the current-account deficit widened to an unprecedented $6.3 billion. One-third of the deterioration reflected a decrease of $2 billion in receipts from net exports of crude oil, petroleum products and natural gas, largely as a result of declining prices, but also because of a very steep increase in the volume of oil imports in 1986. In addition, the non-energy trade surplus fell by $3.5 billion, owing partly to a 3 per cent. terms-of-trade loss and partly to the persistence of relatively buoyant domestic demand conditions during most of 1986. In the *United Kingdom* the current-account balance moved into deficit, recording a shortfall of $1.6 billion, the first since 1979, despite a $3.8 billion rise in the surplus on invisibles transactions. The trade deficit increased by $9.4 billion, roughly one-half of which reflected a decrease in net oil exports caused by the fall in oil prices and a 25 per cent. expansion in the volume of UK oil purchases from abroad. The $4.9 billion worsening in the non-oil trade balance can be traced to unfavourable movements in trade volumes, which more than outweighed the positive influence of a 2½ per cent. terms-of-trade gain. Real non-oil exports, which rose at an annual rate of 4 per cent., were sluggish for most of 1986 but began to expand strongly in the final quarter, when the lagged effects of sterling's real effective depreciation were reinforced by an upturn in foreign demand. Real non-oil imports increased in 1986 by more than 5½ per cent.; however, given the traditionally high income elasticity of import demand, this was relatively modest compared with a real domestic demand growth of 3¼ per cent. In the *Netherlands* the moderate decline of $0.5 billion in the current-account surplus was entirely attributable to a $2.2 billion rise in net invisible payments, reflecting mainly increased net travel expenditures, a fall in net investment income and larger transfer payments. By contrast, the surplus on merchandise trade rose further to a record figure of $7 billion. All of the increase was attributable to an improvement of about 2 per cent. in the terms of trade, which was partly caused by the fact that the downward adjustment of export prices of natural gas lagged behind that of oil import prices. Indeed, as gas prices were adjusted in line with oil prices in the latter part of the year, the trade surplus declined considerably, from $4.5 billion in the first half of 1986 to $2.5 billion in the second half.

As shown in the following table, the balance on total capital-account transactions (including errors and omissions) of all Group of Ten countries swung from a substantial net capital inflow of $46.5 billion in 1985 to a small net outflow of $4.3 billion in 1986. However, the turn-round was entirely the result of changes in the capital accounts of the three largest economies in the Group (which were discussed in detail in the preceding section), whereas total net capital outflows from the other countries in the Group of Ten, at $7.5 billion, were only modestly below the previous year's level, with virtually all of the increase in their combined current-account surplus being mirrored in an improvement in their net official monetary

position. Whereas the two countries with current-account deficits, Canada and the United Kingdom, recorded large net capital imports, all the other countries were exporters of capital in 1986.

Group of Ten countries: The pattern of capital flows.

Items	1985	1986
	in billions of US dollars	
All Group of Ten countries		
Total capital (net)	46.5	– 4.3
United States		
Total capital (net)	123.4	107.9
Changes in net official monetary position	– 5.7	32.6
Japan and Germany		
Total capital (net)	– 65.2	–104.7
Changes in net official monetary position	0.2	– 16.8
Other Group of Ten countries		
Total capital (net)	– 11.7	– 7.5
Changes in net official monetary position	1.9	– 9.5

Note: A minus sign indicates a capital outflow. Total capital includes errors and omissions.

In *Canada* net inflows of long-term capital rose sixfold in 1986, to $12.5 billion, entirely as a result of non-residents' record purchases of $18 billion of Canadian securities. Their relatively high yield, which was an average of 2 percentage points above that on comparable US securities during the year, and the relative stability of the Canadian dollar vis-à-vis the US dollar, but also non-residents' desire to diversify their international portfolios, as evidenced by Japanese investors' acquisition of $6.8 billion of Canadian bonds, all contributed to this result. In the *United Kingdom*, by contrast, the reversal from net capital exports of $1.6 billion in 1985 to net capital imports of $5.9 billion in 1986 was wholly attributable to increased net inflows through the banks and the non-bank sector (other than in the form of direct investment or portfolio capital) and larger unidentified capital inflows. Transactions relating to direct investment and portfolio capital, on the other hand, produced net outflows of $22.7 billion, or $4 billion more than in 1985. A significant part of both the identified inflows and outflows of capital seems to have reflected the intermediation of funds by foreign financial institutions, especially Japanese banks and securities houses operating in the London market.

In the wake of the marked improvement in its current account, *France* became a net exporter of capital in 1986. Net repayments of foreign borrowing contributed significantly to net outflows of long-term funds totalling $10.3 billion; in addition, there were net outflows of $6.7 billion in non-bank short-term funds, which, however, were more than offset by massive net short-term foreign borrowing, amounting to $15.2 billion, by the banking sector. In *Belgium* the rise in net capital exports to $3.6 billion was mainly attributable to a turn-round in the balance on direct investment and higher net portfolio outflows. Larger net outflows in the form of portfolio capital were also the principal reason for increased capital exports, of $5.2 and 6.2 billion respectively, from the *Netherlands* and *Switzerland*. In *Italy* the very large improvement in the current-account balance was accompanied by net

long-term capital outflows of $3.9 billion; short-term capital movements, including errors and omissions, showed a small net inflow, and the net official monetary position, which had deteriorated by $7.5 billion in 1985, improved by $2.3 billion last year.

Balance-of-payments developments in other groups of countries.

In the *industrial countries outside the Group of Ten* the combined current-account deficit widened in 1986 by $4.7 to 14.2 billion. The deterioration occurred entirely on the trade account, where a small reduction in these countries' aggregate oil bill was more than offset by a decline in the non-oil trade surplus. The main reason for the weaker trade performance was the fact that for the group as a whole export volume growth slowed down considerably, from 6 per cent. in 1985 to about ½ per cent. in 1986, whereas import volume growth was sustained at the previous year's rate of 6 per cent.

Within the group, however, developments in world markets and different domestic policy stances produced rather divergent current-account results in individual countries. *Norway* was faced with a massive deterioration in its current-account position, as the 1985 surplus of $2.9 billion gave way to a deficit of $4.5 billion last year. An oil price induced decline in oil export earnings was reinforced by a sharp rise, of $4 billion, in net non-oil imports, most of which reflected a 15 per cent. increase in real imports stimulated by exceptionally strong domestic demand growth. In *Denmark*, too, relatively strong demand pressures, together with declining competitiveness and adverse export market conditions for agricultural products, contributed to a worsening of the trade balance in real terms. Owing, however, to a terms-of-trade gain of 4½ per cent., the nominal trade deficit rose only modestly. At the same time, higher payments on net investment income account and for official transfers raised the invisibles deficit, so that the current payments deficit increased to $4.3 billion in 1986, or nearly 5½ per cent. of GNP. In *Australia* the current-account deficit widened slightly, to $9.2 billion, or 5½ per cent. of GNP. The terms of trade deteriorated by 12 per cent., reflecting in part Australia's heavy dependence on exports of primary products, and the decline of the Australian dollar. Real exports expanded last year by 5 per cent., whereas after two years of buoyant growth a reduction in domestic demand led to a 4 per cent. contraction in import volume.

Three countries in the group recorded sizable improvements in their current-account balance in 1986. In *Spain* the surplus went up by $1.6 billion, mainly because of a significant increase in net tourism receipts. The trade deficit rose considerably, reflecting the influences of a huge terms-of-trade gain of 18 per cent. and an even larger deterioration in the real trade balance. In *Portugal* higher tourism income and a terms-of-trade induced decline in the trade deficit resulted in a $0.9 billion increase in the current-account surplus. In *Greece*, where economic activity weakened last year in response to the October 1985 stabilisation measures, the trade deficit fell by $0.7 billion, entirely as a result of favourable trade volume movements. In addition, mainly owing to higher net tourism receipts, the invisibles surplus increased and the current-account deficit was reduced to $1.8 billion in 1986.

The increase in the aggregate current-account deficit of the industrial countries outside the Group of Ten was accompanied by a rise in net inflows of capital, from approximately $17 billion in 1985 to $24 billion in 1986. Nearly all of last year's net inflows were apparently obtained from non-bank sources abroad: for the group as a whole, borrowing from the banks reporting international banking data to the BIS (the BIS reporting banks), net of changes in deposits (both adjusted for valuation changes), dwindled to only $1.2 billion after having accounted for $4.5 billion of total net inflows in 1985. Official non-gold reserves, valued at end-of-year exchange rates, increased by $9 billion in 1986, or $2 billion more than in 1985.

In *eastern Europe* the combined current-account surplus is estimated to have fallen to less than $1 billion, compared with $4 and 13 billion in 1985 and 1984 respectively. The trade surplus was halved to $4 billion, mostly on account of reduced net exports to western industrial countries. The principal reason for the weaker trade performance was a massive terms-of-trade loss, of perhaps around 15 per cent. With energy products accounting for roughly half of total exports, export prices in dollars declined sharply, whereas average import prices in dollars increased, since a large part of imports originated from countries with appreciating currencies. Net exports from the USSR to countries outside Comecon fell by $0.9 billion in 1986, and in Hungary the current-account deficit in convertible currency rose sharply, from $0.5 billion in 1985 to $1.4 billion in 1986. The deterioration in the group's current payments position was accompanied in 1986 by an increase of $4.4 billion in the BIS reporting banks' net claims on eastern Europe, virtually all of it in the form of gross new lending. Claims on the USSR rose by $4.1 billion and liabilities to the USSR by $0.8 billion.

External developments in the *developing countries* were influenced last year by several partly interacting factors. Firstly, and most importantly, sharply diverging movements in trade prices for oil, non-oil primary commodities and manufactured goods produced substantial changes in terms of trade, the impact of which, however, varied greatly among different groups of developing countries. Secondly, higher import demand from industrial countries led to a marked increase in real exports; however, as the increase in demand was concentrated predominantly on oil and manufactured goods, the favourable impact of higher export volume growth was also distributed rather unevenly among the developing countries. Thirdly, international interest rates continued to come down in 1986, relieving the pressure on the external accounts particularly in those countries which had contracted a large share of their foreign debt at variable interest rates. Fourthly, domestic demand and output growth accelerated in a number of developing countries; in some instances this reflected the exploitation of the greater room for manoeuvre afforded by strong export growth and lower import prices and allowed countries to combine rapid economic growth with improving external positions; in others, however, domestic demand was stimulated in the face of less favourable external conditions at the expense of a deterioration in the current account. Finally, the external financing situation remained very tight for most developing countries, and many of them could rely only on borrowing from official creditors and/or had to have recourse to official reserves.

The following table indicates that the doubling of the developing countries' aggregate current-account deficit from $23 billion in 1985 to $49 billion in 1986 —

Developing countries: Estimated components of changes in current-account balances.

Areas	Changes in current-account balances		Reflecting changes in							
			oil trade balance		non-oil trade balance		invisibles transactions (net)		*of which: interest on external debt*	
	1985	1986	1985	1986	1985	1986	1985	1986	*1985*	*1986*
	in billions of US dollars									
All developing countries ..	6	−26	−14	−48	9	9	11	13	*4*	*6*
Oil-exporting countries ..	8	−39	−19	−56	18	6	9	11	*5*	*3*
Middle Eastern oil exporters	11	−22	−13	−35	16	8	8	5	*1*	*1*
Other oil exporters	− 3	−17	− 6	−21	2	− 2	1	6	*4*	*2*
of which:										
Mexico	*− 3*	*− 3*	*− 2*	*− 9*	*− 3*	*5*	*1*	*1*	*2*	*2*
Non-oil-exporting countries	− 2	13	5	8	− 9	3	2	2	*− 0*	*4*
South-East Asian countries	4	14	1	5	4	5	− 1	4	*− 0*	*1*
Other non-oil-exporting countries	− 6	− 1	4	3	−13	− 2	3	− 2	*− 0*	*3*
of which:										
Brazil	*0*	*− 3*	*2*	*3*	*− 2*	*− 6*	*0*	*0*	*0*	*1*
Argentina	*2*	*− 1*	*0*	*0*	*1*	*− 2*	*1*	*1*	*0*	*1*

Note: A minus sign indicates a deterioration in trade and current-account balances and an increase in interest on external debt.

Sources: IMF World Economic Outlook, April 1987, national sources and own estimates.

the first increase since 1982 — was entirely attributable to a $48 billion decline in the oil trade surplus. Partly offsetting this, the non-oil trade balance improved by $9 billion and the invisibles balance by $13 billion, roughly one-half of which reflected lower interest payments on external debt.

The deterioration in the developing countries' external position was more than accounted for by the turn-round in the current-account balance of the oil-exporting countries, from a surplus of $3 billion in 1985 to a deficit of $36 billion. The purchasing power of these countries' exports (i.e. the value of their exports deflated by import unit values) fell by 40 per cent. There was a terms-of-trade loss of over 45 per cent., only a fraction of which was offset by a 9½ per cent. growth in export volume. In the Middle Eastern oil-exporting countries, where oil accounts for over 90 per cent. of total export receipts, the terms-of-trade deterioration, at 50 per cent., was particularly severe. At the same time, however, these countries were apparently able to capture most of the increase in world oil demand, which allowed them to boost the volume of exports by over 18 per cent. Nonetheless, with export purchasing power being almost halved, their total real imports were pared (for the fourth consecutive year) by close on 23 per cent. to nearly 50 per cent. below their 1982 level. In addition, the Middle Eastern oil exporters continued to curtail net invisibles payments, by $5 billion in 1986. At the same time, declining international interest rates and a reduction in the stock of net external assets lowered their net international investment income by $3 billion. While the more diversified export structure of other oil-exporting countries — whose non-oil merchandise exports account for roughly 30 per cent. of total exports — mitigated somewhat the effect of lower oil prices, their terms-of-trade loss was still almost 40 per cent. Moreover, in contrast to their competitors in the Middle East, these countries were not able to increase real exports significantly in 1986: their volume of oil sales expanded modestly, and their non-oil exports, of which a significant fraction represents

primary products, apparently declined. Despite a cutback of over 20 per cent. in import volume, therefore, their non-oil trade balance did not improve in 1986. On the other hand, net invisibles payments, partly on account of a $2 billion reduction in interest payments on foreign debt, fell by a total of $6 billion.

The collapse of oil prices, coupled with a 10 per cent. decline in the volume of oil exports, exacerbated Mexico's external difficulties in particular. The authorities once again resorted to import volume cuts, of over 14 per cent., and this, together with a 3½ per cent. growth in non-oil export volume, was the principal factor behind the $4.6 billion improvement in the non-oil trade balance. Moreover, owing mainly to lower interest payments, the balance on invisibles transactions improved by $1.4 billion.

In many non-oil-exporting developing countries the fall in oil prices counterbalanced the rise in import prices of manufactured products and thus helped to limit the deterioration in their terms of trade to about 1 per cent. For the group as a whole roughly two-thirds of the decline in their aggregate current-account deficit, from $26 billion in 1985 to $13 billion in 1986, was accounted for by a $8 billion reduction in the oil bill; in addition, favourable trade volume movements improved the non-oil trade balance by $3 billion, and there was also a decline in the deficit on invisibles transactions, total interest payments falling by $4 billion.

The decline in the deficit of the non-oil-exporting developing countries was entirely accounted for by a $14 billion rise in the combined surplus of four South-East Asian countries, Hong Kong, Korea, Taiwan and Singapore. Their net oil import payments decreased by $5 billion, and their non-oil trade surplus went up by $5 billion. Not only have these countries developed a strong competitive manufacturing base over the years, in 1986 they also considerably increased their competitive advantage vis-à-vis other producers outside the United States, most notably Japan, as their currencies remained linked to the dollar. They were thus able to expand appreciably their market shares in the industrial countries. Taiwan alone boosted its current-account surplus in 1986 by $6.9 to 16.1 billion, or 22 per cent. of GNP.

While the South-East Asian countries were easily able to accommodate an increase in domestic demand without any risk to their balance-of-payments positions, an excessively strong expansion of domestic demand in Brazil and Argentina quickly spilled over into their trade account. In Brazil, where there was a sharp improvement of about 20 per cent. in the terms of trade, partly reflecting a $2.8 billion decline in the oil bill, expansionary fiscal and monetary policies, together with an increase in real wages, boosted the non-oil import volume by about 29 per cent. and diverted potential exports to the domestic market, resulting in a $6.4 billion decline in the non-oil trade surplus. Similarly, Argentina, which is self-sufficient in oil, recorded a $2.4 billion decline in its trade surplus, as domestic demand grew by around 8 per cent.

The financing of the combined current-account deficit of all developing countries in 1986 exhibited two striking features (see the table on the following page). Firstly, the increase in the deficit was not accompanied by larger capital inflows but was more than fully matched by a sharp decline in the level of outflows,

reflecting both a slowdown in the accumulation of official reserves and a noteworthy turn-round on other asset transactions, from a sizable non-reserve outflow in 1985 to a small drawdown of assets in 1986. Secondly, while the residual financing requirement decreased modestly in 1986, the composition of financing flows changed substantially. The borrowing of long-term funds from official creditors increased significantly, by $11 to about 30 billion, thereby raising its share in the total inflows of funds from 36 per cent. in 1985 to 59 per cent. in 1986; on the other hand, new financing obtained from private creditors declined by $11 to a meagre 4 billion, virtually all of which represented non-bank credits, mainly in the form of short-term trade credits. New lending to these countries by the BIS reporting banks came virtually to a standstill in 1986, with the provision of a small amount of credits, totalling $3 billion, under officially sponsored financing packages being counterbalanced by reductions in bank claims arising from asset sales, debt equity swaps, write-downs and small repayments.

Developing countries: Estimated financing of the current-account deficit, 1984–86.

Items	All developing countries			Oil-exporting countries			Non-oil-exporting countries		
	1984	1985	1986	1984	1985	1986	1984	1985	1986
	in billions of US dollars								
Current-account balance	−29	−23	−49	− 5	3	−36	−24	−26	−13
Changes in foreign assets (− = increase)	−33	−30	− 2	− 4	−15	20	−29	−15	−22
Official reserves	−13	−16	− 4	0	− 7	19	−13	− 9	−23
Other assets	−20	−14	2	− 4	− 8	1	−16	− 6	1
Residual financing requirement	62	53	51	9	12	16	53	41	35
Borrowing from official creditors (long-term)	32	19	30	6	7	11	26	12	19
Borrowing from private creditors	15	15	4	0	− 1	− 1	15	16	5
BIS reporting banks	8	11	− 0	− 1	1	− 1	9	10	1
Other	7	4	4	1	− 2	0	6	6	4
Other inflows (net)	15	19	17	3	6	6	12	13	11
of which:									
IMF credit	*4*	*1*	*− 1*	*1*	*− 0*	*1*	*3*	*1*	*− 2*
Direct investment	*13*	*13*	*12*	*4*	*4*	*4*	*9*	*9*	*8*

Sources: IMF World Economic Outlook, April 1987, and BIS International Banking and Financial Market Developments, April 1987.

The financing picture for the developing countries as a group, however, veiled considerable differences in the pattern of financing in the oil-exporting and the non-oil-exporting developing countries. Recourse to official reserves was confined to the oil-exporting countries, which, after having replenished their official foreign exchange holdings by $7 billion in 1985, financed more than one-half of their aggregate current-account deficits in 1986 from that source. The use of reserves was evenly split between the oil exporters in the Middle East, which on the basis of large net foreign investment positions built up in the past were still in a relatively comfortable external financial position, and other oil-exporting countries, several of which have heavy external debt burdens. Moreover, whereas the Middle Eastern oil exporters were able to cover their residual financing requirement in 1986 by borrowing about $3 billion from private creditors and $2 billion from official

sources, the other oil-exporting countries had to rely entirely on funds from official creditors and, in fact, made net repayments of $4 billion to private creditors.

In the non-oil-exporting countries, by contrast, the improvement in the current-account position in 1986 went hand in hand with a $23 billion increase in reserve holdings and a small repatriation of foreign assets other than reserve holdings. More than the whole of the reserve increase accrued to Taiwan alone, whose official foreign exchange holdings doubled in 1986, to $46.3 billion. The persistence of a rather precarious external financial situation in many non-oil-exporting developing countries was clearly revealed in the coverage of the residual financing requirement. The main suppliers of funds were official creditors, which provided $19 billion of long-term financing, whereas private creditors reduced their new lending to $5 billion, less than one-third of the 1985 figure.

The external debt of all developing countries is estimated to have risen, in current dollar terms, by $77 billion to a total of $936 billion at the end of 1986, of which 68 per cent. was owed by the non-oil-exporting countries and 25 per cent. by the oil-exporting countries outside the Middle East. About one-half of the increase in the stock of debt reflected new borrowing and the remainder the rise in the dollar value of debt denominated in other currencies. The increase was confined almost exclusively to long-term debt, with the result that the share of long-term debt in total debt approached 85 per cent. at the end of last year, compared with about 75 per cent. in 1982. This lengthening of the average maturity of external debt was, as in past years, partly the result of debt restructuring arrangements but also, and to an increasing extent, the consequence of new finance being available only in the form of long-term lending by official creditors. While a more favourable debt maturity profile tended to ease refinancing pressures, the combination of a rather marked rise in the current dollar value of the stock of debt and sharply declining nominal export earnings implied that debt ratios worsened substantially in 1986. For all developing countries the ratios of total debt to GNP and exports of goods and services rose from 36 and 147 per cent., respectively, in 1985 to 39 and 172 per cent. in 1986; the deterioration in debt indicators was particularly pronounced in oil-exporting countries outside the Middle East, where the ratios soared from 45 and 198 per cent. in 1985 to 58 and 289 per cent. last year.

The world current-account discrepancy.

The world current-account balance, i.e. the sum of all countries' current-account balances, which in theory should be zero, has shown large negative discrepancies since 1980, totalling $520 billion for the seven-year period 1980–86. The discrepancy reached a record figure in 1982 but has declined considerably in the past two years, mainly because the fall in interest rates after 1984 tended to reduce the discrepancy in investment income accounts.

As the existence of such large discrepancies hampers the analysis of balance-of-payments developments and could give rise to inappropriate policy reactions, the Executive Board of the IMF decided in 1984 to set up a Working Party to investigate the principal sources of the discrepancy and to recommend procedures for improving statistical practices. The Working Party, which submitted its final report to the Executive Board in early 1987, came to the following conclusions.

The discrepancy originates primarily in the services account. The world trade balance has shown sizable discrepancies as well, mainly because exports are generally recorded earlier than the corresponding imports. The discrepancy in the trade balance has fluctuated considerably, but it has not contributed to the widening in the overall current-account discrepancy over time. Within the services account the discrepancy can be traced primarily to three types of transactions. Firstly, the most pronounced increase occurred in the discrepancy on investment income. With investment income credits and debits usually being determined on the basis of stocks of external claims and liabilities, the discrepancy in this account mainly reflects the fact that countries are not able to identify fully their residents' holdings of foreign asssets, with the consequence that for the world as a whole the stock of reported foreign assets falls far short of the stock of reported foreign liabilities. The effect on investment income of the under-reporting of foreign claims was greatly amplified by the rise in interest rates between 1980 and 1984. Secondly, the shipping accounts show a sizable discrepancy, which, however, has increased much less than that on investment income. While payments to foreign-operated carriers for freight on imports are in general recorded in full, only a relatively small part of the corresponding earnings is captured in the accounts of countries with large maritime interests. Thirdly, there is a large but stable discrepancy in official transfers, as debits reported by donor countries considerably exceed the credits reported by the recipient countries.

While it is possible to identify the sources of the discrepancy in the main types of services transactions, it is, at present, extremely difficult to allocate all these discrepancies to particular countries and groups of countries. While the Working Party was able to redistribute the investment income discrepancy among individual countries, it could provide only a rough estimate for the allocation of the other services discrepancies to main groups of countries. This geographical allocation indicates that the world current-account discrepancy is not concentrated on a few countries but rather widely spread throughout the world, with about three-fifths originating in the industrial countries and the remainder in the developing countries. However, for these estimates to be confirmed in reported balance-of-payments data, national compilation methods and estimation procedures would have to be revised and improved in line with a series of recommendations made by the Working Party.

IV. DEVELOPMENTS IN DOMESTIC FINANCIAL MARKETS.

Highlights.

The past year witnessed several apparently paradoxical developments in financial markets. Share prices surged on most of the major bourses, although real output growth faltered. Despite the further persistent decline in the exchange value of the US dollar, foreign funds continued to flow into the United States. Nominal interest rates generally declined, in some cases to their lowest levels in a decade, while real interest rates remained sizable. But in spite of relatively high real interest rates, credit demands remained near their record 1985 levels, thus continuing the worrisome growth of debt in the domestic non-financial sectors of several countries.

Massive capital flows across countries and financial liberalisation have fostered a growing international integration of domestic capital markets. Concurrent movements in interest rates and, to a lesser extent, equity prices across countries have increased significantly in recent years. International integration and liberalisation of financial markets may entail a reduction in the capacity of individual countries to act independently in the field of monetary policy. It may also cause a shift in the sectoral incidence of monetary policies and a more rapid spread of real and financial disturbances. The combination of currency depreciation and a sharp rise in long-term interest rates in the United States in April 1987 clearly demonstrates the sensitivity of financial markets to international factors.

The consequences and causes of the recent growth of sectoral debt differ between the private and public sectors. For the private sector the principal concern on the part of the authorities is that rising debt/income ratios may lead to increased rates of default. Concern with public sector debt arises from fears that the growth will lead to higher interest and/or exchange rates, thus "crowding out" private expenditure, from the increased burden of future taxes to repay interest and principal, and from the need for some countries to import foreign capital to make up for deficient private saving. The main factors underlying the growth of public debt are macro-economic policies and conditions, while the growth of private debt may also be related to the tax system and to a freer availability of credit arising from the process of financial liberalisation.

The rapid liberalisation of financial markets continued in 1986. While the "Big Bang" in London was probably the most important development, the French and Canadian authorities also announced important capital market reforms. Loan securitisation and portfolio insurance techniques underwent rapid growth in the United States. Certain regulations on banks and other depository institutions in France, Japan and the United Kingdom were liberalised.

An influence on the growth of private debt is only one of the worrisome aspects of the rapid pace of financial liberalisation and innovation. Many commentators have suggested that the benefits of recent financial change are at least partly offset by actual or potential costs. While the benefits of liberalisation

generally spring from the better operation of the market mechanism, the costs underline the fact that the outcome of the operation of free competition need not always be "optimal". The actual and potential costs of liberalisation are among the arguments used by those who point to a need for a review of the regulation of the financial markets, and who suggest that in some areas regulation may need to be expanded or even tightened. Considerable progress has been made in the field of banking supervision, both domestically and internationally. However, some have argued that a similar effort may be required in the regulation of securities markets, while traditional legal divisions between financial institutions may also be in need of amendment.

Interest rates.

Interest rates in the major industrial economies declined significantly in the course of 1986. Yield curves tended to flatten over the first four months of the year. Subsequently, however, they steepened, primarily as a result of continued easing in short-term rates, with little additional decline in long rates. Interest rates fell further in the United States during 1986 than in most other industrial countries, so that the nominal interest rate differentials favouring dollar securities narrowed sharply or were reversed. This pattern changed in early 1987, as long-term interest rates surged in the United States.

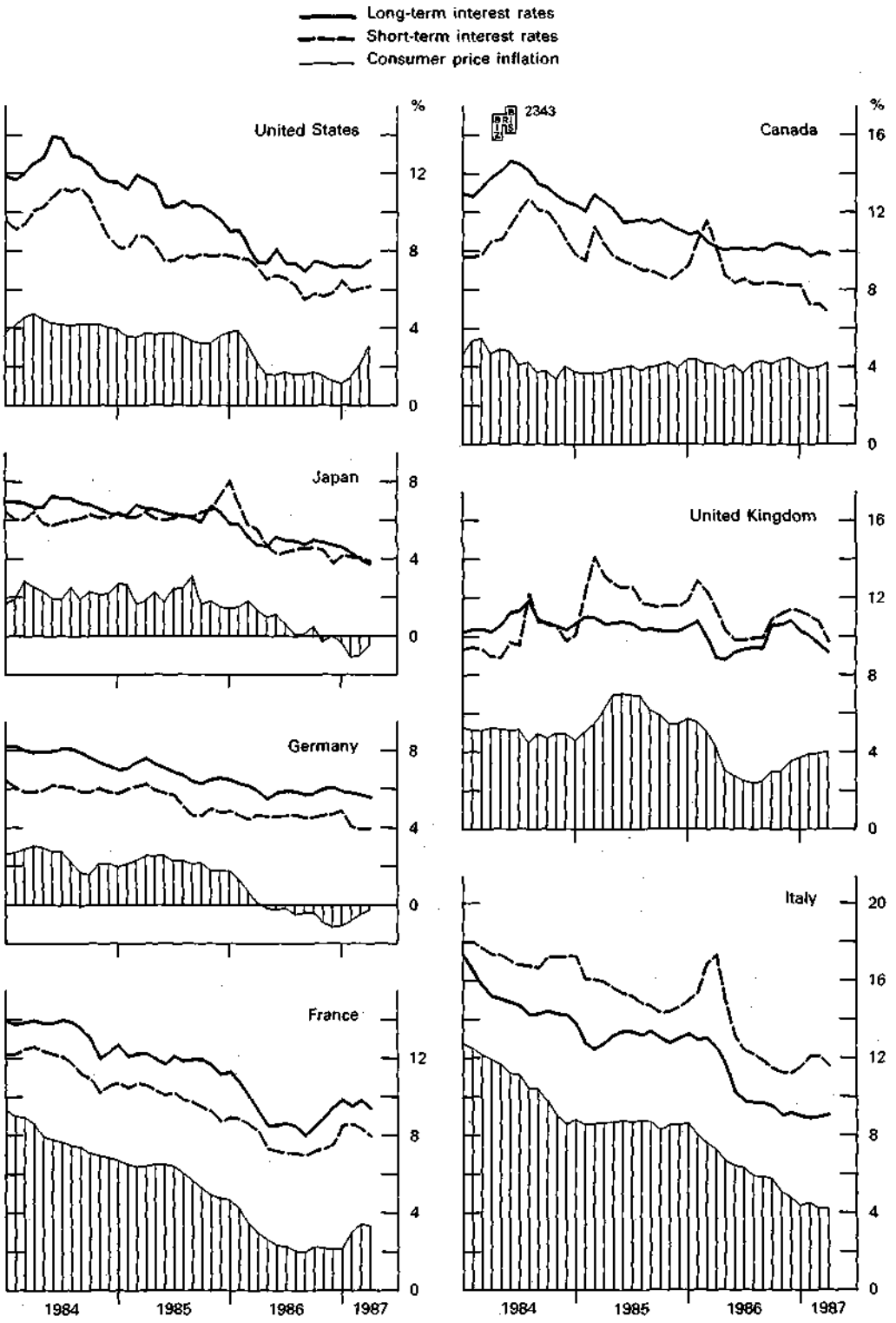
Several factors contributed to the behaviour of interest rates. The most dramatic and widely felt was the collapse of oil prices during the first quarter of 1986. This apparently led investors to mark down their long-run inflation expectations, as long bond rates fell and positively sloped yield curves flattened in the United States, France and Germany. Borrowing activity on most markets remained buoyant during 1986. The high *level* of borrowing may explain the failure of long-term rates, especially in the United States, to follow declines in short-term rates later in the year. Monetary policy apparently adopted a more accommodative stance in a number of countries in 1986, especially in the latter portion of the year in response to concern that output growth might be below expectations. Exchange rates were a fourth important influence on interest rates, particularly late last year and into 1987. Interest rates in the United States seemed particularly sensitive to concerns regarding the exchange rate, as bond prices plunged in April 1987 amid investor uncertainty regarding the course of the dollar and future inflation.

Interest rate movements were closely related across countries last year. The table on page 66 documents a substantial increase in the correlation of changes in interest rates on long-term government bonds across countries between the late 1970s and the 1980s. Particularly large increases are apparent for Japan and France, a result that may be linked to the liberalisation of financial markets in those countries.

To some extent, this greater coherence reflects the widespread success in reducing inflation during the 1980s. In addition, however, a closer relationship among interest rate changes in domestic markets can be attributed to the large volume of cross-border bond transactions. The increased coherence of changes in long-term interest rates may indicate a declining capability for independent monetary and financial policies in many countries, since it implies less central bank

Nominal interest rates and inflation, 1984–87.*

Monthly figures.



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

Correlations of changes in long-term government bond rates.

Countries	United States	Japan	Germany	France	United Kingdom	Italy	Canada	Belgium	Netherlands	Sweden	Switzerland
	February 1975 to December 1979										
United States	1	0.24	0.27	−0.01	0.19	0.09	0.59	0.32	0.23	−0.02	0.18
Japan		1	0.52	0.06	0.08	0.16	0.12	0.33	0.22	−0.02	0.31
Germany			1	0.01	0.20	0.07	0.10	0.34	0.40	−0.09	0.33
France				1	0.18	0.02	−0.08	0.03	0.08	0.06	−0.05
United Kingdom					1	0.24	0.14	0.21	−0.15	0.10	0.30
Italy						1	0.12	0.21	−0.13	0.36	−0.15
Canada							1	0.19	0.16	0.11	0.10
Belgium								1	0.05	−0.08	0.17
Netherlands									1	−0.17	0.11
Sweden										1	−0.08
Switzerland											1
	January 1980 to December 1986										
United States	1	0.50	0.56	0.37	0.42	0.03	0.72	0.39	0.57	0.18	0.56
Japan		1	0.45	0.31	0.27	−0.08	0.34	0.11	0.46	0.28	0.36
Germany			1	0.46	0.18	0.15	0.36	0.38	0.71	0.29	0.55
France				1	0.20	0.28	0.21	0.46	0.47	0.35	0.26
United Kingdom					1	0.09	0.41	0.17	0.13	0.01	0.34
Italy						1	0.10	0.20	0.06	0.05	0.02
Canada							1	0.30	0.36	0.12	0.43
Belgium								1	0.34	0.27	0.28
Netherlands									1	0.39	0.60
Sweden										1	0.16
Switzerland											1

leverage over medium to long-term interest rates as well as greater sensitivity of domestic rates to foreign interest rate movements. For smaller countries, the higher correlations may reflect explicit policy co-ordination through formal exchange rate stabilisation with a major trading partner. Among larger countries, however, the closer association of long-term rates stems more plausibly from greater integration of bond markets.

Despite the reductions in nominal interest rates experienced during 1986, the difference between rates of interest and inflation persisted at high levels, particularly in Europe and Japan. Long-term government bond rates fell by much less than the decline in twelve-month rates of consumer price inflation in all the major industrial economies save Canada. Given that expected real returns on long-term securities are strongly influenced by unobservable expectations of future inflation, and that current rates of consumer price inflation are widely believed to understate those expectations, this development may not be surprising. However, real short-term interest rates can be assessed more easily because near-term inflation is more predictable. Only in the United States and France, among the countries shown on the next table, were realised real yields on short-term instruments during 1986 markedly lower than in the previous year. Indeed, in Japan and Germany realised real returns on short-term instruments rose in 1986, both historically and in comparison with the United States.

Realised real short-term interest rates.*

Years	United States	Japan	Germany	France	United Kingdom	Italy	Canada
1981	6.62	4.48	6.28	1.96	3.18	3.87	7.26
1982	7.03	4.76	4.90	5.64	7.39	3.85	6.72
1983	4.20	4.22	2.92	3.91	5.06	6.14	4.38
1984	5.99	4.34	3.68	5.41	4.54	6.96	7.54
1985	4.42	5.04	4.72	6.45	7.36	6.45	5.39
1986	3.75	5.83	5.12	4.50	7.04	7.69	5.18

* Average of monthly three-month money market rate less next three months' CPI percentage change at an annual rate.

The persistence of what, by historical standards, are large gaps between nominal interest rates and realised inflation rates adds a somewhat sobering note to the generally ebullient mood enjoyed by financial markets during 1986. Sizable real yields on short-term instruments can have a dampening effect on output, by encouraging the acquisition of liquid financial assets at the expense of current consumption by households and stockbuilding by businesses. Indeed, high real returns on financial assets may offer an additional explanation for the failure, noted in Chapter II, of private sectors of the Group of Ten countries to translate fully their real income gains of last year into increases in spending.

Nominal interest rate differentials favouring dollar-denominated bonds, which had been narrowing for some time, widened sharply in early 1987. Relative to government bonds in most other countries, market yields on US Government bonds declined by 150 to 300 basis points over the two years to January 1987. This decline in relative returns did not stem the flow of capital to the United States, though private investors apparently acquired more equities relative to fixed-income securities. The narrowing spreads may have reflected a consensus in the market that the dollar's depreciation was near its end. If so, further sharp dollar depreciation in early 1987 contradicted these expectations, and interest rate spreads again widened to about their 1985 levels.

Interest rate spreads:
US Treasury bond yield less alternative government bond yield.*

Period	Japan	Germany	France	United Kingdom	Italy	Canada
January 1985	4.89	4.28	– 0.95	0.15	– 1.47	– 0.21
July 1985	4.32	3.60	– 1.30	0.23	– 2.93	– 0.34
January 1986	3.27	2.89	– 1.71	– 1.71	– 3.78	– 1.41
July 1986	2.39	1.40	– 1.16	– 2.08	– 2.44	– 2.02
January 1987	2.93	1.28	– 2.36	– 2.86	– 1.89	– 1.76
April 1987	4.79	2.52	– 1.30	– 0.71	– 1.26	– 1.60

* For Germany and Italy, monthly averages; for other countries, end-of-month figures.

Equity markets.

The fall in nominal interest rates during 1986 was accompanied by buoyant equity prices in most large industrial countries. Virtually all major stock market

indices reached new highs during the year, in many cases for the third or fourth consecutive year. As the graphs show, share values have more than doubled since their summer 1982 troughs. Strong price gains in many markets continued into early 1987, with new records set on many exchanges.

One notable feature of the recent rally in equity markets has been the tendency for market indices to move together. To some extent these price movements may reflect common macro-economic developments, for example the concurrent decline in interest rates. In addition, however, equity markets in different countries are becoming more integrated. This integration has not reached the same level as in bond markets — for equities the magnitude of cross-border issuance is much lower than for bonds — though the volume of international equity issuance surged in 1986.

Some observers have expressed concern that speculative excesses may have fuelled the most recent part of the equity boom. Price/earnings ratios on many major markets had reached historically high levels by the spring of 1987, and price volatility has risen. In addition, price behaviour in equity markets does not seem to have corresponded to developments in the "real" economy; if anything, it appears that stock prices accelerated as prospects for output growth were trimmed. In Japan and the United States, in particular, stock exchanges set record highs throughout the first quarter of 1987, despite evidence of faltering growth.

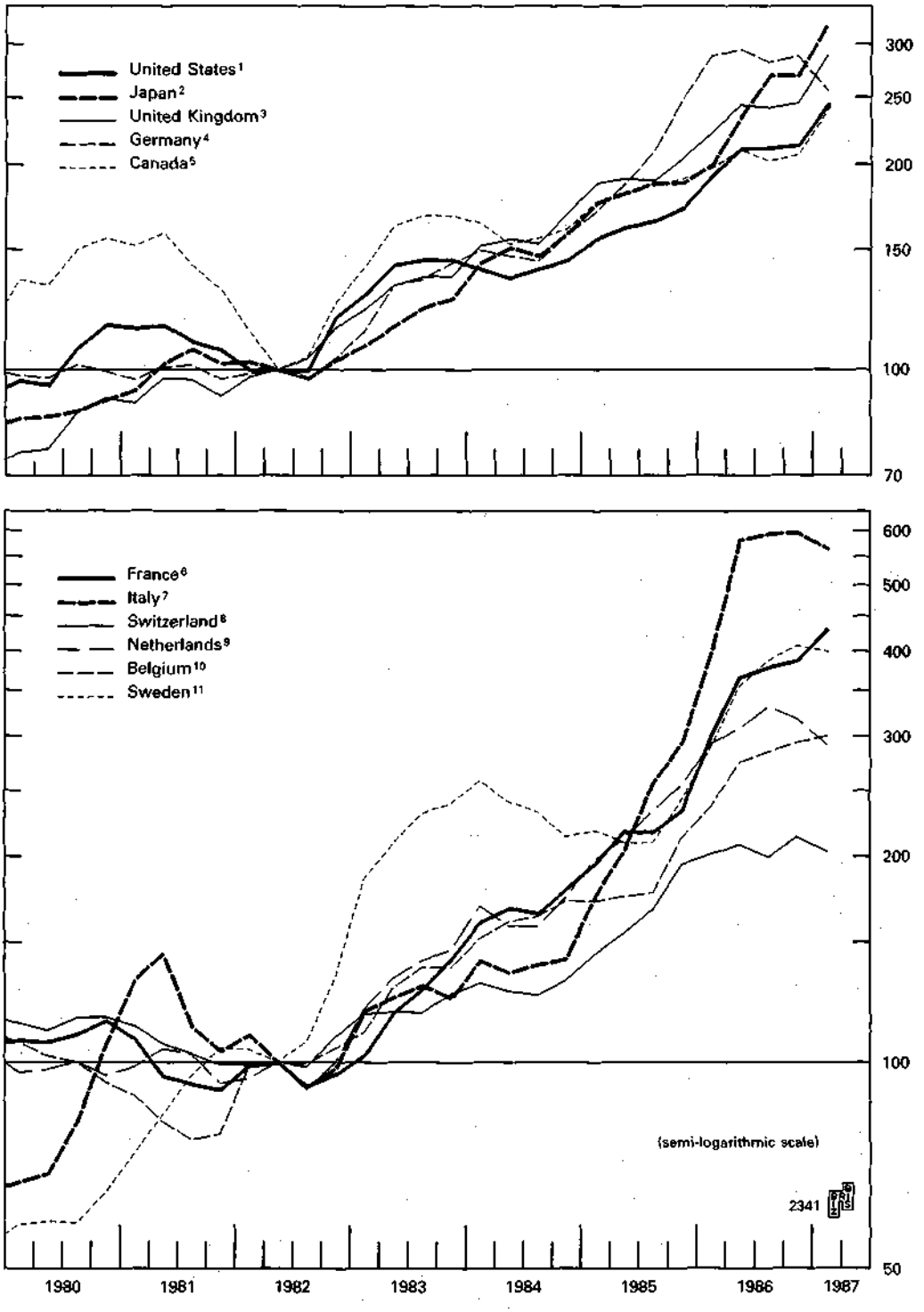
Grounds for attributing stock gains to speculation can be found in the rapid expansion in liquidity evident in world financial markets, as low nominal interest rates enhanced the relative attractiveness of holding equities. In recent months demand for equities, particularly on the part of Japanese investors, was boosted by concerns regarding exchange rates and the cyclical pattern of interest rates in the United States. On the other hand, corporate profits in most industrial countries have increased by a factor of one and a half to two since 1982, and while economic growth may not be robust, neither is recession evident. In addition, the continued successes against inflation may be supportive for equity prices. The experience of the 1970s seems to demonstrate a detrimental effect of inflation on corporate profits and equity prices.

In some countries the strong performance of equity markets may also be traced to government measures to encourage equity investment. In France the "Monory Law" of 1978 established tax advantages for equity purchases; comparable incentives followed in Sweden, Belgium and the United Kingdom. Also, a major goal of the recent privatisation programmes in France and the United Kingdom has been to encourage share ownership by households and broaden the base of equity investment. In Italy stock investment trusts were authorised by legislation in 1983.

Recent stock market behaviour may have implications for economic developments and policy. Higher real equity prices imply a higher valuation of existing corporate assets. This suggests that the price of new capital equipment, relative to existing capital, has fallen considerably. Such a shift in relative prices should be favourable to investment. Conversely, insofar as equity values reflect speculative activity rather than firms' earning potential, risks are involved. Equity values have a major influence on private sector wealth in some countries and can serve to offset both corporate and household debt burdens. A later section of this

Share prices on the stock markets of the Group of Ten countries, 1980–87.

Second quarter 1982 = 100.



[1] Standard and Poor's corporate share index. [2] Tokyo general index. [3] Financial Times ordinary share index. [4] Frankfurter Allgemeine Zeitung general index. [5] Toronto composite index. [6] INSEE general index of French shares on Paris stock exchange. [7] Italian total index. [8] Swiss total index. [9] Amsterdam domestic share index. [10] Brussels and Antwerp general index. [11] Stockholm general index.

chapter discusses the growth of these burdens and the consequent concerns. A major reversal in equity prices would serve to heighten these concerns through higher corporate debt/equity ratios and lower net financial wealth of households.

Trends in financing.

Sector balances. Financial flows within and among the major industrial countries were influenced last year by several interrelated factors. First, there was the need to accommodate the persistently strong rate of borrowing by the government sector in the United States and by the household sector in a number of countries. Secondly, shifts in equity prices, exchange rates and interest rates influenced the choice of markets and instruments by both investors and borrowers. Finally, there were innovations and regulatory changes that stimulated and reacted to market developments, a topic discussed in the final section of this chapter. The effects of these factors may be traced through the net financial balances of the major sectors in the larger economies, and in gross fund-raising activity on credit markets.

The pattern of international capital flows that developed during the mid-1980s — the net absorption by the United States of savings generated in western Europe and Japan — continued during 1986. This was not unexpected; the existing imbalances between these countries had become too large to be reversed quickly without severe dislocations. While some worsening of existing imbalances was expected due to J-curve effects, what did counter some expectations was that these imbalances actually increased more than anticipated in the face of a sizable depreciation of the dollar — a development which had been expected to have an equilibrating effect.

Several factors appear to have contributed to this outcome. Fiscal policies did not work towards equilibration, with little change in public sector deficits last year in Japan, Germany and the United States. In part, this development may reflect the difficulties, political and economic, involved in effecting rapid shifts in fiscal policy. Secondly, the household sectors in Japan and Germany increased their financial surpluses in 1986, while in the United States the household sector's surplus shrank as a percentage of GNP to the lowest level since 1963. As was noted in Chapter II, these trends may have been based on different propensities to spend the terms-of-trade gains achieved during the year. Finally, in addition to adverse effects of the J-curve on nominal trade balances, there was a financial counterpart to the J-curve at work. It took fewer Deutsche Mark and yen to finance the 3.4 per cent. of GNP capital inflow into the United States in 1986 than it did to fund the 2.9 per cent. of GNP deficit in 1985. In this sense, the demand for credit in the United States in 1986 put less of a burden on savers in Japan and Germany.

Progress, albeit slow, is nevertheless being made in restoring external and internal imbalances. Fiscal policy in the United States, under the direction of the Gramm-Rudman-Hollings Act, is expected to produce a significantly lower budget deficit in 1987 as well as additional reductions in subsequent years. Further reductions of budget deficits in Germany and Japan, in the face of relatively weak projections for output growth, would seem unlikely. Moreover, barring further

Sectoral financial balances.*

Countries and items	1980–84	1985	1986
	as a percentage of GNP		
United States			
Public sector	– 3.7	– 5.0	– 4.8
Non-residents	0.5	2.9	3.4
Non-financial corporations	– 0.9	0.0	0.1
Households	4.2	2.9	2.0
Japan			
Public sector	– 6.7	– 4.1	– 4.2
Non-residents	– 0.9	– 3.6	– 4.2
Non-financial corporations	– 3.1	– 2.4	– 1.3
Households	9.8	9.5	10.3
Germany			
Public sector	– 2.8	– 1.1	– 1.2
Non-residents	0.2	– 2.0	– 3.8
Non-financial corporations	– 2.2	– 2.0	– 0.8
Households	3.6	4.1	5.0
France			
Public sector	– 2.1	– 2.9	– 2.9
Non-residents	1.7	0.8	0.6
Non-financial corporations	– 4.2	– 2.1	– 1.5
Households	3.9	2.9	3.5
United Kingdom			
Public sector	– 3.6	– 2.9	– 2.8
Non-residents	– 1.3	– 0.8	0.3
Non-financial corporations	1.3	1.6	0.8
Households	4.7	3.2	2.4
Italy			
Public sector	–10.5	–13.6	–12.5
Non-residents	1.2	0.9	– 0.7
Non-financial corporations	– 5.0	– 4.9	– 3.3
Households	13.0	14.5	13.8
Canada			
Public sector	– 6.9	– 8.1	– 6.4
Non-residents	– 0.2	0.1	1.8
Non-financial corporations	– 2.7	– 0.8	– 1.8
Households	8.4	7.6	5.3
Belgium			
Public sector	–13.9	–11.6	–11.2
Non-residents	2.9	– 0.2	– 2.1
Corporations	2.1	4.1	5.4
Households	8.9	7.7	7.9
Netherlands			
Public sector	– 5.6	– 5.1	– 6.7
Non-residents	– 1.4	– 3.5	– 2.1
Enterprises and households	– 0.8	1.7	– 1.4

* For Japan, the United Kingdom, Italy and Canada, the public sector includes public enterprises. For Germany, the financial balance of the housing sector is included in the household sector.

Sources: National flow-of-funds data.

large dollar depreciation, the nominal trade deficit of the United States is expected to narrow.

Capital markets. The volume of funds raised by non-financial borrowers as a proportion of GNP declined somewhat in most countries in 1986, though for several countries it remained high in comparison with earlier years. Continued efforts by governments to restrain growth in public sector deficits, and a weakness of

investment apparently were the major factors in checking any acceleration of the demand for funds. Declines in public sector borrowing were most apparent in Canada, the United States and the United Kingdom. In Japan and the United Kingdom privatisation revenues helped limit the governments' need to issue debt. Credit demands by the household sector remained strong last year in many countries as consumer confidence was boosted by declines in oil prices. House prices continued to rise rapidly in the United Kingdom and Japan, stimulating demand for mortgage credit. Regulatory constraints on household borrowing were eased in France and Sweden.

Funds raised by domestic non-financial borrowers.

Countries	Years	Fund-raising sector[1]							Total
		Business sector				Household sector		Public sector	
		Equities[2]	Bonds	Loans[3]	Total	Housing credit	Other		
		as a percentage of GNP/GDP							
United States	1980–84	– 0.2	1.2	3.9	4.9	2.9	1.7	5.0	14.5
	1985	– 2.0	2.4	3.7	4.0	3.8	3.6	8.3	19.7
	1986	– 1.9	2.4	3.8	4.3	4.8	2.2	6.5	17.8
Japan	1980–84	0.7	0.5	7.0	8.2	1.6	2.1	9.2	21.1
	1985	0.5	1.0	7.7	9.2	0.9	1.7	6.3	18.1
	1986	0.4	1.3	8.0	9.7	1.2	1.8	5.8	18.5
Germany	1980–84	0.3	0.1	5.1	5.5	3.4	0.6	3.8	13.4
	1985	0.4	0.3	3.9	4.6	2.1	0.7	2.4	9.7
	1986	0.6	0.4	2.0	3.0	1.5	0.5	2.3	7.3
France	1980–84	1.6	0.7	5.8	8.1	3.9		4.7	16.7
	1985	2.2	0.8	3.8	6.8	4.0		4.5	15.3
	1986	3.0	0.8	3.5	7.3	3.2		3.7	14.2
United Kingdom ..	1980–84	0.5	0.2	2.2	2.9	4.4	1.6	4.3	13.2
	1985	1.0	0.5	2.2	3.7	5.3	2.0	3.3	14.3
	1986	1.4	0.6	1.6	3.6	6.2	1.6	2.4	13.8
Italy	1980–84	1.5	0.3	6.4	8.2	0.8		12.3	21.3
	1985	1.2	0.2	5.6	7.0	1.1		14.9	23.0
	1986	1.3	0.6	4.7	6.6	1.3		12.4	20.3
Canada	1980–84	1.6	0.8	2.8	5.3	2.2	1.6	8.5	17.5
	1985	2.3	0.4	2.0	4.7	2.9	2.2	9.2	19.0
	1986	2.6	0.9	1.4	4.9	4.5	2.4	7.0	18.8

[1] For Japan, the United Kingdom and Canada, borrowing by public enterprises is included in public sector borrowing, and in Germany borrowing by the housing sector is included in household borrowing. [2] For Italy, net issues less purchases of equity by the business sector plus changes in publicly funded endowments. [3] Includes money market paper and foreign borrowing.

Sources: National flow-of-funds data.

Corporations responded to strong demand for equities, and to the high real cost of debt finance, by increasing their relative reliance on equity issuance. Less equity was retired in the United States last year than in 1985, and the equity share of gross funds raised rose for most of the other countries in the table. New equity issues increased especially strongly in France, Germany and the United Kingdom. In addition, last year saw a pick-up in the issuance of equity-linked debt. In the United States convertible bond issuance attained a record pace in 1986, while Japanese firms made extensive use of equity warrants in their foreign bond issuance. Firms reduced their reliance on loan finance in most countries last year, certainly owing to cyclical interest rate and stock price trends, but perhaps also as a result of the expansion of securitisation and the liberalisation of capital markets.

New equity issuance on the stock exchanges in continental Europe seems to represent a fundamental shift in funding practices, as well as a response to interest rate and share price movements. Stock market capitalisation as a proportion of GNP and the volume of new equity issues had tripled by 1986 in Germany, France and Italy compared with the very low figures of the early 1980s. In part, this development has been caused by government efforts, mentioned earlier, to encourage equity funding and participation. In addition, however, this result may reflect a secular tendency for equity to play a somewhat larger role in corporate finance in these countries.

1986 also saw a substantial acceleration in the rate of international participation in domestic equity markets, which, combined with regulatory and market changes during the year, may foreshadow greater integration of equity markets. External investors purchased some $17 billion in equities in the United States last year, more than three times the volume of the previous year, and investors in Japan purchased a net $7 billion in non-Japanese equities in 1986, up from $1 billion in 1985. New issuance of Euro-equity, virtually nil prior to 1985, exceeded $7 billion in 1986. Changes in regulations, such as the increase in foreign asset limits for pension funds and life assurance companies in Japan, Canada and Switzerland, may broaden the possibilities for international equity investment.

Activity on bond markets in 1986 was also marked by the growing significance of cross-border transactions. Aggregate net issuance on domestic bond markets in the Group of Ten countries, evaluated at 1985 exchange rates, increased by about 5 per cent. in 1986. In contrast, net issuance of foreign bonds and Euro-bonds rose, again at constant exchange rates, by about 15 per cent. Cross-border bond transactions have been encouraged by the reduction in exchange controls in some countries and by the advent of broader and deeper markets for currency futures, options and swaps. For example, the proportion of new international bonds swapped at issuance has risen in each of the last four years, to stand at 16 per cent. in 1986 (25 per cent. for non-dollar debt). This trend in issuance, in combination with financial liberalisation which has opened countries' capital markets to outside influences, has probably contributed to the increased coherence of interest rate movements noted above.

International factors have been important in many countries' bond markets. For example, foreign bond issues accounted for almost 50 per cent. of the net securities issuance of Japanese non-financial corporations in 1986. One reason for this trend is regulatory restraints, such as collateral requirements, on bond issuance in Japan. Some of these restraints have recently been eased, in part to stimulate more domestic corporate bond issuance. An opposite and, to a certain extent, balancing case is Switzerland, where some 70 per cent. of bonds were issued by foreign borrowers. Gross bond issues rose by 10 per cent. in Switzerland in 1986, despite a decline in issuance by Swiss borrowers.

A particularly notable aspect of increased international participation in domestic capital markets is the impact of foreign investors' attitudes and preferences on domestic markets. In Germany, for example, foreign investors have shown a substantial appetite for long-term German Government bonds, encouraged by a favourable exchange rate outlook and the removal in 1984 of a non-resident withholding tax on bond interest. As a result, the German Government has

substituted bonds for shorter-term instruments such as "Schuldscheine" (promissory notes). The share of bonds in public debt increased from 26 per cent. in 1983 to 37 per cent. in 1986, while the share of "Schuldscheine" fell from 71 per cent. to 61 per cent. Foreign interest has assisted in a broadening and deepening of the German Government bond market, and allowed the German Government both to limit its debt service costs and to extend the maturity of its debt. In addition, foreign borrowers and lenders allowed Germans to run a maturity mismatch between their borrowing and lending last year. Most government bonds, and roughly three-quarters of all bonds issued in Germany last year, were purchased by foreigners, leading to a DM 37 billion net *import* of long-term capital. German savers almost exclusively acquired short-term assets — no doubt encouraged by high short-term real returns.

In the United States Japanese investors were major participants in the US Treasury bond markets, taking a substantial portion of long-term bonds at auctions, and making Japanese investor sentiment an important factor in the determination of US Government bond prices. The plunge in US Government bond prices following the pronounced dollar weakness during March and April 1987 illustrated the effect non-US investor preferences could have on this market.

Equity gains and household saving. Capital gains enjoyed on stock markets in 1986 led to substantial increases in household sectors' net wealth positions. The table demonstrates the magnitude of this contribution relative to the saving ratio of the household sector in four countries. Capital gains can substitute for saving from current income, either contemporaneously, because capital gains are expected or anticipated, or over time, as capital gains boost household wealth relative to income. Some substitution seems evident when the saving ratios in the table are compared to capital gains rates. Above-average capital gains in the United States and in the United Kingdom in recent years have been associated with declining saving rates.

Personal saving ratios and household sector equity capital gains.[1]

Countries and items	1979	1980	1981	1982	1983	1984	1985	1986[2]	1979–86		Memorandum item: households' portfolio distribution[3] in 1985		
	as a percentage of personal disposable income										equities	bonds	institutional investment
United States													
Saving ratio ...	6.8	7.1	7.5	6.8	5.4	6.3	5.1	3.9	6.1	14.6	18	10	19
Capital gains ..	9.8	15.9	−1.1	6.5	7.4	2.8	13.2	13.1	8.5				
Japan													
Saving ratio ...	16.8	16.4	17.0	15.3	15.0	14.7	14.7	15.8	15.7	18.5	12	8	17
Capital gains ..	0.5	0.8	1.1	0.6	4.4	3.3	1.6	10.6	2.8				
Germany													
Saving ratio ...	13.8	14.1	14.7	13.8	12.5	12.9	12.7	13.2	13.5	14.2	6	15	17
Capital gains ..	−0.5	0.0	−0.3	0.3	1.1	0.4	3.2	1.3	0.7				
United Kingdom													
Saving ratio ...	13.1	15.0	13.5	12.9	11.6	12.1	11.4	11.0	12.6	17.2	11	4	43
Capital gains ..	2.7	6.0	0.8	4.8	6.2	6.1	3.9	6.1	4.6				

[1] Data from national accounts. Capital gains only include gains on equities held directly, not holdings through pension funds or life assurance companies (institutional investment). [2] Saving ratio for Japan and capital gains for all countries estimated. [3] As a proportion of gross financial assets.

These data provide a different perspective on the low level of household saving in the United States. The inclusion of gains on equities with saving flows suggests that households in the United States have accumulated assets at a rate closer to that of households in the other countries. Moreover, despite the low saving rates in the United States, stock market gains have caused the ratio of household sector net financial wealth to personal income to return to its level of the late 1960s.

The growth of sectoral debt.

Debt/income ratios of the corporate, household or public sectors have risen in several of the major economies in recent years, as shown in the table below. These developments have, in turn, often aroused concern on the part of the monetary authorities and other observers of the financial system. The reasons for concern differ between private and public debt. For the public sector, concern focuses on the danger that private expenditure will be "crowded out", together with the likelihood that higher taxation will be required to repay principal and interest. For the private sector the main concern is that rising debt/income ratios may lead to increased rates of default.

Domestic non-financial sectors' gross debt/GNP ratios.[1]

Countries	Years	Public sector	Corporate sector	Personal sector
		in percentages		
United States	1975	42	37	50
	1985	52	42	61
	1986	56	46	65
Japan	1975	39	94	33
	1985	90	102	46
	1986[2]	91	102	47
Germany	1975	25	63	42
	1985	41	72	56
	1986	41	71	55
United Kingdom	1975	63	46	33
	1985	60	46	51
	1986[2]	58	48	55
Canada	1975	53	65	52
	1985	83	64	50
	1986	84	64	54

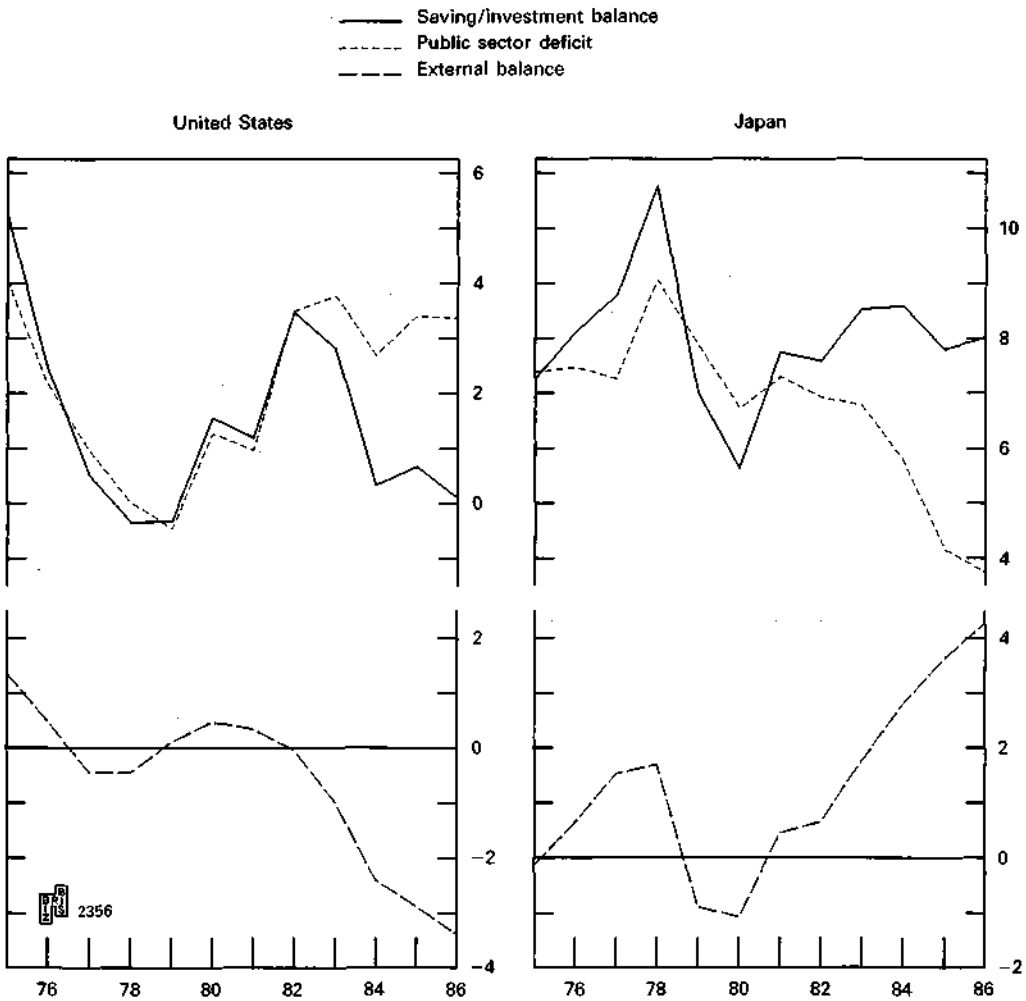
[1] National balance-sheet data. For Canada, public sector consolidated debt figures are estimated. [2] Third quarter.

Public debt: policies and prospects. In recent years structural budget deficits have led to a rapid growth in public debt outstanding as a proportion of GNP (see the graph on page 78) in a number of countries, including not only the United States but also Italy, Ireland, Belgium and Canada. Other countries, such as Japan, face potential problems in the future due to unfunded social security systems combined with an increasing average age of the population. With such changing demographic conditions and in the absence of stiff tax increases or reductions in social benefits, these countries may face rapid growth in government debt over the coming decades, as their social security systems go into deficit.

These developments have focused considerable attention on the likely consequences of rising public debt for the economy. Sharp differences of opinion exist; on the one hand, there are those who argue that finance of public expenditure by issue of debt is equivalent to tax finance in its effects, and, on the other, those who espouse a more widely-held view, namely that debt finance has a stronger expansionary effect than tax finance on aggregate demand, at least when the economy is operating below capacity. The expansionary effects are offset to the extent that any increases in the demand for money are not accommodated by the authorities, thus raising interest rates and reducing investment — the "crowding-out" effect. Crowding-out may also occur via an inflow of funds from abroad, leading to exchange rate appreciation and the crowding-out of exports and import-competing sectors.

Public and private sector deficits and the external balance in the United States and Japan, 1975–86.

As a percentage of GNP.



As shown in the graph, evidence for the United States suggests that budget deficits have led to increased domestic demand and lower aggregate domestic saving. Investment grew rapidly early in the recovery period, but more recently it has declined as a proportion of GNP while borrowing from abroad has increased. These developments were accompanied by high real interest rates and, until early 1985, an appreciating exchange rate. This evidence tends to contradict the alternative view that agents in the private sector are "ultra-rational" and discount the future tax liabilities implied by government bond issuance by stepping up their saving in anticipation of this burden. In fact, the gross private saving rate in the United States has actually fallen since 1984, while the US Federal deficit has continued to rise, thereby entailing a dramatic increase in the country's dependence on foreign saving to finance both private and public sectors.

Concern as regards public debt is not limited to the question of crowding-out; again taking the United States as an example, it also relates to the rapid increase in debt service obligations as a proportion of public expenditure. Given the high level of external borrowing, notably from Japan, many of these obligations have to be paid abroad, albeit in dollars. The financing by non-residents of current public and private consumption and the large current-account deficit have resulted in a loss in the national wealth of the United States vis-à-vis its trading partners. Furthermore, the need to take policy measures to reduce the structural budget deficit may inhibit the exercise of fiscal policy as a tool of counter-cyclical stabilisation.

The repercussions of rising public debt may differ somewhat in the case of a small country. It is less likely for a small country that an increase in the government deficit will put upward pressure on its exchange rate via capital inflows — a more likely result being currency depreciation. The most acute problems often stem from rising debt service obligations, particularly when they are denominated in foreign currency. Indeed, some countries, such as Italy, Belgium and Ireland, risk reaching a stage where, because interest rates exceed the growth rate of nominal demand, debt service obligations grow faster than tax receipts, and thus the government is obliged to issue ever-increasing amounts of debt.

The policy response to public debt problems in recent years has generally been to reduce government expenditure rather than increase taxes. By this means several European countries and Japan have been able to reduce their public sector deficits from the high levels seen in the early 1980s (see the table on page 35). In some countries economic growth itself also reduced the deficits through increased tax revenues and lower cyclically sensitive expenditures, such as unemployment benefit. In the United States some retrenchment of public expenditure is being achieved both via spending cuts following enactment of the Gramm-Rudman-Hollings legislation and — until April 1987 — from lower nominal interest rates. Tax revenues, too, are tending to increase. Regarding the future burden of pension payments, the United Kingdom is aiming to reduce significantly the benefits promised by the state earnings-related pension scheme, while in France and Belgium legislation has been enacted to encourage the growth of private pension schemes.

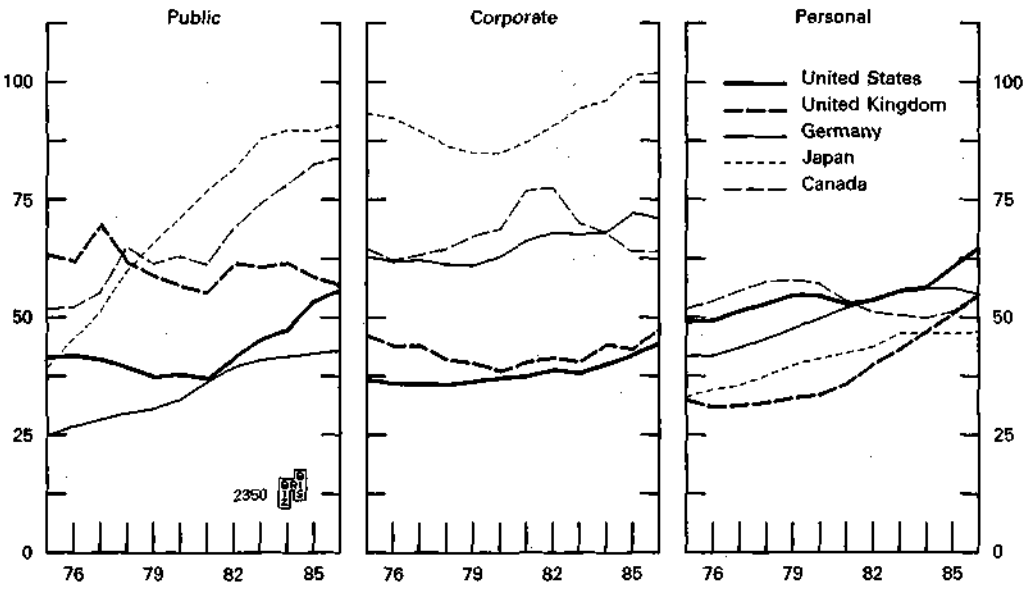
Private debt accumulation: a cause for concern? As shown in the graph on page 78, debt of the corporate and/or personal sectors has grown sharply in relation to income in a number of major countries in recent years. Debt of both sectors has

increased in the United States, as has personal sector debt in the United Kingdom. In many European countries and Japan the corporate sector is heavily indebted in relation to its equity base. Heavy indebtedness is most likely to be a problem if other influences on the balance sheet, such as income, assets or interest rates, shift unfavourably, for example during a recession. Debt/income ratios are an indicator of such potential problems, as can be seen from a comparison of the growth in debt/income ratios with the indices of rates of default shown in the graph on the next page. Of course, rising aggregate debt/income ratios may in some cases overstate the risk of default. Debts on credit cards, insofar as these are used as a means of payment and accounts are settled each month, may not represent a burdensome form of debt. The same could be said of increased debts caused by demographic shifts (which could arise, for example, if there is a rise in the number of young people wishing to buy houses using mortgage credit). The recent rise in asset values may also counter the risks, provided the higher values are maintained. It should be pointed out, however, that the *distribution* of assets often differs from that of debt, and hence one cannot rule out the possibility that there has been a widespread deterioration of balance sheets.

One of the main causes of rising private debt has been the interaction of underlying economic factors, inflation and the tax system in most countries, with financial liberalisation, which has led to a reduction in the rationing of credit by non-price mechanisms. Other financial market developments, such as the expansion in the use of floating rate instruments and the growth of secondary markets, may also have helped to permit a rapid expansion in private debt.

Sectoral gross debt/GNP ratios, 1975–86.

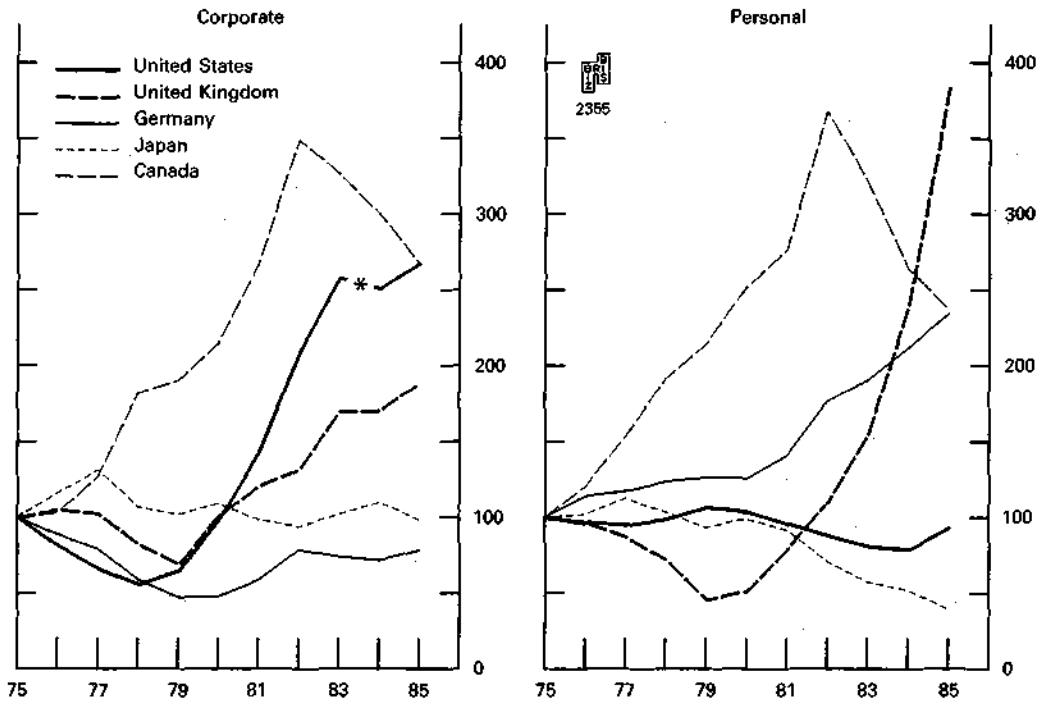
In percentages.



Sources: National balance-sheet data.

Rates of default, 1975–85.

Indices: 1975 = 100.



* Break in series.

Note: National data and definitions. Corporate: rates of business failure; personal: for the United States, rate of non-business bankruptcy; for the United Kingdom, proportion of mortgages foreclosed annually; for Germany, household bankruptcies; for Japan, suspensions of business transactions with banks; for Canada, non-business/consumer bankruptcies.

In most countries *taxation* encourages debt finance by permitting the deduction of interest payments. With the exception of the recent US tax reform, most countries' tax codes have not changed in this respect in recent years; thus the tax system alone cannot explain the acceleration of borrowing. However, the tax system's interaction with inflation in earlier years may have reinforced the incentive to take on debt, because during periods of inflation a tax deduction is granted for that part of interest which effectively constitutes capital repayment. Independently of the tax code, it was probably also the case that *inflation* in the 1970s encouraged borrowing, especially since real after-tax interest rates were low and in some cases negative. Correspondingly, inflation often also reduces the debt/income ratio, thereby encouraging further debt accumulation by the private sector. Although inflation has now fallen, it may be that attitudes to debt formed by borrowers during the inflationary period have persisted.

Rapid growth of debt may also stem from complementary developments in financial markets. Perhaps the most important has been the decline in the *quantity rationing of credit* by the financial sector — or, more generally, an increase in the free market supply of credit. One direct cause of this has been *regulatory changes.* For example, in the United States the abolition of interest rate controls on deposits in the early 1980s permitted greater competition for funds, while in the United

Kingdom the removal of quantitative controls on the growth of banks' balance sheets in 1980 gave banks access to new and previously cartelised credit markets. Bank credit ceilings were abolished in 1986 in France and Sweden.

Certain financial innovations may also have eased credit rationing and permitted the growth of debt. The development of hedging techniques such as *floating rate instruments* has reduced the risk for an intermediary of an interest rate mismatch between short-term liabilities and long-term assets. Floating rate instruments may also support the demand for credit, as they entail less risk to the borrower if interest rates decline as inflation falls. On the other hand, if interest rates increase, the cash flow of borrowers at variable rates is more adversely affected than that of borrowers at fixed rates. *Secondary markets* allow lenders to grant more credit than their own reserves and capital would permit were they both to grant and hold the debt, because debt can be passed on in securitised form to other ultimate holders such as life assurance companies or pension funds. Secondary markets also facilitate risk management in the asset and liability portfolios of financial institutions and may reduce the incentive to monitor securitised loans, if lenders simply seek to reduce their risk by diversification. *Other new techniques* (swaps, junk bonds, third-party guarantees) have given borrowers access to new markets and may have reduced lenders' perceptions of risk. More generally, the further development of markets has provided borrowers with an alternative source of funds, which may enable them to avoid credit rationing by banks.

It is widely acknowledged that, while techniques such as floating rate debt appear to have shifted the risks from lenders to borrowers, they have almost certainly not reduced the risks arising from the business cycle, rising interest rates and other macro-economic developments. Some risks are simply not diversifiable. Borrowers have nonetheless been willing to accumulate debt, given the favourable circumstances prevailing in recent years, such as falling interest rates. The reduction in risk apparently perceived by lenders may be illusory, because borrowers — who in some cases are relatively ill-equipped to deal with risk — may be unable to cope with their debts in adverse circumstances.

Recent history provides several examples of the potential risks of rising debt, even in developed countries. For example, in Canada the growth of private debt in the late 1970s and early 1980s, largely to finance corporate take-overs and real estate acquisition, led to over-extended balance sheets. These resulted, in turn, in a sharper recession in Canada during the early 1980s than elsewhere, entailing a high level of corporate and household insolvencies.

The growth of private debt may present policy-makers with a dilemma regarding the appropriate response. Firstly, they must consider whether rising private debt is a potential micro-economic problem, requiring policies such as stricter control of risk by lending institutions and changes in the tax structure, or a macro-economic issue requiring adjustment of fiscal or monetary policy. It has been noted that a widespread deterioration in balance sheets that is sufficiently severe to lead to defaults is generally a *consequence* of adverse macro-economic conditions. The question of the appropriate policy response thus relates to the degree to which defaults will exacerbate an adverse macro-economic situation. The magnitude of the likely feedback from default risk to the financial system and the real economy is difficult to judge a priori and even difficult to measure after the fact. However, the

potential importance of such feedback may be illustrated by reference to regional energy and agricultural problems in North America. These problems began with a regional recession — connected with the process of disinflation and the change in the relative prices of real and financial assets — but soon had severe effects on bank solvency, regional prosperity and even national activity levels, in particular business capital investment.

One aspect of the problem that the authorities have been facing in some countries is that posed by the combination of rising debt and greater interest rate fluctuations. This problem can arise when suppliers or issuers of debt fail to make the necessary adjustments to this volatility in their interest rate risk-hedging activities and in the adequacy of their capital relative to debt. This suggests that there may be an underlying problem of inaccurate judgements by debtors and creditors which can place an extra constraint on macro-economic policy.

The importance of the tax system for the incentive to issue debt has been emphasised above. Changes in the tax treatment of debt may thus have an important role to play in reducing tendencies towards debt financing. For example, by such measures as reducing the rate of corporation tax and by abolishing the deductibility of interest payments on consumer debt, the recent tax reform in the United States shifts the balance of tax incentives away from debt towards equity for firms, and induces households to avoid consumer debt in favour of mortgage borrowing.

Recent developments in financial liberalisation, benefits and costs, and regulatory responses.

It has been shown in the preceding section that rising private sector debt/income ratios can sometimes be linked to the liberalisation of banking and capital markets. Rising debt is, however, only one consequence of liberalisation. In this section recent developments in financial liberalisation are reviewed, followed by an assessment of some of the important associated benefits and costs. This discussion provides a background for an analysis of current and prospective policy responses.

Recent developments in financial markets; liberalisation and innovation. The key developments in financial markets during the past year were related to the liberalisation of *capital markets* — in particular the "Big Bang" in the United Kingdom. The proximate cause of this change was the threat of prosecution of the stock exchange under UK anti-trust legislation (the Restrictive Practices Act). This threat was only lifted by an agreement to remove minimum commissions — a change that necessitated the simultaneous removal of the separation of functions between agents (brokers) and market-makers (jobbers) and of restrictions on membership. However, the underlying causes were the removal of exchange controls in 1979 and the resultant opening of the domestic capital market to international competition, together with the earlier deregulation of the New York market in 1975. It was feared that, if nothing was done, the Stock Exchange would be unable to compete with foreign institutions, and business would move abroad.

The result of these changes was a major inflow of capital to the market from British and foreign banks, as they acquired stockbrokers and jobbers. Simultaneously, major improvements were made in the technological back-up systems of the stock market, including dealing and settlement systems to cope with

dual capacity (simultaneous agency and market-making), together with price reporting and surveillance systems to ensure an efficient market and maintain investor protection. The "Big Bang" has been complemented by a merger of the domestic and international securities markets in London — a move which should enable London to strengthen its leading position in international markets such as those for Euro-bonds and European equities. The introduction of the new system was accompanied by a reorganisation of supervision of the capital markets based on self-regulatory organisations under the umbrella of the Securities and Investment Board, which will supervise the conduct of business and oversee the prudential aspects of all investment business. In "wholesale" markets the focus of regulation is to be on the prudential supervision of risk-takers. In "retail" markets investor protection will be of equal importance. In all markets stress has been placed on the importance of avoiding conflicts of interest within firms by means of "Chinese walls" dividing functional areas of responsibility.

The results of the "Big Bang" to date have been considerably increased trading volumes in both UK and European equities, lower spreads and transactions costs — particularly for large institutions, which often deal on a commission-free basis direct with market-makers — and reduced profits for participants in the securities business. A shake-out of excess capacity has already begun. The development has been similar in many ways to that following the earlier deregulation of the New York market.

The French and Canadian authorities are also proposing capital market deregulation measures designed to increase the capitalisation of the securities business, through the involvement of foreign firms and domestic financial institutions. Domestic and foreign institutions would be permitted to own 100 per cent. of a domestic securities firm's capital by 1988 in Canada and by 1990 in France. In France the stockbrokers' monopoly of share trading would be ended in 1992, but brokers would be permitted to diversify into other financial markets and to transform themselves into investment banks. The French reform is aimed at improving brokers' ability to take large positions in stocks and at boosting the liquidity of the Paris market, while in Canada it is hoped that increased capitalisation will enable firms to compete successfully both in international markets and in the domestic application of such transactions as bought deals (i.e. the purchase of an entire security issue by an investment bank, which then places the securities with investors). The key stimulus for these changes was the threat to domestic intermediation posed by external competition. For example, in France it was estimated that 15 per cent. of turnover in French equities was taking place in London. Canadian securities firms were threatened by the greater use of foreign sources of funds by Canadian non-financial firms and the tendency for the domestic regulated market to be bypassed by the "exempt" market, where foreigners were already permitted to establish themselves. These reforms entail a shift of emphasis in market regulation from the protection of domestic ownership and the maintenance of the segregation of the financial system to the promotion of free competition and market efficiency.

Similar regulatory shifts took place elsewhere. A reform of capital markets in Denmark allowed banks and insurance companies to purchase or set up stockbroking firms. In Italy banks will be allowed to set up merchant banking subsidiaries, which means, as in the United Kingdom, France and Canada, the

dismantling of the traditional barriers between commercial banking and the securities markets. In Germany banks were allowed to issue negotiable CDs, and a number of measures were taken to streamline the organisation of the eight regional stock markets. In the United Kingdom commercial paper was issued for the first time, though the market has tended to expand slowly. Commercial paper markets were also developed in France and the Netherlands, and in France negotiable Treasury bills are replacing the traditional non-negotiable type. Moreover, the relaxation of exchange controls in France is likely to lead to more foreign borrowing by companies.

In Japan the minimum denominations of money market certificates (MMCs) and CDs were reduced, and the maturity range for MMCs widened. The Government also began to issue Treasury bills to the private sector for use as money market instruments. Regulations regarding unsecured bond issues are being eased. Institutional investors were permitted to invest a greater proportion of their assets externally — a step likely to increase further the role of Japan in world equity and bond markets. Proposed market developments have not always succeeded, however. The Japanese bankers' acceptance market, for example, failed to develop following deregulation, partly owing to the imposition of a stamp duty.

Financial markets have been adept at devising new instruments, independently of measures of liberalisation by the authorities. This is true, in particular, of the United States, where loan securitisation and the use by institutional investors of portfolio insurance techniques based on futures and options grew strongly last year.

Securitisation has been particularly popular in the United States as a means for banks to obtain finance at a lower cost, given the downgrading of their own securities by the rating agencies. It can also be seen as a response to tougher capital requirements on the part of supervisors. The depth of securities markets in the United States is also an important factor. In the absence of one or more of these factors in domestic markets elsewhere — particularly a lack of depth of securities markets — the trend towards securitisation has been weaker. It has, however, been very strong in the international markets.

The United States last year experienced a rapid growth in the issue of collateralised mortgage obligations (CMOs), a private sector debt security offering the returns from a pool of mortgages which are held on the balance sheet of the bond issuer. The issue of these CMO securities in 1986 amounted to $48 billion. New issues of traditional federal agency pass-through securities were also extremely large ($257 billion). The FHLMC "multi-family participation certificate" was an important innovation in this field which limits prepayment risk. It is expected that tax reform will lead to rapid development of real estate mortgage investment conduits (REMICs), a security again offering returns from a pool of mortgages, taxed not at the level of the pool, but at the final investor stage. Other loans to the household sector such as credit card and car loans have also been securitised and sold to investment institutions. Similar techniques are being adopted in other countries, albeit less rapidly. The United Kingdom has seen its first mortgage-backed security issue, while the sale of such securities has also been increasing in Japan (without the advantage of pooling) and in France. Mortgage securities similar to US GNMA bonds are being introduced in Canada. Systems of mortgage securitisation have long been in operation in Denmark and Germany.

The genesis of portfolio insurance and programme trading lies several years in the past, but last year saw a particularly rapid adoption of these techniques. Portfolio insurance basically involves the sale of futures or options in a stock (or bond) index, in order to limit the downside risk on the valuation of a portfolio of securities resulting from market price changes. The term programme trading, while basically implying the sale or purchase of a block of securities, has been applied particularly to arbitrage between stocks and stock index futures contracts, where profits can be made by switching whenever the price difference exceeds handling costs for stocks. These techniques involve the purchase or sale of securities or futures for a prescribed change in market prices, and they have been accused of increasing market volatility. For the institutions concerned the techniques offer advantages in terms of improved average returns, given the low transactions costs and deep futures and options market existing in the United States. The lack of one or both of these factors elsewhere has restricted the concurrent development of these techniques, although participants in the UK, French, Canadian and Japanese markets may soon be in a position to use them more extensively.

The past year also saw important measures of liberalisation in *traditional banking*. In France the control of bank credit as a tool of macro-economic policy has been abandoned — a move concurrent with the development of alternative sources of finance for companies such as the bond and commercial paper markets. The proportion of credit to which subsidised rates of interest apply is being reduced, but rates on many types of deposit remain subject to controls. All Japanese banks are now allowed to diversify their portfolios by holding foreign assets, while the postal savings system is permitted to hold limited amounts of domestic and foreign securities. The latter measure, together with the liberalisation of MMCs and CDs noted above, removes certain obstacles to the abolition of the remaining controls on deposit rates in Japan, which could lead to reduced margins on banking activities. In the United Kingdom building societies have been permitted to make unsecured loans for the first time — a move associated with the fierce competition with banks in the mortgage market. As noted above, the "Big Bang" in the United Kingdom has allowed banks to purchase stockbrokers and market-makers, enabling them to offer the full range of services typical of a "universal" bank.

Even in the United States and Japan, where the law divides commercial from investment banking, both banks and securities houses have recently begun to encroach on each other's business spheres. Foreign banks have been permitted to set up or purchase securities subsidiaries in the United States and Japan, and US and Japanese banks now also own securities subsidiaries in each other's countries. Investment banks in both countries have for several years offered money market or bond-based instruments with most of the characteristics of bank deposits. In the United States some banks have been granted authorisation to underwrite securities to a limited extent. In Japan the Government's need to expand the secondary market in public debt to cope with the rollover of maturing debt led it to allow banks to deal in government bonds at up to two years' maturity in the secondary market in 1984. Securities houses in Japan have been allowed to diversify into certain banking functions: for example, they were permitted in 1983 to make personal loans against the collateral of government bonds and to participate to a limited extent in money markets, while in 1984 they were allowed to transact sales of foreign commercial paper and CDs in the domestic market.

Non-financial firms in the United States have utilised the limited service or "non-bank bank" loophole to set up banking subsidiaries offering either loans or deposit services. (Legislation is pending in the US Senate temporarily to ban the further creation of such institutions.) Some firms also own investment banks. In Italy non-financial firms have been authorised to acquire stakes in banks, subject to certain restrictions. In Canada non-financial companies are currently permitted to own the capital of trust, loan and insurance companies, although new regulations require larger companies to reduce holdings to 65 per cent. by 1991.

Liberalisation of financial markets: benefits and costs. The financial liberalisations witnessed in recent years, of which last year's developments were discussed above, entail a variety of potential benefits and costs. Both benefits and costs are difficult to quantify in any precise fashion. On the other hand, in qualitative terms the expected benefits are obvious, while the costs tend to be uncertain. An analysis of these costs and benefits follows. Because the costs of financial liberalisation are more conjectural and probabilistic than the perceived benefits, a larger proportion of the analysis is devoted to them. However, the space given to each issue should not be taken as necessarily reflecting the relative importance of these two aspects.

The principal *benefits* of recent capital market developments arise from better operation of the market mechanism. Greater competition has ensured a lower cost of funds to borrowers and has raised returns for lenders as margins of intermediation have been squeezed — tendencies that should lead to a more efficient allocation of available funds. Liberalisation has also led to lower transactions costs for non-financial market participants, and has both given many borrowers easier access to long-term finance and rendered it more attractive. Where banks are permitted to participate in capital markets, their sources of income can be more diversified and thus profits made potentially more stable. To the extent that liberalisation has created deeper markets with well-capitalised market-makers and homogeneous pricing, these can offer greater liquidity for asset holders. Liquidity, together with the variety of instruments offered, makes it easier to tailor a portfolio of assets or liabilities to specific financing needs. New instruments permit the separation, hedging and spreading of types of risk, which can be transferred to those best able to absorb it. For governments liberalised capital markets offer a dependable and lower-cost source of funds for bond issue and for the widespread practice of privatisation of state industries. A competitive domestic securities market may help provide employment and tax revenue. Finally, some would argue that liberalisation improves the efficiency of the allocation of existing resources by sharpening the take-over sanction against inefficient management.

The benefits of banking deregulation, as in the capital market, have been in terms of cheaper loans to borrowers and higher returns to savers via a compression of margins. Such a movement has often been linked to new entry into the relevant sector, either by other domestic institutions or by foreign banks. Such new entry, together with the liberalisation of banks' asset portfolios and sources of funds, has also tended to lead to a reduction in the quantity rationing of credit. As noted, this may have been a key cause of the increase in credits to the private sector in some countries in recent years. The liberalisation of banks' assets should again permit a greater diversification of sources of income, making profits more stable.

It has been widely suggested that capital market and banking liberalisation has also resulted in both actual and potential *costs*. Many of the recent cases of financial liberalisation, new financial techniques and facilities have not been tested over business or interest rate cycles — potential costs are therefore difficult to assess. These concerns have been expressed most strongly in the United States and the United Kingdom. However, some of the worries are shared by regulators in Japan and continental Europe.

In the capital markets it has been argued that such techniques as programme trading and portfolio insurance have increased market price volatility. This appears to have been the case in the past for the US equity markets on the days when futures contracts are renewed ("the witching hour"). However, it is hoped that shifts in the renewal dates will remove this specific problem. Generally, it remains to be proved that these techniques have had measurable effects in terms of longer-run trends in security prices. It may be that the time the market takes to respond to news is now shorter. A more general concern regarding the use of futures and options, as with floating rate debt, is that, while they redistribute risk, they are unable to offer a hedge for the system as a whole. If market participants lose sight of this, they may take unwarranted risks.

Capital market liberalisation may have deleterious effects on the banking system, arising from the disintermediation of banks' traditional sources of funds on the liabilities side and from securitisation and the increasing tendency of high-quality borrowers to seek market-intermediated finance on the assets side. For investors, too, securitised loans and other new instruments may incorporate risks. The markets in such instruments may prove relatively narrow, perhaps because few have been issued, because they are relatively distant substitutes for more conventional instruments, or because the market is dependent on only a few sponsoring investment banks as market-makers. In these cases, the liquidity of an instrument may only be apparent — the failure of the investment bank or the desire of some asset holders to divest may render the market inoperative. Such phenomena may underlie the failure of the perpetual floating rate note market in 1986.

It has been argued that the potential costs of liberalisation in terms of the stability of capital markets may go further, especially if market institutions are relatively new and inexperienced, costs are high, capital resources are low and strong competition for market shares is driving down profits. The so-called systemic risk in capital markets stems from the dangers of the widespread realisation of security price and credit risk, related particularly to the functions of capital market underwriting and market-making. For example, the failure of a major market-maker could lead to severe consequences, not only for the market in which the failure occurs, but "contagiously" for other markets in which the market-maker operates, for subsidiaries, other companies or affiliated institutions. Similar concerns for systemic stability have been expressed in relation to the recently developed large-denomination electronic interbank payment systems. It is feared that default by one participant or even electronic failure could lead to major disruption.

Besides aggravating the potential for systemic risk, conglomeration may have other costs in terms of equity and efficiency. To the extent that capital market liberalisation has entailed a breakdown of such traditional distinctions as those between banking and securities activities and between agency dealing and market-

making, conflicts of interest may arise. Many institutions have implemented systems of "Chinese walls" and compliance officers to try to minimise abuses.

Capital market liberalisation may even have had harmful effects on the real economy. Some commentators suggest that it has led to shorter planning horizons for fixed investment by industrial companies, because it facilitates take-overs and weakens the links between a debtor firm and its bank. The increased availability of debt is a key factor in the recent merger wave — and, as noted, the liberalisation of capital markets may have aided this mobilisation of debt. Take-overs may also be easier in a more liquid equity market. However, the institutionalisation of capital markets may also be important. A small group of large institutional investors, themselves under pressure to achieve high returns, may be more easily convinced of the need for merger than a large number of small investors. Concerning debt problems, a key factor is the shift in firms' dependence for finance from "house" banks to consortia and to capital markets. "House" banks may be ready to take a long-term view of a firm's prospects, while this is less likely to occur when a firm has relations with consortia or finances itself in the securities market.

The blurring of distinctions between banking and capital market activity is evident from the above discussion of the potential costs of capital market liberalisation, where many of the issues identified relate to banks. However, costs related to recent changes in traditional banking activities have also been identified. These may be particularly high during the transition from a protected to a highly competitive banking system, with the attendant shrinking of margins.

Many banks continue to hold portfolios which include a large proportion of non-performing international or domestic loans, as a result of the debt crisis or an excessive concentration on regional or energy-related lending. Although a considerable increase in provisioning has taken place, a general reduction in margins due to liberalisation may increase the vulnerability of the banks affected, all the more as some of their best customers may have been lost to the capital markets.

The regulatory response. It is widely accepted that the potential and actual costs of financial liberalisation, together with the international integration of financial markets, point to a need for a review of the regulation of these markets, including the consideration of areas in which regulation should be tightened or expanded, as well as those where further deregulation is warranted. A general approach to regulation which is being adopted by authorities in many countries could be summarised as "more supervision, more international co-ordination of supervision and a review of the usefulness of existing regulations".

For example, the problem of systemic risk in *capital markets* may require tighter supervision of market-makers' capital and liquidity, whether market-making is undertaken as part of a banking conglomerate or not, while the growth of conglomerates suggests an additional need for co-ordination between banking and financial market supervisors. Furthermore, in the international sphere 24-hour trading could facilitate the transfer of risks at different times of the day to other centres with weaker prudential requirements. This suggests a need for international co-operation and co-ordination of supervision. However, in most countries securities market supervision does not fall within the purview of central banks, and the existing supervisory framework tends to be more concerned with investor

protection than with systemic problems. International agreement on securities market supervision is still a rather remote prospect.

More progress has been made in international co-ordination of *banking supervision*. In early 1987 the United Kingdom and the United States issued for comment agreed proposals for measuring the capital adequacy of US and UK banks on a common basis. It is also intended that US and UK banks should be required to maintain standards of capital adequacy in excess of a common minimum ratio. The proposed system of measurement weights different classes of on and off-balance-sheet asset according to risk. For the United States, where banks have previously been required to observe specified ratios of capital to total balance-sheet assets, the new measure is designed to overcome some of the unintended side-effects of earlier capital adequacy requirements, which tended to induce banks to run down their holdings of low-risk liquid assets and increase their off-balance-sheet exposures. More generally, the significance of this bilateral agreement is that, in the light of the closer integration of banking markets worldwide, it reflects the efforts of supervisory authorities to achieve convergence in national regulatory standards.

Banking supervision is not, of course, the only field of bank regulation which may need to change in response to financial market developments. In the United States other regulatory changes have included relaxation of the interstate banking restrictions, in order to allow sound institutions to purchase failing ones. In addition, it is proposed that fresh capital resources be allocated and higher insurance premiums introduced for the Federal Savings and Loan Insurance Corporation. The heavy losses made by this institution, the object of which is to support the US thrift industry (saving and loan and mutual savings banks), are indicative of the difficulties the latter has encountered.

Lastly, the blurring of distinctions between commercial and investment banking raises serious issues for the regulatory authorities in the United States and Japan, which previously maintained a clear institutional separation. In particular, it may lead to an aggravation of the problems of contagion, systemic risk and conflicts of interest. To the extent that commercial banks are involved in securities activities, the authorities may be drawn into providing safety-net facilities to securities market participants. Furthermore, the participation of commercial companies in banking also creates a need for supervision and raises similar implicit "safety-net" support concerns, as well as entailing potentially severe consequences for the bank credit decision-making process.

On the other hand, the traditional separation between commercial and investment banking is widely regarded as unsatisfactory. Banks often face stiffer capital requirements than investment houses, which makes it difficult to compete in areas where functions overlap. This is a growing problem, given the increasing importance of fee income for banks' profits, the growth of securitisation, the decline in the demand for loans and the souring of many existing loans. The division also restricts the diversification of sources of profit on the part of banks. Reactions to these issues differ between the United States and Japan.

In Japan the banks are seeking the removal of remaining limits on overseas securities business, permission for their foreign subsidiaries to deal in securities in Japan and also permission to underwrite domestic corporate bonds. Securities houses

are seeking to offer cash management services and to enter pension fund management. At present, the Ministry of Finance is opposed to wholesale changes in the separation of powers.

Banks in the United States are pressing for an increased ability to underwrite commercial paper, mortgage-backed securities and municipal bonds. While not yet ready to accede to all of these demands, the authorities are currently adopting a relatively flexible approach to the Glass-Steagall division between commercial and investment banking — illustrated, for example, by the recent decision permitting a certain amount of securities underwriting by some banks — but are more strongly opposed to the entry of non-financial firms into the financial sector. One set of more radical proposals in the United States aims largely at eliminating the legal barriers dividing financial institutions, leaving individual firms free to choose their areas of operation. An amended structure of supervision based on market function would need to be set up. By contrast, the non-bank bank loophole would be closed. It is felt that such a system would further competition while preserving the benefits of supervisory oversight of the system.

V. INTERNATIONAL FINANCIAL MARKETS.

Highlights.

In 1986 activity in the international financial markets soared to new record levels. Cross-border bank assets expanded by over $650 billion at current exchange rates, by far the largest annual increase yet recorded. New international bond issues rose to $220 billion, three times their level of three years earlier. However, these figures were considerably inflated by extensive refinancing operations, broad overlaps between the banking and securities markets, a large amount of double-counting due to strong growth of interbank operations and valuation effects resulting from the depreciation of the dollar. Even if these influences are excluded, the net amount of new financing channelled through the international markets last year may be estimated at $240 billion, still the largest figure ever.

Among the influences that help to explain this strong expansion of international financing activity at a time when economic growth in the industrial countries tended to slow down were: widening current-account imbalances between the industrial countries; the downward trend of interest rates as well as vigorous monetary growth and ample liquidity in national markets; the continuing impact of earlier deregulation measures; and the further trend towards the globalisation of national financial markets, with an increasing share of domestic credit flows being channelled through international circuits.

Another important factor was the rapidly expanding role of Japanese banks, which were a dominating influence in the unprecedented growth of interbank activity. Moreover, the opening of the Japan Offshore Market in December 1986 added a new element to the international financial scene.

There were not many additions to the range of new financial instruments last year, but earlier innovations continued to exert an important influence on the development of international financial market activity. The trend towards securitisation gained further momentum, and there was a marked increase in the use of the swap technique and of financial futures and options. The swap technique, in particular, was an important driving force in long-term securities issues and tended to tie the domestic and international markets even closer together.

One of the salient features of international financial market developments last year was the heavy concentration of new activity in the industrial countries themselves, whereas broad groups of developing countries continued to be barred by their poor credit-standing from access to the international markets.

The international debt situation showed no improvement in 1986. The combination of a sharp decline in the prices of their exports and, in some countries, economic mismanagement caused the debt/export ratios of the heavily indebted countries to worsen significantly. Moreover, there were signs of increasing fatigue on the part of some creditor banks and some debtor countries. However, the recent conclusion of comprehensive credit and policy agreements with three of the largest debtor countries, Mexico, Argentina and the Philippines, should set a favourable

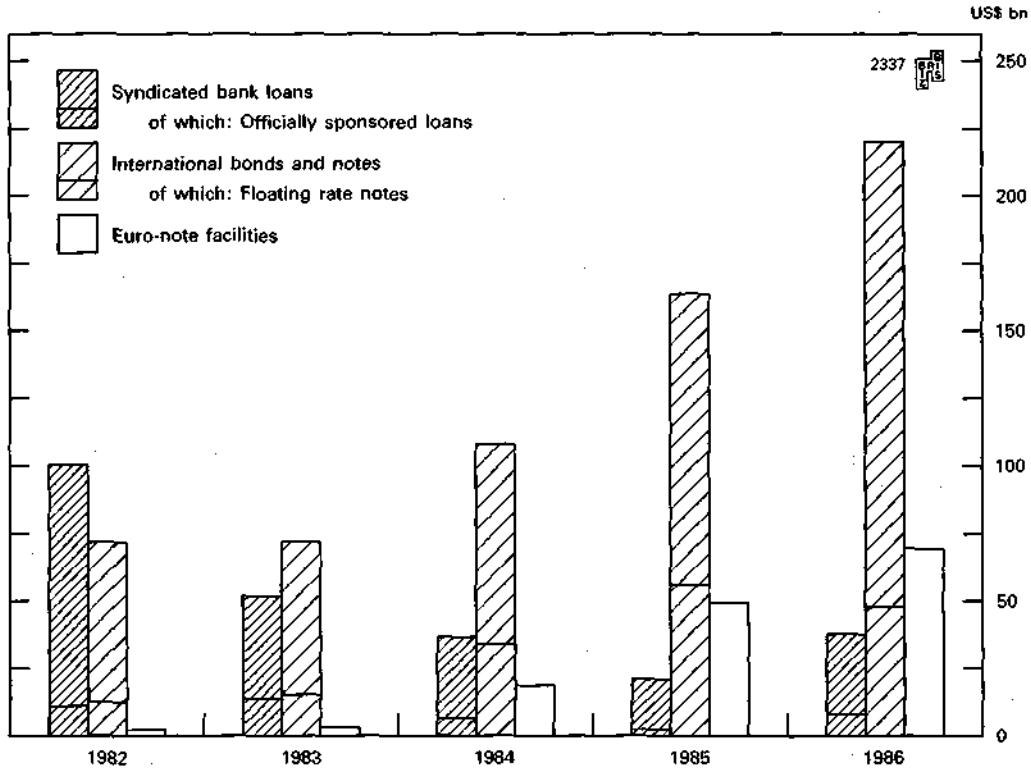
example, indicating that the case-by-case approach is basically sound and can be built on.

The overall picture.

While economic growth in the industrial countries slowed down last year, activity in the international financial markets continued to expand rapidly. At the short end of the maturity spectrum the international interbank market showed by far the largest expansion yet recorded. The role of the international banking sector as a deposit outlet and source of credit for non-bank entities also grew quite strongly; and even the market for syndicated bank loans, after its sharp contraction in preceding years, showed signs of revival. The volume of new facilities negotiated for the issue of various types of short-term — and recently also medium-term — paper registered a further strong increase; and at the long end of the maturity spectrum issuing activity in the international securities markets surged to new heights.

Several factors may help to explain the contrast between slackening growth in the real sector and boom conditions in the international financial markets. One of the most important was certainly the widening of international payments imbalances and the role of the international banking and securities markets in intermediating part of the funds needed to finance them. The US current-account deficit continued to grow last year, as did the Japanese and German surpluses. Moreover, there were

Trends in international financial markets, 1982–86.*



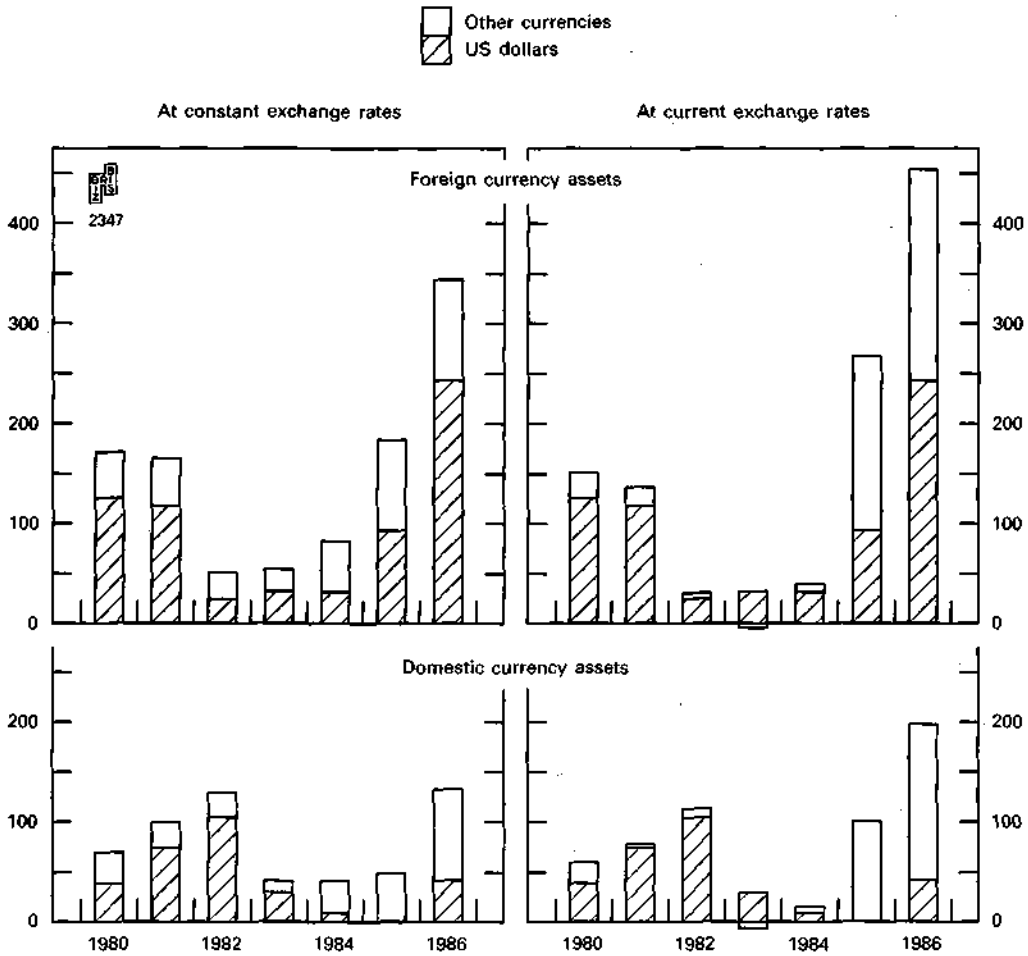
* Figures based on Bank of England data, recorded according to announcement date.

large capital flows in opposite directions. For example, at $132 billion, net long-term foreign investment by Japanese residents far exceeded the country's current-account surplus, which meant that the Japanese banking sector became a large net borrower of new funds in the international markets, mainly to finance residents' purchases of foreign securities. In Germany, by contrast, the current-account surplus was accompanied by large net long-term capital inflows. The resultant massive basic payments surplus had its counterpart in large-scale short-term capital exports through the German banking sector and a strong deposit build-up by the German non-bank sector in the Euro-market.

The very size of international capital flows last year was symptomatic of another important influence behind the continued rapid growth of international financial market activity: the progressive internationalisation of national financial markets. Because of their greater depth and efficiency, or because of regulatory and fiscal advantages, an increasing proportion of the credit flows between domestic savers and investors is intermediated directly or indirectly via the international

Changes in external assets of BIS reporting banks at constant and current exchange rates, 1980–86.

Annual figures, in billions of US dollars.



markets. To give just one example, Japanese borrowers were important issuers in the Euro-bond markets last year, while their bonds were bought in large measure by Japanese banks or other Japanese investors.

A further reason for the buoyancy of international financial activity last year, particularly in the securities markets, was the continued downward trend of interest rates and other borrowing costs. This acted as a powerful incentive for borrowers to repay outstanding debts prematurely and to refinance them on much more favourable terms. Moreover, these same forces tended to induce borrowers to arrange new facilities, for example in the Euro-commercial paper market, even if the funds were not immediately needed and drawn. Consequently, the particularly high volume of gross activity in 1986 conveys an exaggerated impression of the actual volume of net new financing.

Another important development that caused the statistics to overstate the actual volume of new credit was the continuing trend towards securitisation and the growing role of the banks in the securities markets as issuers and holders of such paper. To improve their balance-sheet structures, banks were again important borrowers in the international bond markets, largely through perpetual floating rate note issues. Moreover, at the short end of the securities markets banks made use of the market for Euro-note facilities to arrange programmes for the issue of CDs and other short-term paper. On the assets side of their balance sheets banks, faced with relatively sluggish credit demand from their prime corporate customers, continued to be important buyers of securities, thereby increasing further the weight of marketable claims in their asset portfolios. Moreover, the financing and hedging requirements associated with the banks' role as dealers, arbitrageurs and market-makers in securities were an important influence in the strong growth of the interbank market last year.

A somewhat special type of expansionary influence affecting in particular the international banking sector was the strong depreciation of the US dollar, the currency in which the bulk of international financial activity is conducted. For banks with large dollar books but capital denominated in one of the strong currencies, such as the yen, the decline in the domestic currency value of their dollar claims improved their capital ratios and thus provided scope for a further expansion of their international activities. For banks with strongly growth-oriented policies but a relative shortage of eligible borrowers, this quite often meant the promotion of interbank activity such as interest rate and other arbitrage operations.

Finally, interbank activity was boosted by the opening of the Japan Offshore Market towards the end of last year. The rebooking of outstanding business via these new facilities, as well as the new arbitrage and funding possibilities they afforded, tended to inflate the interbank operations and balance sheets of Japanese banks. However, a large proportion of what is reported as cross-border interbank business in the international banking statistics represents operations between different offices of the same bank (see the table on page 105), which may expand strongly without leading to much growth in final lending.

In view of the nature of some of these expansionary influences, it is not too surprising that last year the difference between gross international financial activity and the actual amount of net new international lending was unusually large. As can

Estimated net lending in international markets: Changes in external claims of BIS reporting banks and international security issues.

	Exchange rate adjusted flows[1]						Stocks at end-1986
	1981	1982	1983	1984	1985	1986	
	in billions of US dollars						
Total international lending of reporting banks[2] ..	264.8	180.5	105.7	124.1	233.5	476.6	3,221.1
minus: double-counting due to redepositing among the reporting banks	99.8	85.5	20.7	34.1	128.5	316.6	1,451.1
A = Net international bank lending[3]	165.0	95.0	85.0	90.0	105.0	160.0	1,770.0
Euro-bond and foreign bond issues	44.0	71.7	72.0	107.9	163.7	220.3	.
minus: redemptions and repurchases	12.0	13.2	14.0	24.9	38.7	64.3	.
B = Net international bond financing	32.0	58.5	58.0	83.0	125.0	156.0	700.0
C (A+B) = Total bank and bond financing	197.0	153.5	143.0	173.0	230.0	316.0	2,470.0
minus: double-counting[4]	7.0	8.5	13.0	28.0	55.0	76.0	190.0
D = Total net bank and bond financing	190.0	145.0	130.0	145.0	175.0	240.0	2,280.0

[1] Non-dollar bank credits are converted into dollars at constant end-of-quarter exchange rates, non-dollar bonds 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] 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.

be seen from the table above, the combined volume of cross-border operations in the international banking and long-term securities markets amounted to nearly $700 billion. However, if allowance is made for the double-counting resulting from interbank operations, from the overlap between the banking and the securities markets and from refinancing operations, the total amount of new credit was closer to $240 billion, still an impressive figure, but more in line with underlying developments in the real sector of the world economy. Moreover, even this smaller credit total was not all "additional" but in part represented a substitute for domestic lending and in part is already included in domestic credit aggregates.

Turning to the more structural aspects of international bank activity, one salient feature last year was the continuation of "split" market conditions. Borrowers from broad groups of problem debtor countries were unable to regain spontaneous access to the international financial markets, while for prime borrowers in much of the rest of the world credit conditions remained very easy. At the same time, some non-oil developing countries, particularly those in the Pacific basin, that experienced a marked improvement in their balance of payments as a result of the drop in the oil price and the strengthening in their competitive positions following the massive appreciation of the yen saw their borrowing needs sharply reduced or held down their borrowing for policy reasons. Moreover, oil-exporting countries compensated the income shortfalls resulting from lower oil prices by drawing down their deposits in the international banking market rather than by borrowing. For all these reasons,

lending activity in the international financial markets in 1986 was focused almost entirely on the developed countries, and particularly on borrowers from within the reporting area itself. Seen from that angle, the international financial markets, despite globalisation, were less "global" than in previous years.

Another prominent feature was the growing role of Japanese banks and securities houses. As can be seen from the table on page 104, Japanese banks, i.e. their head offices and their affiliates in other reporting countries, have become by far the largest nationality group in the international banking market. If valuation effects are excluded, Japanese banks would seem to have accounted for the bulk of direct new international bank lending to non-bank entities last year and for nearly three-quarters of the expansion in the interbank market and can therefore be regarded as the main engine behind the rapid growth of international banking activity last year. Similarly, Japanese securities houses and their burgeoning affiliates around the world have captured an increasing share of international capital market activity. Two of the main reasons for the prominence of Japanese financial institutions are the country's very large domestic savings surplus seeking international redeployment and the simultaneous heavy recourse of Japanese firms to the international financial markets as a source of credit. Given their familiarity with domestic investors and borrowers, Japanese financial institutions certainly enjoy a natural competitive advantage in acting as the intermediaries between Japan and the world at large.

New measures of financial deregulation did not play as important a role in the period under review as during previous years. The most significant regulatory changes were the liberalisation measures implemented in several countries with respect to the issuance of commercial paper, but their impact was mostly on domestic markets. Similarly, the "Big Bang" in London affected mainly the organisation and functioning of the domestic securities markets rather than the international bond markets. In Japan, by contrast, where deregulation is proceeding in stages, the measures taken in 1986 were less significant than those of previous years, but the impact of earlier changes continued to be important.

A common feature of most market sectors last year was that fewer new financial instruments appeared; in particular, there was less recourse to capital market instruments with novel interest or exchange rate features. On the other hand, the turnover in financial futures and options and in interest and currency swaps rose further. The swap market expanded especially sharply and contributed to the growth of other market sectors. This use of a broad range of hedging instruments further reduced the barriers between domestic and international markets, as well as between different currency sectors. As a result, the specific forms of borrowing and investment in different market sectors have been increasingly divorced from the nature of underlying exposures and determined largely by overall cost and return considerations.

Competition between financial institutions has been an important element behind the sharp growth of international activity and has led to a narrowing of the margins of intermediation and to pronounced changes in market shares. This gave rise to contrasting developments during the period under review.

On the one hand, some of the market instruments which have been developed in recent years have become more widely accepted and are being traded on the basis

of standardised terms. This has provided depth and liquidity for some of the new markets and has permitted the creation of a flexible range of financial instruments tailored to the specific needs of borrowers. In this respect, several of the new markets may be said to have added to the efficiency of the financial system.

On the other hand, sharp changes in market perceptions have led to periods of pronounced instability in certain market sectors. In particular, a number of events during 1986 and early 1987 illustrated some of the risks involved in the recent process of innovation and deregulation within a highly competitive environment. Unsold inventories of new bond issues were reportedly accumulated by underwriters in substantial amounts when interest and exchange rate expectations changed suddenly. A more important example, however, is the "boom-bust" cycle in the market for FRNs and in particular for perpetuals. Since their first appearance in 1984 there have been $18 billion worth of issues of perpetual FRNs, $7.4 billion of which occurred in 1986 alone. In late autumn 1986 sentiment suddenly turned against this market as the perception gained ground that issues had in many instances been severely underpriced in relation to the underlying risks. In December it became virtually impossible to place perpetual FRNs with final investors, and prices dropped sharply. Although some market-makers attempted to alleviate the difficulties, they did not succeed in turning round market sentiment, and in early 1987 problems began to spill over into the FRN market in general.

This episode highlights the potential fragility of liquidity in relatively new, unregulated financial markets where there is no central authority to ensure that dealers stand by their implied commitment to support a secondary market. It also raises broader questions about the ability of the financial system to withstand major shocks, such as a sudden and generalised increase in interest rates, and about the kind of supervision and regulation appropriate in a period of rapid structural change and innovation.

The international banking sector.

The development of the overall aggregates. Following a pronounced pick-up in 1985, the growth of international banking activity accelerated further last year. In terms of current dollars the BIS reporting banks' gross external assets soared by $651.8 billion, or 25 per cent. Valuation effects resulting from exchange rate movements which boosted the dollar value of positions denominated in other currencies were very significant; but, even excluding these influences, the growth of the reporting banks' external assets accelerated between 1985 and 1986 from $233.5 to 476.6 billion, by far the largest expansion yet recorded. In addition, the growth of banks' local claims in foreign currency more than doubled, from $64.8 to 147.7 billion.

The very rapid expansion of international banking activity was largely the result of a surge in interbank business within the reporting area, which accounted for as much as 90 per cent. of the increase in the reporting banks' cross-border assets. As already explained, this unusual buoyancy of the interbank market can be ascribed to several factors: the increased role of banks in the securities markets, interest rate expectations and arbitrage, the growing role of Japanese banks with a traditionally high share of interbank claims, and the opening of the Japan Offshore Market.

BIS reporting banks: Selected features of international activity.

Items	Assets					Liabilities				
	Exchange rate adjusted flows				Stocks at end-1986	Exchange rate adjusted flows				Stocks at end-1986
	1981	1984	1985	1986		1981	1984	1985	1986	
	in billions of US dollars									
Cross-border positions vis-à-vis:										
1. banks within the reporting area	160.8	94.1	182.4	428.6	2,063.4	159.3	108.9	197.4	431.0	2,231.1
2. non-banks within the reporting area	31.6	16.9	23.1	29.8	419.6	50.6	12.0	23.3	57.3	426.8
3. countries outside the reporting area	65.7	13.1	23.8	9.1	668.4	16.6	28.8	19.3	– 7.0	410.1
4. unallocated	6.7	–	4.2	9.1	69.7	11.2	0.3	2.5	28.6	111.5
Total cross-border positions	264.8	124.1	233.5	476.6	3,221.1	237.7	150.0	242.5	509.9	3,179.5
of which: in foreign currency and ECUs	*165.0*	*82.7*	*184.2*	*344.1*	*2,331.4*	*189.1*	*92.0*	*173.6*	*395.1*	*2,466.2*
Domestic positions in foreign currency:										
5. interbank[1]	51.2	14.3	52.5	126.8	566.0	48.4	15.1	65.1	95.8	531.6
6. vis-à-vis non-banks[2]	19.4	13.2	12.3	20.9	185.7	5.3	5.7	7.1	17.4	90.6
Total domestic positions	70.6	27.5	64.8	147.7	751.7	53.7	20.8	72.2	113.2	622.2
Total foreign currency positions	235.6	110.2	249.0	491.8	3,083.1	242.8	112.8	245.8	508.3	3,088.4

Note: As from end-1983 the reporting area was enlarged to include banks in Finland, Norway, Spain, Bahrain and the Netherlands Antilles as well as banks in the Bahamas, the Cayman Islands, Hong Kong and Singapore. As from that date, therefore, the first five of these countries are newly included in the reporting area, whereas the other four market centres mentioned, for which previously only data for the branches of US banks were available, were already part of the reporting area.

[1] For banks in Europe, Canada and Japan only. In the case of banks in Japan this figure also includes positions vis-à-vis non-banks. [2] For banks in Europe and Canada only.

Sources and uses of international banking funds. The exceptionally rapid expansion of the international banking aggregates last year was accompanied by a considerable pick-up in underlying credit growth. Net of the double-counting resulting from the redepositing of funds between banks in the reporting area, the total amount of credit outstanding in the international banking sector may be estimated to have increased by $160 billion last year, or by one and a half times as much as in 1985. Moreover, to an even greater extent than in 1985, the expansionary stimulus came almost entirely from within the reporting area itself, with new claims on countries within that area accounting for about 90 per cent. of final uses of new funds (see the table overleaf).

The buoyancy of inside-area lending resulted largely from the reporting banks' own absorption of international funds for domestic lending (over $90 billion), but direct credits to non-bank entities also showed a strong increase of $51 billion, or 9 per cent. Japan, the United Kingdom and the United States together accounted for over 75 per cent. of reporting-area borrowing. Banks in the United States seem to have used about $24 billion of external funds for domestic purposes, while US non-bank entities borrowed $16 billion directly from reporting banks abroad. In Japan

Estimated sources and uses of international banking funds.

	Exchange rate adjusted flows						Stocks at end-1986
	1981	1982	1983	1984	1985	1986	
	in billions of US dollars						
Uses							
Reporting area	92	42	52	77	77	142	1,032
Outside area	66	39	28	13	24	9	668
Unallocated	7	14	5	–	4	9	70
Total	165	95	85	90	105	160	1,770
Sources							
Reporting area	137	93	81	61	83	138	1,248
Outside area	17	−12	1	29	19	− 7	410
Unallocated	11	14	3	–	3	29	112
Total	165	95	85	90	105	160	1,770
Net							
Reporting area	−45	−51	−29	16	− 6	4	−216
Outside area	49	51	27	−16	5	16	258
Unallocated	− 4	–	2	–	1	−20	− 42

banks imported about $35 billion of foreign currency funds, which were essentially used for net local lending in foreign currency and may have financed a large part of residents' purchases of foreign securities. In addition, Japanese non-bank entities' direct recourse to borrowing from banks abroad amounted to $4.3 billion. In the United Kingdom the non-bank sector raised $17.4 billion in the Euro-market or from banks abroad, a sizable share of this borrowing being accounted for by foreign-owned securities houses.

Other major non-bank borrowers, of both cross-border funds and foreign currencies locally, were residents of the Netherlands ($4.9 billion), who appear to have funded in this way a substantial portion of their purchases of foreign securities, and Swiss non-bank entities ($3.5 billion). By contrast, Spanish, German and French borrowers reduced their outstanding liabilities to the reporting banks by $4.8, 4 and 2.3 billion respectively.

On the sources side of the market, identified new funds supplied from within the reporting area totalled $138 billion, $55 billion more than in the previous year. This acceleration was due in large measure to identified new deposits received from non-bank entities, which more than doubled from $30 billion in 1985 to $75 billion. Despite securitisation, this was the largest annual increase yet recorded. In addition, funds channelled into the market via trustee funds in Switzerland can be estimated at roughly $5 billion, and a sizable portion of the $29 billion increase in the unallocated item may be attributed to the issuance of negotiable securities by the reporting banks, the bulk of which was in all likelihood purchased by residents of the reporting area. Nearly $60 billion of the funds supplied from within the reporting area came from the banks themselves. Banks in Germany and Japan were heavy net exporters of funds denominated in domestic currency, to the extent of $24 and 15 billion respectively. A substantial volume of new international funds, $12.6 billion, was also supplied via the banks in the reporting offshore centres.

As regards the supply of non-bank deposits from within the reporting area, German entities were for the first time the largest providers of new funds to the Euro-currency market. They stepped up their new deposits from a mere $2 billion in 1985 to $17 billion, thereby nearly doubling their outstanding Euro-market

balances. The main reasons for this development seem to have been a pronounced increase in the liquidity of the German non-bank sector and more attractive Euro-Deutsche Mark deposit rates. Withdrawals of official deposits from the Euro-DM market, strong demand for Euro-DM funds for the financing of purchases of DM bonds and a lowering of German domestic reserve requirements applying also to funds imported from the Euro-market made it possible for the German banks to offer to prime customers more favourable deposit rates in the Euro-DM market than at home.

US residents, traditionally the largest non-bank suppliers of funds to the Euro-market, increased their outstanding balances with the reporting banks by $14.1 billion, or 8 per cent. There was, moreover, a pronounced expansion of deposits by non-bank entities in the United Kingdom ($13.8 billion), mostly in the form of foreign currency deposits with banks in the United Kingdom itself. Additions to outstanding balances by non-bank entities in other reporting countries and in offshore centres also accelerated sharply. The largest increases were reported for residents of the Benelux countries ($9 billion), Bermuda ($2.7 billion), Panama ($2.2 billion) and Canada ($2.1 billion).

Development of reporting banks' business with countries outside the reporting area. Between 1985 and 1986 new lending to countries outside the reporting area dropped off sharply, from $24 to 9 billion, its lowest level since the late 1960s. However, these countries drew down their deposits with the reporting banks by $7 billion, so that on balance they were net takers of funds to the extent of $16 billion last year. The overall figures disguise significant differences in the development for individual countries and sub-groups resulting from balance-of-payments divergences and varying degrees of access to international financial markets. In particular, the split market separating creditworthy borrowers and countries facing external financing problems showed no sign of disappearing. In addition, reporting banks' claims on problem debtor countries were increasingly influenced by a number of factors unrelated to actual flows of funds. The most important of these, the aggregate impact of which may be roughly estimated at about $3 to 4 billion, were conversions of debt into equity or domestic liabilities, sales of claims to entities other than the reporting banks and transfers of claims to export credit insurance institutions (see page 119 below).

New lending to non-OPEC developing countries, which had picked up in the course of 1985, came virtually to a halt last year, while these countries added $11.4 billion to their outstanding bank balances. This outcome was, however, heavily influenced by Taiwan, whose massive official reserve gains were to a substantial extent redeposited with the reporting banks. Excluding Taiwan, the reporting banks' assets and liabilities vis-à-vis non-OPEC developing countries declined by $3.8 and 2.9 billion respectively. In contrast to Taiwan, other countries in Asia either reduced their banking debts or increased their borrowings only moderately. China and India each obtained $0.8 billion of new credits, while South Korea, which recorded a strong improvement in its balance of payments, repaid $2.3 billion, but at the same time drew down its deposits by $1.7 billion. China also reduced its deposits, by $0.7 billion, and was thus the largest net taker of new funds ($1.5 billion) from the reporting banks in this group; in 1985, however, its net borrowing had amounted to as much as $10.2 billion.

Estimated flows between the BIS reporting banks and groups of countries outside the reporting area.[1]

Positions of reporting banks vis-à-vis:	Flows at constant end-of-quarter exchange rates							Stocks at end-1986
	1980	1981	1982	1983	1984	1985	1986	
	in billions of US dollars							
OPEC countries[2]								
Claims	7.0	4.2	8.2	9.8	– 1.9	0.2	– 0.2	116.4
Liabilities	41.9	3.2	–18.2	–13.0	2.1	7.6	–22.1	143.8
Net[3]	–34.9	1.0	26.4	22.8	– 4.0	– 7.4	21.9	–27.4
Memorandum items:								
Foreign exchange reserves[4]	*14.2*	*– 8.8*	*– 7.5*	*– 8.3*	*– 3.4*	*6.4*	*–14.0*	*47.1*
Current-account balances	*107.0*	*53.5*	*– 8.5*	*–20.5*	*– 6.5*	*5.0*	*–30.5*	.
Non-OPEC developing countries								
Claims	38.9	39.9	19.8	12.6	9.8	11.1	0.1	365.1
Liabilities	4.0	9.5	4.6	10.4	19.3	5.7	11.4	195.3
Net[3]	34.9	30.4	15.2	2.2	– 9.5	5.4	–11.3	169.8
Memorandum items:								
Foreign exchange reserves[4]	*– 1.8*	*– 0.1*	*– 2.5*	*8.5*	*17.5*	*4.5*	*23.9*	*113.3*
Current-account balances	*–57.5*	*–83.5*	*–68.0*	*–50.0*	*–23.0*	*–26.0*	*–15.5*	.
Other developed countries								
Claims	15.4	16.8	16.0	7.2	5.3	6.8	4.8	113.8
Liabilities	5.7	3.8	– 0.1	1.3	3.1	3.2	3.8	41.6
Net[3]	9.7	13.0	16.1	5.9	2.2	3.6	1.0	72.2
Memorandum items:								
Foreign exchange reserves[4]	*1.2*	*– 1.6*	*1.8*	*2.4*	*– 1.0*	*– 1.2*	*7.5*	*20.6*
Current-account balances	*–15.2*	*–22.8*	*–21.3*	*–12.4*	*–15.4*	*–11.0*	*– 8.8*	.
Eastern Europe								
Claims	6.8	4.8	– 4.6	– 1.1	– 0.1	5.7	4.4	73.1
Liabilities	0.9	0.1	2.0	2.7	4.3	2.8	– 0.1	29.4
Net[3]	5.9	4.7	– 6.6	– 3.8	– 4.4	2.9	4.5	43.7

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 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] Up to the end of 1983 the BIS reporting area covered banks in Austria, Belgium-Luxembourg, Canada, Denmark, France, the Federal Republic of Germany, Ireland, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom, the United States and the offshore branches of US banks in the Bahamas, the Cayman Islands, Panama, Hong Kong and Singapore. As from end-1983 the reporting area includes, in addition, banks in 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 banking units in Bahrain and all offshore banks operating in the Netherlands Antilles. As a result, the first three of these countries are no longer included under "Other developed countries", while Bahrain is no longer included under "OPEC countries", except as regards the positions of banks in the United States. [2] Includes in addition Bahrain (up to end-1983), Brunei, Oman and Trinidad and Tobago. [3] A minus sign (–) equals net deposits. [4] At current exchange rates.

In Latin America the only major borrower of funds was Argentina, which drew a further $1.6 billion on the credit package agreed with the banks in 1985. The banks' claims on other Latin American countries either declined or remained virtually unchanged. In particular, claims on Mexico were reduced by $1.5 billion. At the same time Mexico's deposits with the reporting banks, which had declined by $1.5 billion in the first nine months of the year, rose by $1.9 billion in the fourth quarter as a result of substantial returns of flight capital. A $0.7 billion reduction in bank claims on Chile was essentially due to debt/equity swaps. Brazil reduced its deposits with the reporting banks by $1.3 billion and did not borrow any new funds. The reporting banks' claims on Colombia, the only major Latin American country that has not undertaken any rescheduling of its debts, remained unchanged despite the disbursement of a $1 billion loan signed in December 1985 with its creditor banks, while the country built up its deposits by $0.7 billion.

The reporting banks' business with individual groups of non-OPEC developing countries.

	Estimated flows at constant end-of-quarter exchange rates								Stocks at end-1986
	1979	1980	1981	1982	1983	1984*	1985	1986	
	in billions of US dollars								
Assets									
Latin America	23.2	27.4	30.5	12.1	8.3	5.3	1.7	– 1.6	221.8
Middle East	1.2	2.1	2.3	1.7	0.3	– 0.4	0.2	– 0.6	16.9
Africa	2.7	2.0	2.0	1.7	0.6	0.1	0.9	– 0.4	22.8
Asia	8.2	7.4	5.1	4.3	3.4	4.8	8.3	2.7	103.6
Total	35.3	38.9	39.9	19.8	12.6	9.8	11.1	0.1	365.1
Liabilities									
Latin America	4.9	– 0.9	4.7	– 1.9	5.8	10.1	0.4	0.4	70.8
Middle East	1.7	2.7	1.5	1.8	– 0.9	– 1.6	1.5	– 0.5	22.7
Africa	1.8	0.7	0.5	– 0.8	0.2	1.0	1.4	– 0.2	12.6
Asia	3.9	1.5	2.8	5.5	5.3	9.8	2.4	11.7	89.2
Total	12.3	4.0	9.5	4.6	10.4	19.3	5.7	11.4	195.3

* 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.

Taken as a group, OPEC countries met their 1986 foreign exchange shortfalls resulting from the lower oil prices not through new borrowing, but by drawing down their deposits with the reporting banks by $22.1 billion. At the end of the year these countries' combined net claims on the reporting banks amounted to only $27.4 billion, as against $48.7 billion twelve months earlier and $96.7 billion at their peak in March 1981. With the exception of the United Arab Emirates and Nigeria, which added $1.1 and 0.4 billion respectively to their deposits, deposit withdrawals were fairly widespread, but particularly significant for Saudi Arabia (– $7.8 billion), Venezuela (– $4.9 billion), Iran (– $3 billion), Kuwait (– $2.9 billion), Indonesia (– $2 billion) and Algeria (– $1.7 billion). On the borrowing side, in contrast, there were wide differences between individual countries. The reporting banks' claims declined by $1.4 and 0.8 billion vis-à-vis Venezuela and Kuwait respectively, but rose by $1.5 and 1.3 billion vis-à-vis Algeria and Iraq.

Claims on countries in eastern Europe, which had increased by $5.7 billion in 1985, grew by a further $4.4 billion. The bulk of this credit expansion was vis-à-vis the Soviet Union ($4.1 billion), which suffered a sharp contraction in its hard-currency earnings owing to the oil price fall. Reported claims on Poland fell by $0.8 billion, presumably largely as a result of transfers of claims to official export credit insurance institutions and outright write-downs. Other major borrowers in this group were the German Democratic Republic and Bulgaria, with new takings of $0.6 and 0.5 billion respectively.

Developed countries outside the reporting area borrowed $4.8 billion whilst building up their deposits with the reporting banks by $3.8 billion. The largest borrowers within this group were Australia, New Zealand and Turkey, which received $6.8, 2.5 and 1.4 billion respectively, but these three countries also added substantially to their deposits. The increases in the reporting banks' claims on Australia and New Zealand resulted in large measure from purchases of securities

issued by borrowers in these countries. Major reductions in outstanding bank credits were recorded vis-à-vis South Africa (– $1.9 billion), Portugal (– $1.8 billion), Greece (– $1.3 billion) and Yugoslavia (– $0.9 billion).

Developments in individual market centres. As regards the role of individual market centres, the outstanding feature continued to be the growing importance of Japan as a market-place. The external assets of banks in Japan surged last year by $127.4 billion, or 58 per cent. Since cross-border liabilities showed an even stronger increase, the external net creditor position of banks in Japan, which at the end of 1985 had amounted to $15.3 billion, was eliminated. Although, owing to the effects of three years of gradual but continual liberalisation, activity was quite buoyant throughout the year, nearly half of the expansion took place during the last quarter following the opening of the Japan Offshore Market at the beginning of December. At the end of 1986 external claims booked in the newly established offshore units amounted to $88.7 billion, or 26 per cent. of total external claims of banks in Japan. By the end of March 1987 they had expanded further to $116.1 billion.

Developments in individual banking centres.

External positions of banks in:	Flows at constant end-of-quarter exchange rates								Stocks at end-1986	
	Assets				Liabilities				Assets	Liabilities
	1981	1984	1985	1986	1981	1984	1985	1986		
	in billions of US dollars									
United Kingdom	79.5	23.1	30.7	86.7	78.7	35.6	45.7	97.4	714.5	758.9
France	9.1	8.2	7.4	9.4	14.9	6.6	4.7	12.2	188.0	181.2
Germany	7.4	7.4	19.4	38.8	1.5	5.5	6.4	11.0	158.3	99.4
Luxembourg	6.2	7.3	9.6	15.2	4.1	5.8	9.5	16.6	141.1	130.5
Belgium	8.8	10.8	16.1	22.6	9.8	12.4	16.9	23.6	124.6	142.9
Switzerland	5.1	2.2	9.1	10.3	2.8	1.0	8.1	9.6	95.6	61.4
Netherlands	7.4	3.9	5.2	5.9	4.6	1.7	4.2	9.7	88.1	83.3
Italy	6.4	2.9	8.7	3.8	4.4	6.6	5.7	8.5	58.1	79.9
Austria	2.4	1.9	5.2	6.0	1.8	3.8	5.6	6.8	45.7	49.1
Spain	.	1.3	1.7	2.9	.	0.6	– 1.3	4.4	23.7	23.8
Denmark	0.7	1.2	4.1	– 1.2	0.6	1.4	4.8	– 0.9	11.5	12.0
Sweden	0.1	–	1.6	1.2	1.9	– 0.3	3.0	3.4	10.8	23.6
Other European reporting countries[1]	0.8	2.2	1.3	3.5	0.9	3.6	4.8	7.4	16.8	37.9
Total European reporting countries	133.9	72.4	120.1	205.1	126.0	84.3	118.1	209.7	1,676.8	1,683.9
US IBFs	63.4	17.1	11.8	29.5	48.3	19.4	16.2	44.2	234.3	240.3
Other banks in the United States	12.3	– 2.5	– 8.8	18.3	–10.0	12.6	22.1	27.4	234.4	201.0
Total banks in the United States	75.7	14.6	3.0	47.8	38.3	32.0	38.3	71.6	468.7	441.3
Japan	20.7	21.9	53.4	127.4	21.8	23.8	41.4	148.1	345.3	346.0
of which: offshore market	.	.	.	*88.7*	.	.	.	*88.0*	*88.7*	*88.0*
Canada	2.7	1.8	2.0	6.7	18.0	1.2	2.4	3.5	53.0	69.7
Other reporting countries[2]	31.8	13.4	55.0	89.6	33.6	8.7	42.3	77.0	677.3	638.6
Total	264.8	124.1	233.5	476.6	237.7	150.0	242.5	509.9	3,221.1	3,179.5

[1] Includes Ireland and, as from 1984, also Finland and Norway. [2] Includes, up to 1983, the branches of US banks in the Bahamas, the Cayman Islands, Panama, Hong Kong and Singapore. As from 1984 this item also covers non-US banks in these market centres, except Panama, plus all offshore units in Bahrain and all offshore banks operating in the Netherlands Antilles.

There are certain similarities between the Japan Offshore Market and the US international banking facilities. Both offshore markets are subject to less stringent monetary regulations, are separated from domestic banking activity and benefit from a privileged tax status, which in Japan, however, is limited to the exemption of interest payments to non-residents from withholding tax. Another important aspect of the Japan Offshore Market is that it has given smaller Japanese banks greater access to international financial business.

Whereas in the United States the branches and agencies of foreign banks account for a significant share of the activity of the IBFs, the Japan Offshore Market seems so far to have been predominantly utilised by Japanese banks. This contrast can be explained by the greater importance of foreign banks in the United States and by the fact that the Japan Offshore Market offers fewer comparative advantages to foreign financial institutions.

The immediate effect of the opening of the Japan Offshore Market was an expansion of business with the branches of Japanese banks elsewhere, especially those in the Asian offshore markets. Total cross-border positions of Japanese banking offices with one another worldwide can be estimated to have increased during the fourth quarter of 1986 by roughly $80 billion. This was reflected in particular in the external claims of banks in other offshore centres, notably Hong Kong and Singapore, which increased by a record $44.3 billion.

The US banking sector continued to contribute to the financing of the country's current-account deficit last year. External claims of banks in the United States, which had shown hardly any growth in 1985, expanded by $47.8 billion, but liabilities recorded an even stronger increase. As a result, the banks' external net creditor position narrowed by a further $23.8 billion to $27.4 billion, down by over $100 billion from its peak level of March 1983. Another salient development involving banks in the United States was the sharp rise in external lending in foreign currency, which expanded by $5.8 billion, or 30 per cent., last year.

The growth of external claims of banks in reporting European countries also accelerated sharply between 1985 and 1986 from $120 to 205 billion, with roughly 10 per cent. of the 1986 increase taking the form of purchases of international securities. Banks in the United Kingdom alone accounted for $86.7 billion, or 42 per cent., of this expansion. Japanese banks in London, where they are the largest nationality group, contributed over $70 billion to this growth. Japanese banks also appear to have played a significant role in the $22.6 billion increase in the external assets of banks in Belgium. In contrast to London, however, the bulk of this expansion was in currencies other than the dollar, notably Swiss francs and ECUs.

After the UK banks, banks in Germany recorded the largest expansion in external assets, namely $38.8 billion, the bulk of which was in domestic currency. Whereas in all the other reporting European countries except Switzerland the banks were net importers of external funds, the German banks added $27.8 billion to their external net creditor position last year.

The nationality structure of international banking. Looked at from the point of view of the nationality of ownership of the reporting banks, the development of international banking activity in 1986 was somewhat uneven. Nearly 57 per cent. of the $725.8 billion increase (in current dollar terms) in total international banking

International bank assets by nationality of banks.*

Parent country of bank	December 1984		December 1985		December 1986	
	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	200.7	8.9	233.7	8.7	276.1	8.1
Germany	143.2	6.4	191.2	7.1	270.0	7.9
Italy	90.6	4.0	113.2	4.2	145.1	4.3
Japan	517.9	23.0	706.7	26.4	1,117.7	32.8
Switzerland	82.9	3.7	109.2	4.1	152.0	4.5
United Kingdom	168.9	7.5	192.2	7.2	211.7	6.2
United States	594.5	26.4	589.6	22.0	598.3	17.6
Other	450.7	20.1	544.8	20.3	635.4	18.6
Total	2,249.4	100.0	2,680.5	100.0	3,406.3	100.0

* 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 (as from end-1985), 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.

claims — as measured by cross-border claims plus local claims in foreign currency — was accounted for by Japanese banks, whose share of total activity expanded from 26 to nearly 33 per cent. The reasons for the strong growth of Japanese banks have already been discussed in the earlier part of this chapter; it should be noted, however, that almost 42 per cent. of the increase in Japanese banks' international assets represented claims on related offices. If these intra-bank positions are excluded, the rate of growth in Japanese banks' international banking activity (47 per cent.) was not very different from that of German and Swiss banks (around 40 per cent. each), although in the case of German and Swiss banks exchange rate effects accounted for a much larger part of the increases.

Elsewhere, growth was more modest. The US banks, which continued to reassess their international role, increased their international assets by barely 2 per cent., and their market share declined further to 17.6 per cent., or not much more than half of that of Japanese banks. Two years earlier, at the end of 1984, the US banks' share had still exceeded that of Japanese banks. The international banking claims of French and UK banks expanded by 18 and 10 per cent. respectively.

There were also pronounced differences in the composition of the growth of international assets and liabilities of different national banking groups. Japanese banks alone accounted for $97.4 billion, or 56 per cent., of total final lending to non-bank entities. This was funded by net borrowings in the interbank market, by security issues, by funding through related offices in non-reporting centres and by borrowing in local currency markets. Italian and French banks displayed a broadly similar lending and funding pattern. On the other hand, German banks were large recipients of funds from non-banks and very significant providers of funds to the interbank market. US banks, which continued to be relatively large direct recipients of non-bank deposits, were together with the Canadian banks the only nationality group to reduce their credits to non-banks.

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

Parent country of bank	Changes during 1986				Stocks at end-1986			
	Related offices	Other banks	Non-banks[1]	Securities[2]	Related offices	Other banks	Non-banks[1]	Securities[2]
	in billions of US dollars							
France								
Assets	4.3	25.1	12.7	0.3	33.7	155.6	86.4	0.4
Liabilities	7.5	31.9	4.9	1.1	42.0	171.7	47.1	3.1
Germany								
Assets	4.4	63.7	10.6	0.1	17.8	172.1	79.7	0.4
Liabilities	7.2	14.0	24.6	0.2	27.9	100.1	72.9	2.7
Italy								
Assets	1.7	19.7	10.4	0.1	5.2	103.3	36.3	0.3
Liabilities	2.0	29.7	1.7	2.3	7.6	125.0	12.4	5.6
Japan								
Assets	171.3	142.4	97.4	– 0.1	363.3	444.6	307.8	2.0
Liabilities	203.5	154.1	23.2	17.0	399.6	512.0	113.3	45.6
Switzerland								
Assets	6.9	26.0	9.2	0.7	23.0	80.9	40.5	7.6
Liabilities	15.7	15.1	5.3	– 2.2	55.5	31.7	37.9	7.9
United Kingdom								
Assets	4.1	9.8	5.9	– 0.3	29.1	101.6	79.2	1.8
Liabilities	6.0	6.2	8.7	2.8	31.3	88.6	77.3	29.0
United States								
Assets	4.7	7.0	– 2.7	– 0.2	252.8	179.9	163.0	2.6
Liabilities	3.7	7.6	10.9	– 2.6	222.2	120.2	196.7	32.8
Other								
Assets	16.1	44.8	28.9	0.8	85.0	303.7	242.2	4.5
Liabilities	14.2	59.6	26.4	3.3	74.7	353.2	210.2	18.7
Total								
Assets	213.5	338.5	172.4	1.4	809.9	1,541.7	1,035.1	19.6
Liabilities	259.8	318.2	105.7	21.9	860.8	1,502.5	767.8	145.4

[1] Includes assets and liabilities vis-à-vis official monetary institutions. [2] Includes CDs.

Currency composition of international banking activity and growth of the ECU market. Whereas during the preceding years the relative share of the dollar had tended to decline, the pronounced expansion in international banking aggregates last year was mainly due to dollar business. Total cross-border lending in dollars of banks in industrial reporting countries surged by $227.2 billion, or more than four times as much as in 1985 (see the table overleaf). Nearly 60 per cent. of this expansion was concentrated on banks in Japan and the United Kingdom.

In the non-dollar sector of the market, growth was again strongest in the yen sector, which expanded by $66.2 billion, or 42 per cent., and accounted for over 40 per cent. of the total increase in non-dollar assets. The acceleration was due to yen lending out of Japan, whereas the increase in Euro-yen assets was of the same magnitude as in 1985. There was no expansion in Euro-Deutsche Mark assets, although Deutsche Mark lending out of Germany increased sharply. By contrast, relatively strong growth was recorded in Euro-sterling (+ $8.7 billion) and Euro-lira assets (+ $4 billion), largely as a result of borrowings by UK and Italian residents respectively.

After several years of rapid expansion, banking activity denominated in ECUs slowed down sharply in 1986. The growth in ECU assets, including claims on residents, dropped off from $16.6 billion in 1985 to $7 billion (see the table on page

The currency composition of reporting banks' cross-border positions.[1]

Currencies		Exchange rate adjusted flows								Stocks at end-1986	
		Assets				Liabilities				Assets	Liabilities
		1981	1984	1985	1986	1981	1984	1985	1986		
		in billions of US dollars									
US dollars	A	88.0	22.0	52.9	185.2	116.5	40.0	41.3	207.6	1,045.3	1,161.9
	B	74.4	8.8	1.4	42.0	38.4	27.9	33.5	60.9	443.6	411.8
Other	A	45.2	34.7	64.1	62.9	39.0	32.7	78.2	106.6	560.4	621.8
	B	25.4	32.4	46.4	90.0	10.2	30.2	34.8	53.2	441.4	299.0
of which:[2]											
Deutsche Mark	A	15.8	10.6	13.5	–	10.2	16.4	16.0	28.8	208.8	236.0
	B	4.8	4.2	15.5	26.4	0.2	2.9	3.0	2.3	116.4	61.6
Swiss francs	A	11.2	2.9	15.3	7.9	15.8	2.7	18.9	17.6	111.6	133.5
	B	2.6	1.6	2.8	3.3	2.4	1.0	2.4	1.4	49.2	15.9
Japanese yen	A	6.6	6.4	21.0	21.4	5.8	1.8	19.4	21.9	85.2	81.6
	B	5.2	11.9	22.1	44.8	1.7	11.3	17.9	29.9	137.9	91.5
Pounds sterling	A	3.7	5.0	4.8	8.7	0.3	4.7	7.1	10.1	32.6	38.2
	B	5.0	6.7	2.3	8.9	4.8	8.3	5.6	9.3	49.8	61.0
ECUs		.	12.8	13.7	6.9	.	10.5	12.4	4.6	53.1	46.4

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.

107), or from nearly 45 per cent. to about 10 per cent. Since ECU liabilities showed an even smaller increase, the amount of ECU activity that had to be funded by the banks themselves through the bundling of component currencies rose by $3 billion to a total of $10.1 billion.

Two developments help to explain the slowdown in the growth of the ECU market last year. Firstly, exchange rate uncertainties with regard to some member currencies impaired the usefulness of the ECU basket for hedging purposes. Secondly, the positive interest differential between ECU and Euro-DM deposits became smaller. As a result, ECU deposits by non-bank entities from the EEC contracted by $0.8 billion last year, after increasing by $2.6 billion in 1985. This turn-round was almost fully accounted for by residents from the Benelux countries, who had been the most important group of investors in previous years. On the other hand, new final lending to non-bank entities continued at the same rate as in 1985 ($2 billion), with credits to non-EEC residents increasing by nearly 100 per cent.

The syndicated loan market. After reaching in 1985 its lowest level for a decade, activity in the syndicated credit market showed signs of revival last year, with the total of announced new international credits picking up from $21.1 to 37.8 billion (see the table on page 108). Of the 1986 figure, however, $8 billion represented medium-term facilities arranged for certain problem debtor countries, whereas in 1985 such non-spontaneous credits had only amounted to $2.3 billion. With the exception of eastern Europe, the increased recourse to syndicated loan facilities encompassed all groups of countries, but the acceleration was particularly pronounced in the reporting countries themselves, from $7.1 billion in 1985 to $14.7 billion. The largest facilities were arranged for borrowers in the United States ($3.8 billion), France ($3.2 billion) and Italy ($2.1 billion). New facilities extended to developing countries (including OPEC) increased from $5.6 to 8.4 billion

The structure of the ECU banking market.

	Assets				Liabilities			
	Flows[1]			Stocks at end-1986	Flows[1]			Stocks at end-1986
	1984	1985	1986		1984	1985	1986	
	in billions of US dollars							
Positions vis-à-vis non-banks:								
domestic	2.6	– 0.7	0.1	6.5	0.6	1.7	– 0.4	3.4
cross-border within the EEC	1.2	1.2	0.6	6.1	0.3	0.9	– 0.4	1.9
cross-border with non-EEC residents	0.4	0.9	1.0	2.1	–	0.4	–	0.5
unallocated[2]	0.6	0.6	0.3	2.2	0.2	0.3	–	0.9
Total positions vis-à-vis non-banks	4.8	2.0	2.0	16.9	1.1	3.3	– 0.8	6.7
Positions vis-à-vis banks:								
domestic	3.8	3.6	–	13.1	3.4	3.7	– 0.2	12.9
cross-border within the EEC	8.3	7.6	0.8	31.0	8.3	7.6	1.8	32.6
cross-border with non-EEC residents	0.9	2.0	3.3	7.4	0.9	2.6	2.8	8.0
unallocated[2]	1.4	1.4	0.9	4.3	0.8	0.6	0.4	2.4
Total interbank positions	14.4	14.6	5.0	55.8	13.4	14.5	4.8	55.9
Total	19.2	16.6	7.0	72.7	14.5	17.8	4.0	62.6

[1] At constant end-of-quarter exchange rates. [2] Includes international institutions other than the BIS.

(excluding the officially sponsored credit packages), with South Korea ($1.3 billion), India ($1 billion), Algeria and China ($0.9 billion each) being the largest beneficiaries.

In the first quarter of 1987, owing partly to the difficulties in the FRN market, there was a further strong expansion of announced new syndicated credits, bringing the total to $17.3 billion, or an annual rate of nearly $70 billion, the largest amount since 1982. Growth was again heavily concentrated in the reporting countries, where the figures were boosted by the announcement of a $5 billion credit facility for British Petroleum.

The international securities markets.

The short-term sector. In 1986 the market for Euro-notes continued to expand strongly, but more in the direction of an international commercial paper market and away from earlier arrangements under which groups of underwriting banks guaranteed the availability of funds in adverse circumstances. The volume of new Euro-note facilities arranged rose by 40 per cent. to $69.5 billion, and by the end of 1986 there were more than 350 facilities in place. The cumulative amount of paper issued under these facilities seems to have totalled only about $35 billion at the end of the year, but the utilisation ratio is reported to be increasing. Uncommitted facilities not directly backed by standby arrangements accounted for nearly 80 per cent. of the new facilities and mainly took the form of Euro-commercial paper programmes. In addition, an increasing number of facilities were arranged for which no limit was set on the amount of paper that can be issued.

International financial market activity, by market sectors and borrowers.

Types of instrument \ Borrowers	United States	Other industrial reporting countries[1]	Other developed countries	Eastern Europe	Developing countries (incl. OPEC)	Other[2]	Total
	in billions of US dollars						
International bond issues							
1981	7.2	24.1	1.6	–	3.2	7.9	44.0
1982	15.3	37.6	4.0	–	3.1	11.6	71.6
1983	7.9	43.8	3.6	–	1.8	14.9	72.0
1984	24.8	60.8	6.1	0.1	2.7	13.4	107.9
1985	40.2	87.2	9.5	0.4	6.2	20.2	163.7
1986	40.7	140.7	15.6	0.6	2.9	19.8	220.3
1987 Q1	9.4	38.7	4.0	0.3	0.4	6.9	59.7
Euro-note facilities[3]							
1981	–	–	0.5	–	0.5	–	1.0
1982	0.4	0.8	0.4	–	0.5	0.2	2.3
1983	0.4	1.6	1.0	0.1	0.2	–	3.3
1984	3.0	9.6	4.8	0.1	0.6	0.7	18.8
1985	16.6	20.8	9.8	0.1	1.0	1.2	49.5
1986	18.3	37.4	11.0	0.1	1.0	1.7	69.5
1987 Q1	2.7	10.1	2.9	–	0.1	0.2	16.0
Total securities markets							
1981	7.2	24.1	2.1	–	3.7	7.9	45.0
1982	15.7	38.4	4.4	–	3.6	11.8	73.9
1983	8.3	45.4	4.6	0.1	2.0	14.9	75.3
1984	27.8	70.4	10.9	0.2	3.3	14.1	126.7
1985	56.8	108.0	19.3	0.5	7.2	21.4	213.2
1986	59.0	178.1	26.6	0.7	3.9	21.5	289.8
1987 Q1	12.1	48.8	6.9	0.3	0.5	7.1	75.7
Syndicated bank loans[4]							
1981	8.3[5]	30.8	6.0	1.1	48.0	2.3	96.5[5]
1982	7.0	23.0	12.5	0.8	53.5	2.6	99.4[6]
1983	3.4	13.7	5.6	0.7	26.7	1.7	51.8[6]
1984	3.6	8.6	4.3	2.5	17.1	0.5	36.6[6]
1985	2.1	5.0	2.3	3.7	7.9	0.1	21.1[6]
1986	3.8	10.9	3.6	2.0	16.4	1.1	37.8[6]
1987 Q1	2.4	10.3	1.3	0.8	1.9	0.6	17.3

[1] Countries contributing to the BIS international banking statistics. [2] Offshore centres, international institutions plus unallocated items. [3] 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/Euro-commercial paper (ECP) programmes. [4] Excludes existing loans newly negotiated where only spreads are changed. [5] Excludes $35 billion of US takeover-related standbys. [6] Includes the following amounts of non-spontaneous bank lending: $11.2 billion in 1982, $13.7 billion in 1983, $6.5 billion in 1984, $2.3 billion in 1985 and $8 billion in 1986.

Source: Bank of England.

Although the shift to arrangements of the commercial paper type has taken place partly in response to the imposition of capital requirements on underwriting commitments, more general cost considerations have also played a role. In addition to dispensing with the guarantees provided by the underwriting bank, many new facilities have incorporated the more flexible terms with respect to maturity, pricing, distribution and settlement which are characteristic of the US commercial paper markets.

The growth of the market for Euro-notes has been accompanied by its increasing linkage to domestic markets and its extension to currencies other than the dollar. Multiple-component facilities, which enable borrowers to draw funds in a variety of forms in the domestic or Euro-markets and in a number of currencies, constituted a significant proportion of new arrangements last year. More

importantly, the integration between domestic and international sectors has taken place through a narrowing of cost differentials. The evidence which exists in the case of the US dollar market suggests that, despite the fact that interest rates on Euro-commercial paper exceed those on US domestic issues for comparable borrowers, this differential is offset by lower dealing fees. A related feature has been the development of new domestic markets for commercial paper. Since the end of 1985 such markets have been established in the United Kingdom, the Netherlands and France. In the United Kingdom a steady stream of programmes has been arranged since the market opened in the spring of 1986, but its growth has been hampered by the regulations in force. Excluding open-ended commercial paper programmes, $2 billion of new facilities were arranged last year and by the end of the year less than $1 billion of paper had been issued. After a sharp expansion in the first half of 1986, new issues of commercial paper in France slowed down, with roughly $4 billion outstanding at the end of the year.

As regards instruments, the major innovation in 1986 was the development of medium-term Euro-note facilities. Like commercial paper, medium-term Euro-notes are continuously issued unsecured notes, but with longer maturities, ranging from nine months to ten years. Such instruments, which bridge the gap between the shorter and longer-term sectors of the markets, allow borrowers flexibility with respect to maturity profiles and the size and timing of issues. In the United States medium-term note programmes have been available to high-quality financial companies for some time, but account for no more than 10 to 15 per cent. of the total domestic commercial paper market. In recent years, however, the emergence of a secondary market and the flexibility afforded by "shelf registration" procedures allowing issuers to tap US securities markets any time after satisfying registration requirements (rather than on a single, predetermined issue date) have provided a further growth impetus. In the Euro-market $3.7 billion of medium-term facilities were arranged during the course of 1986.

Although the number of Euro-note facilities has grown, the market remains essentially restricted to prime borrowers and to borrowers from developed countries. However, the growing similarities with commercial paper have meant that a larger number of corporate entities which traditionally do not tap the Euro-markets have arranged Euro-note facilities as a back-up for their domestic commercial paper programmes. US corporations and their finance affiliates remained the largest borrowers last year, taking $18.3 billion. The most salient feature, however, was the sharp increase in borrowing by Japanese entities, from $0.5 billion in 1985 to $10.4 billion. This rapid growth took place mainly during the first half of the year and was largely accounted for by Japanese banks attempting to broaden the investor base for their CD issues. Other major users of these facilities were Australia ($6.9 billion), France ($4.5 billion) and Sweden ($4.4 billion).

The volume of new facilities arranged reached its highest level, $20.4 billion, in the second quarter of 1986. It has slowed down since then, and amounted to $16 billion in the first quarter of 1987.

The long-term sector. Following two consecutive years of strong growth, activity in the international bond market reached another record level. Total issues soared to $220 billion, up by 35 per cent. from 1985. However, this expansion in new issue activity was accompanied by a sharp increase in amortisations and early

Structural features of the international bond markets.[1]

Items	1983	1984	1985	1986 year	1986 first quarter	1986 second quarter	1986 third quarter	1986 fourth quarter	1987 first quarter
	in billions of US dollars								
Total issues	72.0	107.9	163.7	220.3	55.4	55.7	60.1	49.1	59.7
by type of issue:									
fixed rate issues	56.7	73.9	107.8	172.5	47.0	46.4	39.3	39.8	57.0
floating rate notes	15.3	34.0	55.9	47.8	8.4	9.3	20.8	9.3	2.7
of which:									
equity-related[2]	*9.9*	*11.9*	*11.6*	*27.1*	*5.3*	*6.9*	*7.6*	*7.3*	*7.8*
by currency of issue:									
US dollar Euro	35.8	67.1	95.1	114.8	25.9	29.6	33.7	25.6	18.2
foreign	3.4	1.3	3.5	5.7	2.2	–	0.7	2.8	1.2
Swiss franc	14.0	13.1	15.0	23.3	6.3	4.9	6.1	6.0	6.2
Deutsche Mark	6.4	7.0	11.3	16.2	4.4	5.1	3.9	2.8	6.6
ECU[3]	1.7	2.9	7.3	6.8	1.6	2.8	0.8	1.6	3.7
Yen Euro	0.3	1.2	6.8	18.6	5.1	3.0	5.8	4.7	8.6
foreign	3.7	4.7	5.4	4.0	2.5	0.6	0.4	0.5	0.5
Sterling Euro	2.0	4.1	5.6	10.5	3.1	3.9	3.0	0.5	5.3
foreign	0.9	1.4	1.0	0.4	0.2	0.2	–	–	–
Other	3.8	5.1	12.7	20.0	4.1	5.6	5.7	4.6	9.4

[1] Fixed rate bonds and FRNs. [2] Convertible bonds and bonds with equity warrants. [3] Excludes bonds issued in borrowers' national markets.

Source: Bank of England.

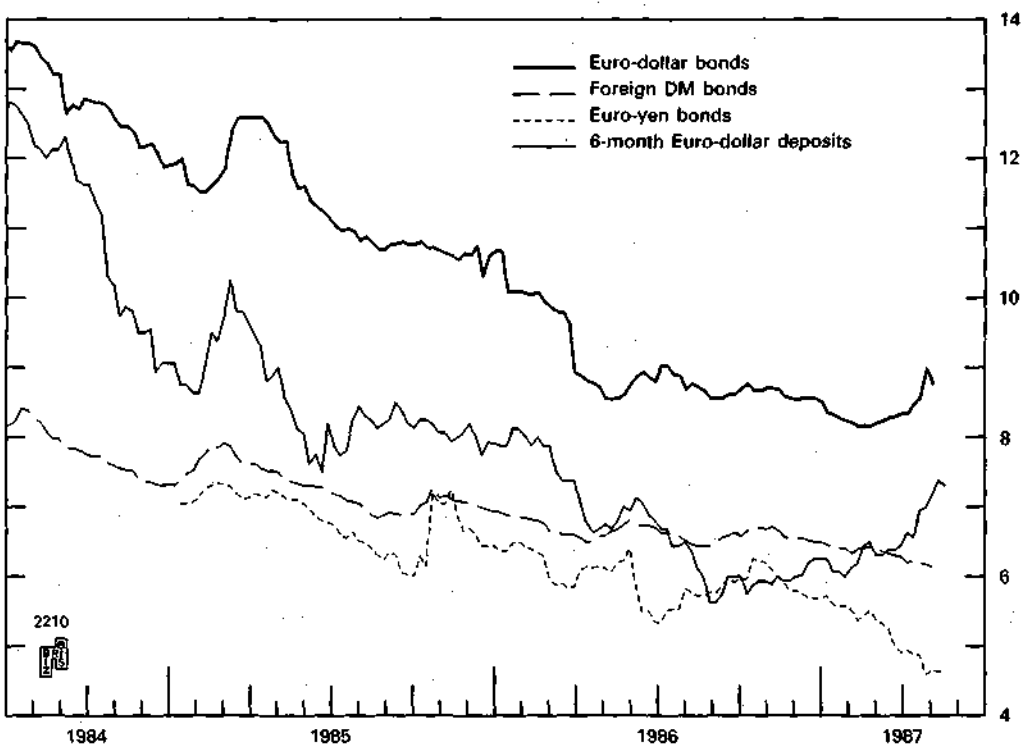
redemptions, which resulted in repayments of principal of roughly $64 billion, or two-thirds more than in 1985. As a result, the net volume of bond issues expanded by "only" 25 per cent. to $156 billion.

Various factors affected the volume, timing, pricing and currency denomination of new issues last year. Firstly, the decline in interest rates, as well as expectations regarding future rate movements, largely governed the relative shares of fixed and floating rate bonds. In the first half of 1986, when dollar interest rates fell sharply, from 10 per cent. to 8 per cent. or less, activity was most buoyant in the fixed rate sector as borrowers tried to lock in the lower interest rates, with the share of fixed rate bonds rising to 84 per cent. from 66 per cent. in 1985. Moreover, the favourable trend of interest rates and other borrowing conditions encouraged the activation of call provisions and spurred a large volume of refinancing operations. As the outlook for interest rates became more uncertain towards the end of the summer and their decline was temporarily reversed, the issuance of floating rate notes rebounded, to account for 35 per cent. of total new bond issues during the third quarter. Activity in the FRN market was also boosted by banks' issues of perpetual FRNs, which are recognised as primary capital for supervisory purposes in some countries. Towards the end of the year, however, as a result of the difficulties in this specific market sector, spill-over effects brought the issuance of FRNs to a virtual halt (see page 96 above).

Secondly, in 1986 a significant volume of international bond issues was associated with interest and currency swaps, which enable borrowers to raise funds in the markets in which they enjoy a comparative advantage. Although no figures

Yields of selected international bonds and Euro-dollar deposit rates, 1984–87.

Wednesday figures, in percentages.



are available for the volume of swaps with an international dimension, one estimate, based only on the activity of US banks and foreign banks operating in the United States, suggests that at the end of 1986 the value of outstanding contracts amounted to $480 billion, or 120 per cent. more than a year earlier. It is also estimated that roughly 20 per cent. of new international bond issues last year were the object of currency or interest rate swaps, while issuing activity in some of the smaller currency sectors seems to have been almost entirely swap-driven. For example, at least 70 per cent. of new issues in Australian and New Zealand dollars were swapped by borrowers into other currencies. The increase in activity in several European currencies, such as the French franc, Dutch guilder and Danish krone, also appears to have been largely related to swap operations. Moreover, nearly 50 per cent. of new issues of yen-denominated bonds were swapped in order to circumvent Japanese domestic regulations, notably restrictions on longer-term borrowing. In addition to the growth of liability-based swaps, another feature was the growth of asset swaps which repackage securities into synthetic fixed or floating interest rate paper.

A third factor influencing issuing activity last year was the general buoyancy of equity markets and the expectations of borrowers and investors regarding the future performance of share prices. This contributed both to the strong expansion of equity-related bond issues and to the growth of the new market for Euro-equities. Issues of convertible paper and bonds with equity warrants more than doubled from $11.6 billion in 1985 to $27.1 billion. Japanese companies alone

accounted for more than half of the 1986 total, since such issues enable them to circumvent costly and cumbersome domestic regulations on conventional share issues. Indeed, the exercise of options attached to such securities accounted for nearly three-quarters of all share capital raised in Japan during 1986.

In addition to the proliferation of equity-related bonds, there were significant developments in the international markets for equities. Euro-equities are generally issued outside domestic markets through syndicates and distributed in the same way as Euro-bonds, are in bearer form, and are not subject to domestic listing regulations. Initial placings in the Euro-equity market in 1986 amounted to $7.5 billion, nearly four times as much as in the previous year. The bulk of these issues were by multinational companies with high international standing, but a number of important issues were also arranged in conjunction with the privatisation of public sector enterprises.

Although in current dollar terms the share of total international bond issues denominated in dollars declined from 60 per cent. in 1985 to 55 per cent. last year, it is difficult to assess the significance of this shift. The pronounced exchange rate movements of the US dollar against the other major currencies boosted the value of issues in non-dollar currencies. Moreover, swap-driven bond issues tend to blur the distinction between activities in different currency sectors. Nevertheless, one striking feature in this area was the rapid growth of yen-denominated issues, which expanded by 85 per cent. to $22.6 billion, or nearly the same level as Swiss franc issues, which also soared last year, by 55 per cent. to $23.3 billion, with Japanese issuers playing an important role in both these currency sectors.

The dominance of borrowers from developed countries in the international bond markets became even more pronounced last year, with their market share expanding to 89 per cent. from 84 per cent. in 1985. US entities continued to be the single largest takers of funds ($41 billion), but their share of total new issues was somewhat less than in the previous year, reflecting some hesitancy on the part of foreign investors towards US companies whose credit-standing had been impaired by earlier overborrowing, partly in connection with take-over activity.

Japanese entities, the second-largest group of borrowers, stepped up their issuance of international bonds sharply, from $20.3 to 31.7 billion. Borrowing by UK entities rose by over one-third to $19.5 billion. The UK Government obtained $4 billion in one issue to strengthen its foreign exchange reserves, UK banks raised $2.5 billion of primary capital through the issue of perpetual FRNs, and a number of UK companies shifted their sterling issues to the international markets, contributing to a strong expansion in the Euro-sterling sector last year. Other developed countries, too, considerably stepped up their recourse to the international bond market, by nearly 70 per cent. to $105.1 billion, although refinancing activities accounted for a significant proportion of this amount. The largest borrowers were Canada ($17.4 billion), France ($13 billion), Germany ($10.7 billion), Australia ($10.1 billion) and Denmark ($9.2 billion). Developing countries, including OPEC members, reduced their already modest recourse to the international bond markets from $6.2 billion in 1985 to $2.9 billion, but they benefited from the $8.2 billion raised in 1986 by international development institutions.

Groups of borrowers in the international bond markets.

Borrowing countries or areas	Years	Total	of which					
			US dollars	Swiss francs	Japanese yen	Deutsche Mark	ECUs	Other
		in billions of US dollars						
United States	1983	7.9	6.1	1.3	–	0.3	–	0.2
	1984	24.8	21.4	1.1	0.7	0.8	0.1	0.7
	1985	40.2	30.3	2.6	3.3	1.1	0.8	2.1
	1986	40.7	28.7	4.3	4.4	0.8	0.7	1.8
	1987 Q1	9.4	6.2	0.5	0.5	0.3	0.1	1.8
Japan	1983	11.3	4.0	6.5	–	0.6	0.1	0.1
	1984	15.8	9.1	5.7	0.1	0.5	0.1	0.3
	1985	20.3	11.3	5.8	0.8	0.8	0.7	0.9
	1986	31.7	19.2	7.9	2.5	0.7	0.5	0.9
	1987 Q1	8.9	4.1	2.4	1.3	0.5	0.3	0.3
Other developed countries	1983	36.1	21.1	4.3	2.0	3.3	0.9	4.5
	1984	51.1	32.6	4.3	2.4	3.4	1.6	6.8
	1985	76.4	44.2	4.5	4.3	6.1	4.4	12.9
	1986	124.6	64.4	8.8	11.3	11.1	4.2	24.8
	1987 Q1	33.8	7.7	2.7	5.9	4.2	2.2	11.1
Developing countries (including OPEC)	1983	1.8	1.3	0.1	0.3	–	–	0.1
	1984	2.7	1.6	0.2	0.7	–	–	0.2
	1985	6.2	4.0	0.1	1.2	0.7	–	0.2
	1986	2.9	1.1	0.1	1.4	0.2	–	0.1
	1987 Q1	0.4	–	0.1	0.2	0.1	–	–
Others (including eastern Europe)	1983	0.2	0.1	0.1	–	–	–	–
	1984	0.3	0.2	–	0.1	–	–	–
	1985	1.9	1.4	0.1	0.1	0.1	0.1	0.1
	1986	2.3	1.7	0.1	0.1	0.3	–	0.1
	1987 Q1	0.9	0.3	0.2	0.2	0.1	–	0.1
International institutions	1983	14.7	6.6	1.7	1.7	2.2	0.7	1.8
	1984	13.2	3.5	1.8	1.9	2.3	1.1	2.6
	1985	18.7	7.4	1.9	2.5	2.5	1.3	3.1
	1986	18.1	5.4	2.1	2.9	3.1	1.4	3.2
	1987 Q1	6.3	1.1	0.3	1.0	1.4	1.1	1.4
Total	1983	72.0	39.2	14.0	4.0	6.4	1.7	6.7
	1984	107.9	68.4	13.1	5.9	7.0	2.9	10.6
	1985	163.7	98.6	15.0	12.2	11.3	7.3	19.3
	1986	220.3	120.5	23.3	22.6	16.2	6.8	30.9
	1987 Q1	59.7	19.4	6.2	9.1	6.6	3.7	14.7

Source: Bank of England.

During the first quarter of 1987 international bond issues, which in the preceding quarter had fallen off somewhat, nearly regained the peak level of $60 billion reached in the third quarter of 1986. However, there was a pronounced shift in the structure of the market. Issues of FRNs came to a virtual standstill as the continuing problems in the sector for perpetuals spread to the FRN market in general. On the other hand, issues of fixed rate bonds advanced from just under $40 billion in the two preceding quarters to a record level of $57 billion, despite increasing interest rate uncertainties associated with a gradual upturn in US long-term bond yields. Reflecting the climate in the exchange markets, the shift towards fixed rate paper was accompanied by a pronounced contraction in the market share of the dollar sector, from 58 per cent. in the fourth quarter of 1986 to 32.5 per cent.,

with non-dollar issues attaining their highest level ever. Issues denominated in Japanese yen reached a record level of $9.1 billion, thereby overtaking Swiss franc issues and making the yen sector the second-largest in the market. However, issuing activity increased most strongly in some of the smaller currency sectors, such as in Deutsche Mark (from $2.8 billion in the fourth quarter of 1986 to $6.6 billion), sterling (from $0.5 to 5.3 billion) and "other" currencies (from $4.6 to 9.4 billion) including the Australian and New Zealand dollars and the French franc (see the table on page 110). A vigorous comeback from $1.6 billion in the fourth quarter of 1986 to $3.7 billion was, moreover, staged in the ECU sector, where the January 1987 EMS realignment had helped to remove some of the earlier exchange rate uncertainties. Another feature of the first quarter was the continued high level of equity-related bond issues ($7.8 billion), reflecting the buoyancy of share prices.

The debt situation.

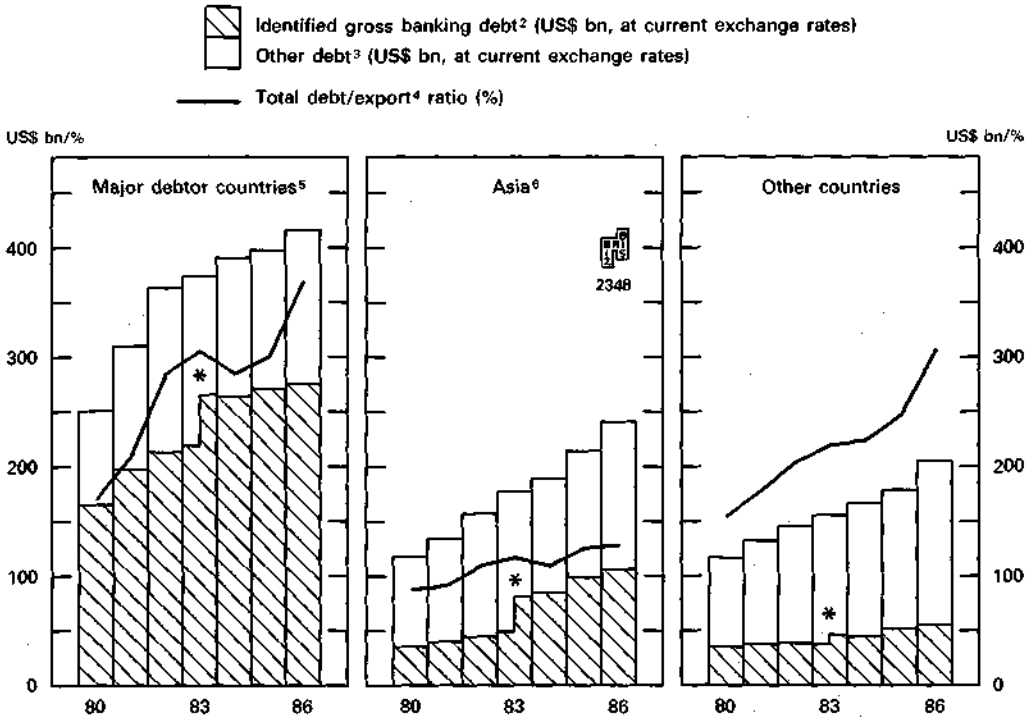
The events of 1986 suggest that considerable time and further efforts will be needed to achieve a lasting solution to the international debt problems. The combined current-account deficit of the fourteen major Third World debtor countries addressed by the Baker initiative (i.e. the fifteen Baker countries minus Yugoslavia), which had been nearly eliminated in 1984–85, began to widen again. The debt/export ratio of these countries, after a renewed increase during 1985, showed a further sharp deterioration, from about 300 to 370 per cent. Even the ratio between interest payments and export proceeds rose last year, despite the decline in dollar interest rates. This disappointing outcome was above all the result of a $20 billion drop in export revenues, which fell to only about three-quarters of their 1980–81 peak level. External debts, by contrast, if valuation effects resulting from exchange rate movements are excluded, showed hardly any increase last year.

The experience of these major countries with large banking debts was broadly shared by numerous smaller problem debtor countries, the bulk of whose debt is owed to foreign official creditors. On the other hand, a limited number of newly industrialised countries, notably in the Pacific basin, with relatively low debt service ratios and strongly growth and market-oriented policies, succeeded in expanding their exports sharply last year.

The setback for the heavily indebted countries in 1986 resulted from a combination of external and domestic factors. On the external side, the major factor was the general weakness of raw material prices, which produced a 17 per cent. deterioration in these countries' terms of trade (see the graph on page 116). In particular, the sharp fall of oil prices severely affected certain countries in this group, notably Mexico, although others, such as Brazil, benefited from a lower oil import bill. As a group, however, the countries to which the Baker initiative is addressed are large net exporters of oil and their combined surplus from oil trade fell last year by $18 billion, which was more than the overall deterioration in their aggregate current-account balance.

On the domestic side, the principal reason for the deterioration in the balance-of-payments situation of certain heavily indebted countries was economic mismanagement. Policies entailing an excessive rise in real incomes resulted in an over-expansion of domestic consumption, which led to a resurgence of inflation and

Evolution of international indebtedness in certain groups of developing countries, 1980–86.[1]



* Break in series due to the broadening of the coverage of the BIS international banking statistics.

[1] Excluding OPEC countries in the Middle East, and offshore centres. [2] Vis-à-vis banks located in BIS reporting countries. [3] Estimates based on IMF sources. [4] Exports of goods and services. [5] Countries covered by the Baker initiative, with the exception of Yugoslavia. [6] Excluding the Philippines.

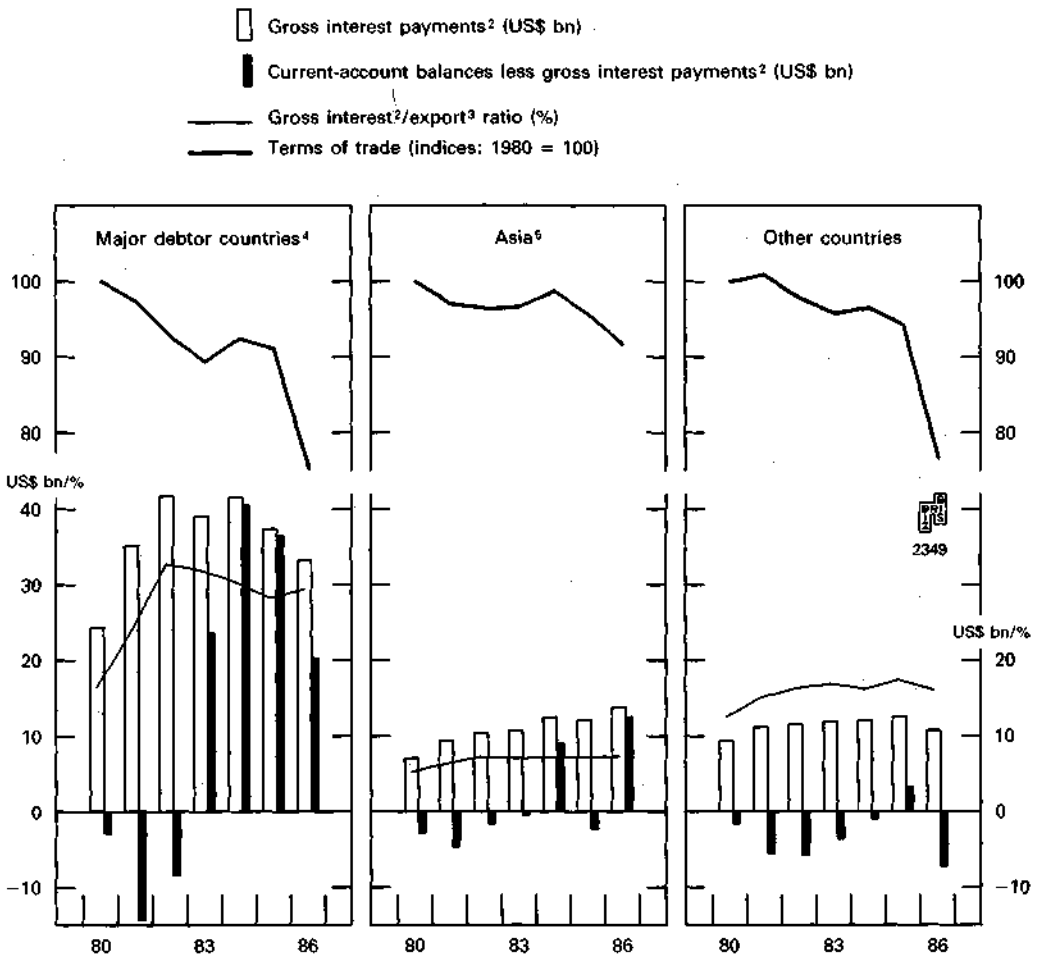
a reduction of exports. Overall the volume of exports from the fourteen heavily indebted countries contracted by 5 per cent. last year.

Following upon the declines in 1981–84, a recovery of living standards is, of course, to be welcomed; but if these countries are to grow out of their debt problems, growth should be led by increased investment and exports. While several debtor countries have made very serious structural adjustment efforts, there is as yet little evidence that investment ratios have begun to recover from the low level to which they fell in the aftermath of the debt crisis. Heavy debt service burdens and weak demand for their exports are partly responsible for this; nevertheless, there would seem to be considerable scope for a further improvement in policies.

In spite of the recent worsening of the external payments situation of a number of developing countries, certain important achievements in dealing with the debt problem should not be forgotten.

Standardised procedures for rescheduling debt and continued financing by both official and private creditors in the context of well-monitored adjustment programmes have implied substantial concessions from the creditors' side. The margin over LIBOR has come down substantially in the recent reschedulings. The case-by-case approach takes into account the specific needs and circumstances of individual countries and seeks to foster their longer-term growth. The World Bank

Factors influencing the borrowing needs of certain groups of developing countries, 1980–86.[1]



[1] Excluding OPEC countries in the Middle East, and offshore centres. [2] Estimates based on IMF sources. [3] Exports of goods and services. [4] Countries covered by the Baker initiative, with the exception of Yugoslavia. [5] Excluding the Philippines.

has greatly stepped up its lending for structural adjustment purposes, with disbursements almost doubling from $1.7 billion in 1983 to $3 billion in 1986. In addition, substantial progress has been made in work on the establishment of the Multilateral Investment Guarantee Agency, which will promote direct investment in the developing countries by providing both cover for non-commercial risks and technical assistance.

Secondly, the fall in interest rates on dollar liabilities, the currency in which the great bulk of the debt is denominated, has been very sharp, with the six-month LIBOR — the key rate of reference for Euro-dollar syndicated credits — dropping from a yearly average of 16.7 per cent. in 1981 to 8.6 per cent. in 1985 and 6.9 per cent. in 1986. The continuing decline in interest rates cut debt service costs by over $4 billion in 1986.

Thirdly, the pronounced weakening of the dollar during the past two years has not only helped to reduce the real value of the largely dollar-denominated debt, but,

in developing countries where the exchange rate is tied to the dollar, has also increased competitiveness vis-à-vis industrial countries other than the United States. Moreover, as a result of tighter credit and more realistic interest and exchange rate policies, capital flight slowed down in the course of last year, which shows that even in problem debtor countries reasonable policies can exert a positive influence on capital flows.

Finally, despite an increasingly competitive and difficult international environment, creditor banks have been able to improve their ability to absorb losses, mainly by building up provisions and strengthening their own funds. Between 1982 and 1985 the overall effect of these additions to capital and provisions may be estimated to have reduced the average exposure of major international banks in the Group of Ten countries, measured as a percentage of their total capital, by more than one-quarter and by as much as 50 per cent. in some instances. In 1986 banks continued to strengthen their balance-sheet positions, and in May 1987 the largest US bank announced that it was adding $3 billion to its loan-loss reserves to cover about 25 per cent. of its exposure to heavily indebted developing countries.

One outstanding feature of 1986 was again the great diversity of individual country experiences and responses. Developments in Brazil and Mexico, the two most heavily indebted countries in the developing world, illustrate how different the effect of exogenous shocks can be and how quickly policy strategies can be reversed. In the first few years of the debt crisis Brazil implemented a fairly stringent adjustment programme which enabled it to achieve substantial and growing trade surpluses, to prevent an excessive decline in the economy's investment ratio and to reduce the perennially high inflation rate. However, in 1985 a more expansionary strategy was adopted, which resulted in a strong acceleration not only of economic growth but also of inflation. This led to the introduction of the Cruzado Plan in March 1986 which, with the help of a temporary price freeze, was intended to reconcile price stability with high economic growth. Although aided by a falling oil bill and strong coffee prices, this policy did not meet with success, largely because it was accompanied by an excessive rise in real incomes. The resultant surge in consumer demand, by squeezing exports, led to a reduction in the trade surplus, sharp reserve losses and, on the domestic front, a resurgence of inflation. In February 1987 Brazil unilaterally imposed a moratorium on the payment of interest on $68 billion of medium and long-term debt owed to foreign banks. In addition, it blocked $15 billion of short-term trade and interbank debt outstanding not only at banks in Brazil but also at the foreign offices of Brazilian banks. In late April, however, the Brazilian Government announced a major change in its policy, slashing by half the 7 per cent. economic growth target for 1987 and promising a new austerity programme aimed at controlling inflation, stimulating exports and facilitating co-operation with the country's foreign creditors. Moreover, after an interval of nearly two years the country shows signs of being willing to resume the dialogue with the IMF.

In Mexico, where the oil price fall compounded the effects of an earthquake and earlier policy slippages, a credible adjustment programme and a new IMF/World Bank sponsored financing package was put into place last year. Although the country accordingly tightened policies that it had adopted in the latter part of 1985 in order to reduce domestic overheating, its external accounts continued to

deteriorate. With oil revenues dropping from $14.8 to 6.3 billion, a 4 per cent. contraction in Mexico's GDP did not prevent its trade surplus from shrinking from $8.5 billion in 1985 to $4.6 billion, despite sharp import cutbacks and a strong expansion in non-oil exports. Stringent credit policies did, however, ultimately succeed in inducing a reflux of flight capital. After a $1.6 billion decline in the first nine months of 1986 Mexico's official reserves rose by $2.4 billion in the final quarter of the year.

After protracted negotiations with bank creditors an agreement providing for $7.7 billion of new money was finally signed in March 1987. This was the last part of a deal involving a further rescheduling of over half of Mexico's external debt and the provision of a total of nearly $14 billion in new money from official and private creditors. With the margin at 13/16 percentage point over LIBOR, the terms of the commercial bank credits were quite favourable. The arrangement also contained a novel feature, namely a commitment by lenders to provide new money should there be adverse changes in Mexico's external circumstances. The agreement represented the first fruits of the new strategy put forward by the US Secretary of the Treasury at the IMF/World Bank meeting in September 1985 for solving the debt problem by fostering growth, stretching repayments over a long period of time and injecting new capital in a concerted way with enhanced monitoring by the World Bank.

Argentina concluded an agreement with the advisory committee of its creditor banks in early 1987 which involved $2 billion of new money and the restructuring of about $30 billion of public and private sector debt. Moreover, there is an exit bond provision limited to a maximum of $5 million per bank. The new loan will have a margin of 7/8 percentage point above LIBOR and a twelve-year maturity. Like Mexico, Argentina has seen the advisability of accepting continued surveillance by the IMF and the World Bank. The Austral Plan introduced in mid-1985 initially did have some success in bringing down inflation. In 1986, as economic restraint was relaxed and real wages began to go up again, the economy grew by 5.6 per cent. but the trade surplus was halved and inflation rebounded. Against this background a new programme was announced in February 1987 reintroducing the price and wage freeze, devaluing the currency and adjusting some public sector prices. However, much remains to be done to tackle the economy's structural problems, such as trimming the public sector, improving the taxation system, reviving investment and removing anti-export biases.

The Philippines, the only problem debtor in Asia, was another major country to conclude a rescheduling agreement with the banks in early 1987. Although this agreement did not involve any new money, it did alleviate the burden of existing debt by lowering the margin over LIBOR to 7/8 percentage point, providing for a grace period of seven and a half years on some of the debt and extending repayments over a total period of seventeen years. In addition, tradable notes denominated in foreign currency are to be issued which will be eligible for conversion into pesos for purchases of equity. Economic conditions in the Philippines have stabilised, and following two years of marked contraction economic growth began to pick up again last year. The current account has improved and the country has been able to add substantially to its reserves. In contrast to developments in Latin America, where inflation has accelerated, there has not been any major setback in efforts to promote price stability.

In most cases agreements on new credit and rescheduling packages with longer maturities and lower margins have only been reached after extended and sometimes difficult negotiations, while final signing by all participants has often been subject to further delays. Moreover, there was effectively no spontaneous new lending to the major problem debtor countries last year and for the first time banks actually reduced their overall claims on these countries. In previous years disbursements of new credits granted within the framework of officially sponsored rescheduling arrangements had made it possible for these countries to maintain a moderate inflow of new credit from the international banking system.

Most of the decline in banks' claims on the major problem debtor countries in 1986, however, can be attributed to the conversion of external debt into equity or domestic debt. In the case of the major debtor countries total conversions to date are estimated to have amounted to some $4 billion, of which nearly $2 billion in 1986. Not all of this entails an improvement in the debtor countries' external position, since part of the direct investment inflows might also have occurred in the absence of the swaps and possibly on terms more favourable to the debtor country. Brazil, Chile and Mexico are the principal troubled debtors to have converted appreciable amounts of debt, but Argentina, Ecuador, Nigeria, the Philippines and Venezuela have recently instituted, or are in the course of setting up, procedures to allow debt conversion.

Asset swaps or outright sales of LDC debt in the developed countries, which are estimated to have amounted to between $5 and 8 billion in 1986, also reduce bank exposure when the counterparty is a non-bank. But even in cases where the LDC claim is acquired by another bank, concentration of risk exposures may be reduced. Another way in which banks' exposure has been lowered has been through the transfer of claims to export guarantee agencies or other similar public sector bodies.

One reason for the increasing difficulty in obtaining the co-operation of the banks in new credit packages, even when these are a part of meaningful adjustment programmes, is the differences in the situations and strategies of individual groups of banks. Most banks with exposures that are very large in relation to their own funds and with affiliates or other business interests in the debtor countries tend to take a very long-term view and to be more inclined than other banks to provide new funds. For banks with medium-sized exposures which have already built up large provisions against their claims on problem debtor countries the capitalisation of interest payments may be easier to justify to their shareholders than the extension of new credits that may have to be written down the moment they are granted. Finally, smaller banks with minor exposures and little ambition to expand their international business may be tempted to withdraw from LDC financing altogether, even if this means accepting some immediate losses.

This diversity of interests implies that a pragmatic approach, taking into account the varying situations of individual banks, is likely to be most successful. The recent use of exit bonds and debt conversion schemes are signs that this is beginning to happen. While the sums involved may be small in relation to the total amount of debt outstanding, the new techniques may still play a very useful role in speeding up debt negotiations by offering different options to creditor banks in widely different positions.

It is not surprising, in the circumstances of 1986, that on both the debtor and creditor sides there have been some signs of fatigue with the debt strategy. Nevertheless, the basic ideas embodied in the Baker initiative are still valid. The debtor countries cannot resolve their current problems, and restore their external creditworthiness so that transfers of real resources to them from the industrial world again become possible, except by adopting policies that allow them to move their economies towards diversified, export-oriented growth. For this to happen, much remains for them to do in terms of structural adjustment and more efficient utilisation of resources. Most of these measures, even if adopted for external reasons, would not involve a real conflict with domestic interests but would enhance the countries' own growth and prosperity. That the achievement of export-led growth is not an impossible task has been shown by a number of Asian countries in recent years and even by the growth of manufacturing exports from some Latin American countries, but it will take time to implement.

To enable the debtor countries to run the current-account deficits that such policies of structural adjustment imply, including the imports needed to help increase domestic investment, external financing will be required from both official and private sources. Part of this financing should take the form, as envisaged in the Baker initiative, of long-term borrowing linked directly to domestic investment projects. But, in addition, these countries need to give greater encouragement to inflows of risk capital, so as to limit further increases in their external indebtedness. It may be added that more realistic market and growth-oriented policies should help the debtor countries to induce a repatriation of flight capital.

At the same time, if the Baker initiative is to succeed, the industrial countries have an indispensable contribution to make, not only by providing new finance and maintaining a propitious cyclical environment, but also by promoting structural adjustment in their own economies. Export-oriented growth of the debtor countries can be a meaningful and sustainable policy only if the industrial countries are willing to provide increasing room for manufacturing and agricultural imports from these countries. With high unemployment and strong agricultural lobbies this may not be easy, particularly at times of weak economic growth and in countries which lack overall dynamism. But no market-oriented solution of the international debt situation will be possible unless the debtor countries' structural adjustment towards export-led growth is paralleled by a corresponding adjustment of economic structures in the industrial countries.

VI. MONETARY POLICY AND EXTERNAL CONSTRAINTS.

Highlights.

Last year monetary policy in the industrial countries became more complex in various ways. In a rapidly changing economic and financial environment the choice of priorities became more difficult and external constraints more severe. Rates of monetary expansion accelerated, partly in response to lower interest rates. Some key aggregates became increasingly difficult to interpret. In several countries aggregates overshot the targets which the authorities had set in the context of the medium-term inflation control strategies that had been in place for some years.

In many countries the money stock has been rising faster than nominal GNP for several years; last year, however, the fall in the income velocity of the aggregates was more pronounced and widespread. Financial innovation has been one influence on the relationship, but, even more generally, declines in interest rates have reduced the incentive to economise on low-yielding money balances. One could argue that to the extent that lower interest rates have been related to the decline in inflation the increased demand to hold money balances could be appropriately accommodated by monetary policy. In some countries inflows of funds have played a major role. Not all of the rises in money stocks can be satisfactorily explained, however. The uncertainties associated with their interpretation have increased, but, in the absence of evidence of strong underlying inflationary pressures in the goods and labour markets, the monetary authorities in the major countries have responded by gearing their short-term interest rate policies more to sustaining economic growth and to limiting movements in exchange rates.

In the short run, large-scale dollar depreciation has tended to shift the balance of inflation risks away from other countries towards the United States, where price and wage behaviour has remained moderate. Yet in many countries rises in asset prices seem to have been flashing warning signals about excess liquidity for some time. Although inflation has been subdued, long-term interest rates in most of the major economies have seemed remarkably firm since the spring of last year, and in the United States they have moved up considerably in recent months.

Experience has now convincingly demonstrated that even the largest countries must take their currencies' exchange rates into account when formulating monetary policy. Greater stability of key exchange rate relationships may require the international co-ordination of monetary policies, even if only on an informal basis. However, exchange rate pressures on key currencies often reflect budgetary and current-account imbalances, relative changes in energy and raw material prices or other disturbances. Attempts to counter such pressures by interest rate adjustments alone could jeopardise monetary and price stability in the major countries. Price stability still remains a precondition for satisfactory performance of the world economy in the longer run.

In many European countries external constraints on monetary policy have long been accepted and have actually been used for controlling inflation by stabilising links between the domestic currency and currencies of countries with low rates of inflation. Even so, external constraints seem to have tightened recently and may become more severe as plans to liberalise cross-border transactions come into effect. As a result of increasing convergence, the EMS has been an area of considerable exchange rate stability in the face of large fluctuations in the dollar exchange rate in recent years. However, the more frequent realignments of the past year and the increasing scale of the related capital movements may indicate potential difficulties in the operation of the system. The high levels of long-term interest rates in some EMS countries and also in countries with less formal exchange rate objectives seem to indicate market concern that "hard-currency" policies might be followed less strictly in the future. In continuing to develop their monetary policy instruments, some European central banks have tried to adapt reserve requirements to help insulate interest rates on bank loans or deposits from the responses of money market rates to external influences.

In recent years monetary policy has borne the main burden of bringing inflation under control, notwithstanding the fact that the decline in inflation in 1986 was aided appreciably by lower oil prices. But monetary policy is now being called on to play a part both in supporting economic activity and in helping to stabilise key exchange rate relationships. These objectives will not always call for the same monetary policy and may at times be inconsistent. In addition, in countries where unsustainable budget deficits have been a constraint on discretionary fiscal policy, further action to bring down the deficits is still needed. In others weakening economic activity has prompted expansionary budget intentions, but the adjustments will need time to take effect. Fiscal policy being inherently inflexible in the short run, there is a considerable risk that monetary policy will be overburdened by attempts to stabilise exchange markets and short-run output fluctuations and to keep inflation under control, all at the same time.

Monetary policy based on money stock objectives.

Monetary targets and the results in 1986. In the volatile domestic and international conditions prevailing last year, the medium-term monetary policy strategies which had been in place for some years in the industrial countries came under increasing strain. In spite of the well-established longer-run relationship between rates of monetary expansion and inflation rates, it has never been easy to implement monetary targeting in practice. Difficulties in interpreting developments in particular aggregates and the need to take other indicators into account in the short run conduct of monetary policy have been experienced before in most countries. Ultimately, however, monetary aggregate control strategies have proved effective in helping to moderate inflationary expectations and to restore overall price stability. Since the early 1980s most countries have endeavoured to bring published objectives for monetary expansion down year by year, but a move towards greater flexibility was evident in the targets set for last year, and particularly in the weight attached to them in the implementation of monetary policy. Rates of monetary expansion quickened fairly generally, and in some countries distortions in the behaviour of targeted aggregates increased.

In the United States the rise in M_1 slowed down briefly in early 1986 when the economic recovery seemed to be faltering, but the Federal Reserve generally accommodated the demand for bank reserves at declining or stable short-term interest rates. M_1 growth subsequently accelerated to a rate of 15.2 per cent. for the year, compared with the 12.0 per cent. rate recorded the previous year. The growth of M_2 and M_3 also quickened and remained barely within the target ranges for the year. Total debt of domestic non-financial sectors continued to grow considerably faster than nominal GNP.

In Japan, also against a background of declining short-term interest rates, M_2 + CDs continued to expand in 1986 at a rate above the medium-term trend. In Germany, where there was little change in the level of short-term market interest rates during 1986, the growth of central bank money moved above the target range at the beginning of the year, apparently because of temporary disturbances in the demand for currency. The aggregate moved back towards the top of its target range in May/June but thereafter grew rapidly, and the objective for the year was overshot for the first time since 1978.

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 based on quarterly averages		
							first quarter		
		1985[3]	1986[3]	1987[3]	1985	1986	1985	1986	1987
		in percentages[5]							
United States	M_1	3–8	3–8	–	13.1	15.3	6.5	11.6	16.4
	M_2	6–9	6–9	5½–8½	8.8	8.9	9.2	7.0	9.2
	M_3	6–9½	6–9	5½–8½	7.7	8.8	10.6	7.1	8.5
	TDND	9–12	8–11	8–11	13.4	13.1	13.8	14.0	12.2
Japan	M_2+CDs	8	8–9	9	9.0	8.3	7.9	9.0	8.8
Germany	CBM	3–5	3½–5½	3–6	4.5	7.7	4.9	5.2	7.7
France	M_2	4–6	–	4–6	6.5	–	9.1	7.4	2.5
	M_3	–	3–5	3–5	–	4.6	9.6	6.2	4.6
United Kingdom	M0	3–7	2–6	2–6	4.2[6]	5.4[6]	5.4	3.7	4.5
	£M_3	5–9	11–15	–	13.6[6]	19.2[6]	10.0	15.0	19.0
Italy	CPS	12	7	7	13.0	11.4	15.5	11.1	13.5
	M_2	10	7–11	6–9	11.4	9.6	14.0	9.5	9.7
Switzerland	CBMA	3	2	2	2.2	2.0	2.4	1.4	3.2
Netherlands	DM_2	–	5½–6	11–12[7]	8.3	9.6	3.4	12.0	8.4[8]

[1] TDND = total domestic debt of non-financial sectors; CBM = central bank money; M0 = wide monetary base; CPS = credit to non-state sector; CBMA = adjusted monetary base; DM_2 = contribution to M_2 creation by 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 M_2 + CDs in Japan, projection only. [3] Periods running from the fourth quarter to the fourth quarter for the United States (except for M_1 in 1985), Japan (1985–86), Germany and France (1986–87); and from December to December for Italy and the Netherlands. Periods based on November–January averages for France (1985). Changes over the last twelve months for the United Kingdom. Annual averages for Switzerland. For the United States the target shown for M_1 in 1985 is that established in July 1985 for a period running from the second quarter to the fourth quarter. (The target for 1985 published in January was 4 to 7 per cent.) In the United Kingdom the 1985 and 1986 targets for sterling M_3 were suspended in October 1985 and October 1986 respectively. For Japan, for 1987 the second quarter to second quarter projection is shown. In France, Italy and the United Kingdom the definition or measurement of the aggregates was changed in 1986. [4] Calculated on the same basis as the objective. [5] At annual rates. [6] Twelve months to December. [7] Objective for a period of twenty-four months ending in December 1987. [8] First two months.

Sources: National data.

In France M_3 moved above the top of its target range in the first half of 1986, though the rise slowed down subsequently. In the United Kingdom sterling M_3

surged above the target range shortly after the latter was announced in March 1986 and continued to expand erratically at very high rates afterwards. M0 also rose at a faster pace from the summer onwards and was in the upper half of the target range by the end of the year. In Italy the growth of credit to the non-state sector exceeded the objective for the year and the growth of M_2, though moderated by financial innovation, was close to the top of the target range. In the Netherlands the banking system's net contribution to credit continued to grow at a rate which had been a cause of concern in the previous year. In Switzerland, on the other hand, the growth of the target aggregate was moderate and in line with the objective for the year.

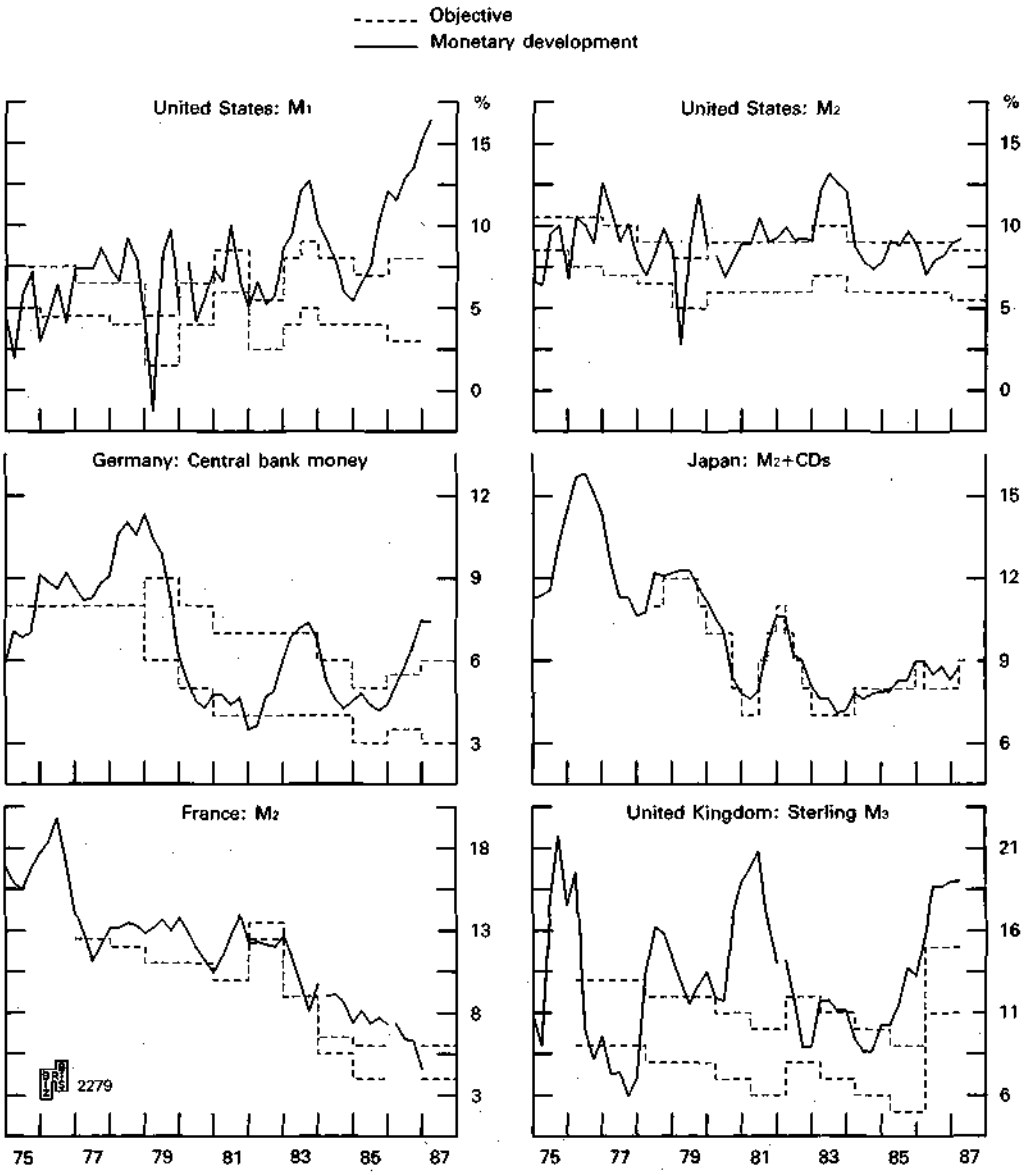
On balance, little was done to resist the overshooting of monetary targets for the year. Indeed, in an unusually open public debate initiated by the United States regarding the monetary policies of other major countries, the issue was the speed at which short-term interest rates should be lowered. The question of whether increases might be appropriate was never seriously broached. The fast growth of monetary aggregates in 1986 can thus be viewed as reflecting the response of money demand to lower interest rates, the increasing tendency for components of the narrow aggregate in some countries to be interest-bearing and explicit policy responses to both internal and external developments.

Before considering the implications of monetary developments last year, it would seem useful to consider them in the light of the experience of monetary targeting over a longer period. The graph shows broadly comparable measures of changes over four quarters in targeted aggregates in relation to the objective, though the objectives were not, in general, formulated precisely in this way. Clearly, the upsurges in rates of monetary expansion recorded in 1985–86, though unusual, were not unprecedented. The graph also suggests that the difficulty of targeting the aggregates has differed greatly from country to country.

The extreme volatility of movements in M_1 in the United States and the propensity of this aggregate to rise well above the targeted path in recent years contrast sharply with the smooth development of M_2 + CDs in Japan and central bank money in Germany. Moreover, the growth rates of these two broad money indicators, unlike that of M_1 in the United States, have until recently tended to slow down over time, as inflation has abated, in a way which permitted the setting of progressively lower targets. Admittedly, in Germany the pace of financial innovation has been modest, and in Japan near-term projections rather than formal targets are published by the Bank of Japan. However, experience in countries other than the United States suggests that attempting to target a narrow monetary aggregate can be difficult, however attractive a concept of transactions money may seem in principle. The fairly stable recent development of M_2 in the United States suggests that the use of this aggregate as a policy guide could imply a targeting strategy more comparable with that of other major countries.

The suitability of broad aggregates as targets can also be affected by financial innovation, however. In France it was possible over time to reduce the overall rate of expansion of the broad banking aggregate targeted until 1985, though meeting individual annual targets was evidently not easy. Deregulation of the financial markets and liberalisation of exchange controls have increased the difficulty of forecasting monetary developments and made it necessary to allow for rises in the velocity of the new M_3. In the United Kingdom the advantage of targeting sterling

Monetary aggregates: Objectives and development, 1975–87.*



* Changes over four quarters, based on quarterly averages. The developments shown are for aggregates in use in the target period; breaks in the case of the United States, France and the United Kingdom reflect significant changes in the concept or coverage of the targeted aggregates.

M_3 was formerly seen to lie in its relationship to developments in budgetary financing, the growth of bank credit to the private sector and external monetary movements. Its behaviour has become increasingly unpredictable, mainly as a result of changes in the competitive behaviour of financial institutions since the removal in 1980 of direct restraints on the growth of banks' interest-bearing liabilities. The increased pace of financial change in recent years has made it necessary to accept a large rise in broad money, however measured. It has also become more difficult to predict and control the behaviour of the broad aggregates in the United Kingdom and to interpret their significance. Seen against this background, the way countries

responded to monetary developments when reappraising their targeting procedures at the end of last year can more readily be understood.

In the United States, where, under the Humphrey-Hawkins Act, the Federal Reserve has a legal commitment to publish monetary targets, the Chairman of the Open Market Committee informed Congress in February 1987 that the recent behaviour of M_1 would seem to necessitate a target range so wide as to provide little information for market participants. Hence the Federal Reserve decided simply to monitor M_1 in the light of other information, though leaving open the possibility that an explicit target range might be set at a later date. Bearing in mind the historical relationship of money growth and inflation, the Open Market Committee approached 1987 with the strong presumption that monetary growth should be moderated. Ranges for M_2 and M_3 slightly below those set a year earlier were reaffirmed, in the expectation that the actual outcome would be much nearer to the middle of the range. In the absence of dramatic downward movements in interest rates like those seen in recent years, little decrease in the income velocity of these aggregates was expected.

The official projections for M_2 + CDs in Japan for the first and second quarters of 1987 remained above the medium-term growth trend of about 8 per cent. Drawing attention to the risk that speculative transactions in both financial and real assets could undermine public confidence in price stability, the Bank of Japan noted that it was important for financial institutions to maintain a cautious attitude in lending, in particular for financing purchases of land.

In Germany the Bundesbank fixed a target for 1987 with an unchanged mid-point, related to the long-term average increase in production potential and an underlying rate of inflation in excess of the forecast rise in consumer prices. The target corridor was widened so as to provide for more flexibility in view of the pronounced uncertainties about the external and domestic conditions under which monetary policy would have to be conducted during the year.

Monetary policy in France in 1987 is to be guided more by M_2, which comprises deposits and placements at sight (non-interest-bearing or at controlled interest rates) and thus reflects changes in the demand for transactions balances. M_2 is also the aggregate least likely to be affected by shifts between different forms of placement, which are allowed for in the lower range set for M_3. As in France, the 1987 target for M_2 growth in Italy is related to the expected growth in nominal GDP, but it implies slower growth of the aggregate than in 1986. The Bank of Italy has indicated that it is uncertain how prospective financial changes will affect the demand for credit to the non-state sector. An increase of 2 percentage points above or below the new norm is therefore regarded as acceptable.

In the United Kingdom the Governor of the Bank of England indicated in October 1986 that the authorities were considering whether to dispense with broad money targets. The Government's medium-term financial strategy for restoring price stability was restated in the March 1987 budget speech. However, it was now expressed mainly in terms of progressively declining norms for nominal GNP, and M0 was the only monetary aggregate for which a new target was announced. In May a new aggregate, M_4, including liabilities of banks and building societies, was announced and changes in the names of existing aggregates, from sterling M_3 to M_3,

from M_3 to M_3c and from PSL_2 to M_5, were foreshadowed. In the Netherlands a slower rise in the liquidity ratio (the ratio of M_2 to net national income) in 1986 could be attributed entirely to increased private capital outflows. The Netherlands Bank has extended its arrangements with the banks to provide a reduction in their net contribution to domestic money creation over a period of twenty-four months ending in December 1987. In Switzerland an unchanged target provides for the growth of the adjusted central bank money stock at a rate regarded as consistent with the aim of avoiding inflation in the longer run.

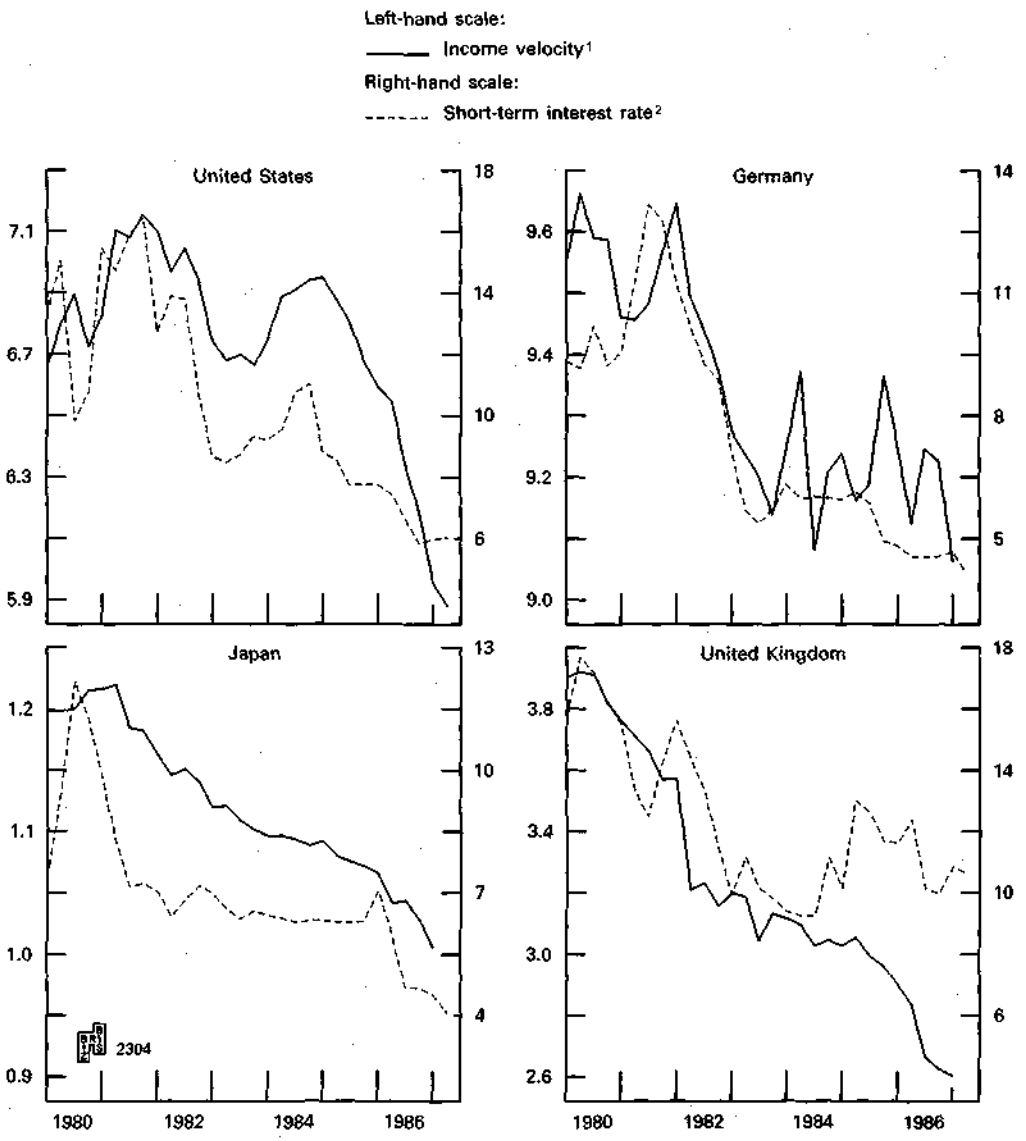
In short, the proclaimed response to greater uncertainty in these countries has been to reaffirm aggregate strategies but to make the norms more flexible in various respects. The departure from previous practice was greatest in the United States and the United Kingdom, where targets for aggregates which had originally stood at the centre of the strategy, after being less strongly emphasised in recent years, were dropped. In Canada, of course, monetary targeting had been abandoned some years ago. In key countries, however, there is still a presumption that the monetary authorities' commitment to controlling monetary expansion in the medium term provides the main anchor for inflation and inflationary expectations in the longer run.

The behaviour of income velocity and the role of interest rates. In a context of low inflation rates and modest rises in economic activity the growth in money stocks last year was particularly large in relation to that of nominal GNP. In the short run changes in the relationship between the money stock and nominal GNP may be indicative of the variable time-lags with which monetary developments influence the economy. In several countries, however, the income velocity of the money stock has been falling for several years. Changes in velocity may reflect interest-induced changes in the incentive to economise on relatively low-yielding money balances or shifts in the demand for money balances due to financial innovation and changes in currency preferences. Some of these types of shift in money demand may prove temporary, others lasting. A major policy problem is the difficulty of distinguishing temporary from permanent shifts in previously stable money demand relationships.

As can be seen in the graph overleaf, declines in income velocity continuing over a number of years have been evident for the key monetary aggregates in the United States, Japan, Germany and the United Kingdom. The graph also suggests that in varying degrees declines in interest rates from their 1980–81 peaks have been an influence, though in each case other factors have clearly also been involved.

In the United States shifts in the composition of M_1 and, in particular, the rise in the interest-bearing savings component since the deregulation of interest rates on deposits have altered the trend of M_1 velocity and increased the sensitivity of the demand for M_1 balances to changes in market interest rates. In both 1985 and 1986 shifts in interest rate differentials greatly reduced the disincentive to hold interest-bearing M_1 balances and contributed to the strong growth in this aggregate. Banks and thrift institutions have been unexpectedly slow to adjust interest rates on deregulated NOW (negotiable order of withdrawal) accounts downward in response to the decline in Treasury bill yields. As a consequence, in 1986 balances on interest-bearing chequable deposits rose by 30 per cent. as funds were transferred from other placements such as time deposits. Non-interest-bearing demand deposits also grew rapidly in response to declines in their opportunity cost and to related increases in

Income velocity of the money stock and short-term interest rates, 1980–87.



[1] Representative money stock data: for the United States, M_1; for Germany, central bank money; for Japan, M_2 + CDs; for the United Kingdom, sterling M_3. [2] Representative three-month instruments.

compensating balance requirements, which are partly designed to help cover the costs of services provided to customers by banks.

Views differ as to the extent to which declines in interest rates explain the unprecedentedly large fall in the velocity of M_1 last year. In any case, it may take years before the behaviour of M_1 in a deregulated environment is fully understood. There is evidence, for instance, that banks could be even slower in adjusting interest rates on deposits to rises in market interest rates than in adjusting them to declines, and that the adjustment may be non-linear. Many of the above-mentioned shifts in the composition of the public's liquid asset holdings last year occurred within M_3, but, with non-bank purchases of Treasury bills also weakening, the rise in M_3 was

unusually large relative to that of total liquidity. Consequently, declines in the velocity of M_2 and M_3, evident since 1981, also accelerated last year, but the behaviour of these aggregates has been more in line with what might have been expected on the basis of earlier money demand relationships.

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	Market paper[3]	Increase in M_3 as a percentage of the change in liquidity
	increase as a percentage of the change in the broad money stock						
United States							
1971–85 average	5	6	6	30	28	25	86
1976[4]	5	8	1	38	45	3	94
1980[5]	6	3	6	51	3	32	88
1986	5	13	19	– 10	53	20	94
Germany							
1971–85 average	10	22	.	26	42	.	–
1978[4]	13	32	.	21	33	.	–
1981[5]	1	– 6	.	108	– 3	.	–
1986	13	25	.	15	48	.	85
France							
1971–85 average	5	36	.	19	38	3	87
1978[4]	6	31	.	18	45	0	89
1981[5]	7	38	.	5	49	0	97
1986	5	40	.	19	16	19	59
United Kingdom							
1971–85 average	12	21	22	44	.	2	59
1977[4]	26	65	21	– 11	.	– 1	44
1979[5]	12	21	5	69	.	– 6	51
1986	3	16	38	35	.	9	61

[1] Broad money stock: M_3 (for the United Kingdom, sterling M_3); total liquidity: for the United States and France, L; for Germany, extended M_3 concept; for the United Kingdom, PSL_2. [2] Interest-bearing component of M_1. [3] For the United States, large time deposits, overnight and term repurchase agreements and Euro-dollars, institutionally-held money market mutual funds; for France and the United Kingdom, certificates of deposit. [4] Year of 1976–78 short-term interest rate trough. [5] Year of 1979–81 short-term interest rate peak.

Sources: National data.

Large shifts in the composition of the public's holdings of financial assets have also taken place in other countries in recent years in response to declines in market interest rates and financial innovation. Though their predictability has differed from country to country, such shifts have typically contributed, as in the United States, to declines in the velocity of broad aggregates and to disproportionately large rises in the relatively liquid components.

In Germany partly predictable declines in the velocity of central bank money and M_3 have been induced by declines in interest rates since 1982. An interest rate induced shift in the composition of M_3 away from time deposits with relatively flexible interest rates towards both savings and sight deposits has also taken place. Though money market interest rates changed little last year, the lagged effect of earlier declines contributed to an above-average share of sight deposits in the annual increase in M_3. Strong growth in the currency component in 1986, however, probably reflects an increase in non-resident holdings associated with exchange rate speculation. In Japan, where the decline in the velocity of M_2 + CDs observed in recent years partly reflects a trend rise in the savings component, the decline in interest rates on time and savings deposits helps to explain the relatively large share of demand deposits in the increase in the aggregate last year.

Changes in the financial system seem to have played the major role in the fall in the velocity of sterling M_3 in the United Kingdom in recent years. Banks and building societies have competed aggressively to expand their lending and deposit-taking activities. Tax measures have affected non-financial companies' incentives to borrow at banks and to accumulate deposits and have induced a build-up of deposits held by non-bank financial institutions. Last year the demand for money was also distorted by stock market reform, merger activity and the privatisation of public enterprises. The rapid rise in the share of new types of interest-bearing sight deposits in the increase in sterling M_3 is a striking development.

In several countries structural change in the financial system has also led to fast growth of relatively liquid placements which are not included in the conventional monetary aggregates. Following the authorisation of new types of liquid market instruments such as commercial paper and negotiable Treasury bills, the rise in total liquidity was faster than that of broad money in both France and Japan last year. In Italy the growth of investment funds and portfolio management services helped to restrain the growth of M_2. In Germany there was a relatively rapid rise in the extended M_3 aggregate, which, unlike the conventional M_3 measure, reflected a strong rise in residents' Deutsche Mark deposits abroad and a decline in their holdings of short-term bonds, which became subject to reserve requirements in May 1986.

It seems reasonable to argue that where declines in the income velocity of the money stock can be confidently attributed to declines in interest rates or to financial innovation they must reflect an expansion in the demand for the assets concerned rather than monetary disequilibrium. Given that the decline in interest rates since 1981 has taken place against a background of falling inflation rates, it seemed appropriate for policy to accommodate some acceleration in monetary expansion.

Not all of the increase in money measures can be explained convincingly by changes in money demand, however, and part of the money balances now willingly held may be spent on goods and services in due course. Rises in the prices of shares, land and other assets may stimulate spending in various ways. In some countries there is a risk that the reversal of speculative rises could make financial positions more fragile, thus making it more difficult to raise interest rates when necessary. Over the past year monetary policy has been guided by current developments in the economy. However, the full effects of monetary expansion on price formation in the goods and labour markets are normally felt only after a long delay. So far the fall in oil prices and developments in other commodity markets have helped to keep inflation subdued. Supply constraints in the economy may tighten in the course of external current-account adjustment. The link between monetary expansion and inflation may have become difficult to understand because of financial innovation, interest rate induced declines in velocity and exchange rate movements. It can nevertheless be useful to retain monetary policy frameworks focused on longer-run considerations, even under difficult conditions. Should the credibility of targeting strategies weaken, the protection they can provide against incipient rises in inflationary expectations could be lost.

Monetary and credit expansion and international capital flows. Credit market pressures and external disturbances often help to account for monetary developments which cannot be explained by the usual influences on the demand for

money. Unusual aspects of the money creation process last year can best be seen when developments in the money stock are considered in the context of the balance sheet of the monetary system.

Counterparts of changes in the broad money stock.

Items and countries	1971–80		1981–86		1985	1986
	average	maximum	average	maximum		
	December to December, in percentage points					
Contribution to changes in the broad money stock of changes in:						
Net foreign assets[1]						
Germany	2.0	6.2	1.9	5.7	3.3	5.7
Japan	– 0.1	3.9	– 0.9	0.5	– 1.1	– 2.3
France	–	–	0.0	2.8	2.4	2.8
Belgium	– 0.7	4.9	– 7.2	– 4.2	– 5.5	– 4.2
Netherlands	1.8	8.4	2.6	6.0	4.2	– 5.6
Italy	0.0	3.8	– 0.2	0.9	– 1.7	– 0.5
United Kingdom	– 0.1	9.4	– 2.4	– 0.2	– 2.4	– 2.0
of which:						
Official net foreign assets[2]						
Germany	*1.9*	*7.0*	*0.0*	*0.6*	*0.1*	*0.6*
Japan	*1.0*	*8.4*	*– 0.1*	*0.7*	*– 0.3*	*0.7*
France	*0.6*	*3.6*	*0.4*	*2.1*	*1.4*	*2.1*
Belgium	*0.9*	*4.9*	*– 1.0*	*3.5*	*– 0.4*	*0.3*
Netherlands	*3.3*	*7.7*	*0.6*	*4.4*	*1.6*	*– 0.6*
Italy	*0.4*	*3.4*	*– 0.1*	*2.2*	*– 2.7*	*0.7*
United Kingdom	*2.4*	*24.2*	*– 0.5*	*2.3*	*1.6*	*2.3*
Credit to the *private sector*[3]						
United States	6.8	10.9	5.0	6.2	5.9	6.1
Germany	14.9	23.6	9.6	11.1	8.9	7.5
Japan	14.3	26.9	9.3	10.9	10.9	9.7
France	10.0	12.5	11.3	14.4	10.0	8.0
Belgium	7.6	9.8	3.0	5.0	2.7	5.0
Netherlands	21.5	30.4	13.4	33.6	8.1	13.7
Italy	8.3	10.5	5.9	7.8	6.8	5.3
United Kingdom	13.7	29.2	18.6	24.2	19.0	24.2
Credit to the public sector[4]						
United States	1.0	3.5	1.2	2.5	1.1	1.2
Germany	5.0	11.2	3.1	6.7	1.8	0.8
Japan	3.2	6.5	1.2	3.0	– 0.2	1.3
France	0.8	3.0	2.4	3.4	2.4	0.3
Belgium	5.6	8.5	10.1	15.7	9.9	7.3
Netherlands	2.4	6.3	6.6	15.4	4.5	3.8
Italy	12.4	15.8	11.7	18.7	10.7	5.5
United Kingdom	5.6	13.6	– 1.5	0.9	– 0.2	– 1.0
	December to December, in percentages					
Changes in the broad money stock[5]						
United States	11.4	14.5	9.9	12.4	7.4	8.9
Germany	9.6	14.3	5.7	7.1	5.0	6.7
Japan	14.6	24.8	8.6	11.0	8.7	9.2
France	14.8	19.3	9.0	11.5	5.8	4.3
Belgium	10.6	16.1	7.0	10.5	5.2	10.5
Netherlands	11.0	22.7	7.8	10.7	10.7	4.5
Italy	19.7	23.6	12.2	18.0	11.1	9.4
United Kingdom	15.1	27.4	12.6	19.3	13.6	19.3

[1] For the United Kingdom, includes public sector external transactions. [2] Domestic currency equivalent of exchange market intervention. For Germany, includes Bundesbank foreign exchange swaps with domestic banks; for Japan, movement in Treasury foreign exchange account with the Bank of Japan; for France, includes valuation changes; for Italy, external contribution to monetary base creation. [3] For the United Kingdom, sterling credit. [4] For France, central government only. [5] For the United States, Germany and France, M3; for Japan, M2 + CDs; for Belgium, the Netherlands and Italy, M2; for the United Kingdom, sterling M3.

Sources: National data.

In many countries the private sector's demand for bank credit had declined in recent years, and weakened further last year. With inflation abating and investment activity fairly weak, the internal financing capacity of enterprises improved. Furthermore, external financing in the form of security issues increased. In the United States the demand for bank loans was fairly weak last year, but banks increased their holdings of securities (mainly Federal agency issues). In the United Kingdom, however, surging bank lending to households and to the financial sector formed the main counterpart of the large rise in sterling M_3. In Italy, where the credit ceiling introduced in late 1985 to help stem the explosive rise in bank lending during the exchange market crisis expired in June 1986, a subsequent acceleration in bank lending also partly reflected the financing of stock exchange transactions and a decline in the interest rates on bank loans in relation to those on deposits. In Germany, and for much of the year also in France, liquidity created by balance-of-payments surpluses on non-bank account helped to weaken the demand for bank credit in 1986. In the Netherlands, by contrast, a fast rise in domestic bank credit last year seems to have been associated with net outflows of capital on non-bank account which exceeded the external current-account surplus.

In most European countries and in Japan the contribution of credit to the public sector to money creation has fallen sharply in recent years under the influence of budgetary consolidation and a rise in bond financing. Non-monetary financing of the government, however, like the growth of banks' long-term liabilities, is typically sensitive to changes in interest rate expectations in the bond market. In some countries, including Germany and the Netherlands, the increase in the money stock last year partly reflected a relatively slow growth of banks' non-monetary liabilities, such as bonds, and a rapid growth of long-term bank credit under the influence of lower long-term interest rates.

An indication of increasing international monetary interdependence can be seen in the nature and size of the contribution made by external influences to money creation in some countries last year. At over 5 percentage points in Germany in 1986, this contribution was comparable with the figure recorded in 1973, when the breakdown of the Bretton Woods fixed exchange rate system occasioned very heavy intervention in the foreign exchange market by the Bundesbank. Last year, by contrast, net official purchases of foreign exchange, though large in certain periods, accounted on balance for only about one-tenth of the total contribution of the external counterpart. The remainder was attributable to an increase in the net foreign assets of German banks in the context of a large external surplus on current and long-term non-bank capital transactions. Though the behavioural explanation may be complex, involving a weakening of the demand for bank credit, inflows of funds on non-bank account in effect provided most of the increase in M_3, with the increase in these inflows as compared with 1985 more than accounting for the acceleration in M_3 growth between the two years. It is not always understood that such effects may come about in the absence of official intervention in the exchange markets. In France both the official exchange reserves and banks' net foreign positions increased in 1986. In Japan, however, external monetary developments were very different, with a relatively small rise in the official foreign exchange reserves being more than offset by a deterioration in the external net asset position of the banks.

The external monetary position of the United States is still reflected mainly in liabilities of the Treasury. Purchases of US Government securities by foreign monetary authorities, at some $35 billion, were equivalent to over 15 per cent. of the Treasury's borrowing requirement last year and an even larger proportion in early 1987.

Monetary policy under varying degrees of external constraint: the management of floating exchange rates.

In seeking to support the domestic economic recovery, the Federal Reserve last year had to take into account the potential impact of a major weakening of the dollar on inflation in the United States. In Japan and Germany interest rate policies were at first constrained by the need to prevent too rapid an appreciation of their currencies and subsequently had to be geared to counterbalancing the effects on the economy of the correction that had already taken place.

The degree of external constraint which a country faces in the conduct of its monetary policy depends on the extent to which price and wage formation in the economy is influenced by the exchange rate and on the response of international capital flows to differentials in expected rates of return on financial assets in different countries. It also depends on the exchange rate system, though floating exchange rates do not, of course, protect countries from all types of external disturbances.

Countries with relatively open economies have long been conscious of close exchange rate/price level linkages which limit the advantages they can expect to gain, even in the short run, from exchange rate depreciation. As a result, monetary policy in many small countries has been geared to explicit exchange rate norms, while in most larger countries money stock policies have been adapted in varying degrees to take explicit account of exchange rates. In the United States the impact of changes in the exchange rate of the dollar on domestic prices had generally been considered small enough to be left largely out of consideration in monetary policy until fairly recently, though in a context of dollar appreciation in the mid-1980s monetary policy was eased more than it might otherwise have been. Hopes for an improvement in the US current account are based, of course, on the assumption that the dollar depreciation will mainly affect the competitiveness of the economy, but the effects on inflation in the United States cannot be ignored altogether, as has been shown by developments early this year.

The sensitivity of capital movements to interest rate differentials has increased markedly in recent years with the growing international integration of the financial markets. Certainly, large cross-border movements of short-term funds were experienced in earlier years, even by countries with exchange controls, not least in the form of shifts in the terms of payments for goods transactions. Yet experiences in both large and small industrial countries suggest that the scope for pursuing discretionary interest rate policies has narrowed over time.

Floating exchange rates were expected to permit countries to control their own money stocks and inflation rates. At times they have accommodated different rates of inflation and interest rate differentials that seemed appropriate in the light of differences in the magnitude of countries' inflation problems. However, swings in floating exchange rates of the scale seen in recent years, particularly in the dollar rate vis-à-vis other currencies, have conclusively demonstrated that exchange rates do not

simply adjust passively to inflation differentials. The coexistence of financial asset markets where prices respond rapidly to changes in supply or demand conditions and goods markets where prices move much more slowly has meant that movements in interest rates in large countries have often implied movements in real interest rates. At times these have contributed to large and rapid exchange rate changes. In fact, the asymmetry in the speed at which prices in the financial and goods markets adjust means that changes in floating exchange rates have been predominantly real changes which have had major consequences for the stability of the real economy.

The policy mix and exchange rate developments. Exchange rate overshooting in relation to developments in inflation rates has often reflected policy mismatches. This does not mean, however, that it could appropriately have been corrected by adjustments in monetary policy alone. In fact, over most of the period since 1973 short-term interest rate policies in the three biggest countries were largely pre-empted by money stock objectives. As far as can be judged, divergent monetary policies do not generally seem to have been the major cause of real changes in the dollar exchange rate of the Japanese yen or the Deutsche Mark. Leaving aside recent developments, the major exception seems to be the turbulent period which began in 1978 with a comparable phase of dollar weakness when fast rates of monetary expansion were accepted in Germany and Japan. In the United States monetary policy was tightened and the use of non-borrowed bank reserve targeting between late 1979 and mid-1982 was accompanied by volatile and at times very high real interest rates. In a context also of the second oil crisis, short-term interest rates had to be raised fairly sharply in Japan in 1979 and in Germany in 1981.

At other times exchange rate overshooting seems to have been due mainly to differences in fiscal policy. The priority given to reducing large budget deficits in Germany and Japan was in sharp contrast with US fiscal policies since the early 1980s. Large actual and prospective budget deficits have been a major influence on effective demand and real interest rates in the United States, though the resilience of private investment and confidence factors also played a part. In a context of slow price adjustments and non-accommodating monetary policy, expansionary fiscal policy formed part of the mechanism which led to the overvaluation of the dollar.

Though other major countries adapted interest rate policy to resist a rapid depreciation of their currencies when it seemed likely to contribute to inflationary pressures, the overvaluation of the dollar and the US trade deficit nevertheless facilitated economic recovery abroad. It is difficult to contend that during the period of dollar strength monetary policy in the United States should have been eased when demand pressures were still strong or that monetary policy in other countries should have been tightened with a view to correcting the exchange value of the dollar. Clearly, it is not always appropriate to use monetary policy to attempt to counter exchange rate distortions which are primarily due to other policy problems, such as budgetary imbalance.

When inflationary pressures eased, monetary policy was relaxed — first in the United States, where the stimulatory effect of the budget deficit had been gradually dissipated by the widening current-account imbalance, and then, last year, in Japan and Germany when currency appreciation began to weaken these economies. The level of real exchange rates by that time and the constraints on changing fiscal policies made it necessary to alter monetary policy. However, the slow progress

made towards reducing the US budgetary and external current-account deficits implies a continuing risk that the burden of policy adjustment placed on monetary policy could increase. The prospect of a further build-up of dollar debt held abroad could test the willingness of the exchange markets to await real adjustment. The accumulation of public and private debt in the United States (see Chapter IV) could begin to raise a question concerning the extent to which interest rates would be allowed to rise should a tightening of monetary policy become appropriate for whatever reason.

Changes in relative prices and exchange rate norms. Exchange rate pressures stemming from structural shifts in private saving behaviour, changes in the profitability of investment in different countries or movements in the prices of oil and commodities in relation to the price of industrial output may also be difficult to counter by monetary policy means alone. Whether the effects of such changes on countries' current-account and external net asset positions have placed strong constraints on the policies of industrial countries is open to question, but the acceptance of changes in real exchange rates may facilitate the adjustment process in the economy. Considerations of this kind have influenced the monetary policies pursued in the United Kingdom and Canada, whose position as net exporters of oil or raw materials differs from that of most other industrial countries.

In the United Kingdom, where the monetary aggregates have been difficult to interpret, exchange rate norms have played an increasingly important part in monetary policy over the last two years. However, the exchange rate norms have been adjusted to take into account the impact on the domestic inflation rate of changes in oil prices. Since the summer of last year the implicit exchange rate norms seem to have been adapted pragmatically so as to give somewhat more weight to reducing the external current-account deficit implied by the earlier fall in oil prices and to stimulating domestic output. Thus, in early 1986 downward pressures on the exchange rate were resisted by a rise in short-term interest rates, but in the summer a substantial depreciation of sterling was accepted before interest rates were increased to arrest the decline. As a result, a large improvement in the competitive position of British industry was achieved. An unexpected easing of the Government's financing constraints helped to place upward pressure on sterling in early 1987, and short-term interest rates came down in March 1987, when the Government's budget was presented. They were lowered further in April and May, when interest rates in the United States were rising.

A flexible monetary policy in Canada in recent years has also permitted the exchange rate to depreciate so as to help counter the effect on the current account of a large deterioration in the terms of trade. In early 1986, however, when the decline seemed to be gaining momentum, vigorous exchange market intervention and a 4 percentage point increase in money market rates were necessary to arrest it. A subsequent strengthening of the Canadian dollar enabled short-term interest rates in Canada to be brought down, but until March 1987 the differential vis-à-vis US interest rates remained larger than it had been two years earlier. The rise in consumer prices was beginning to quicken, and the task of preventing inflation from getting built into wage and price decisions seemed likely to be complicated by differing degrees of demand pressure in different parts of the country and the need for large changes in relative prices.

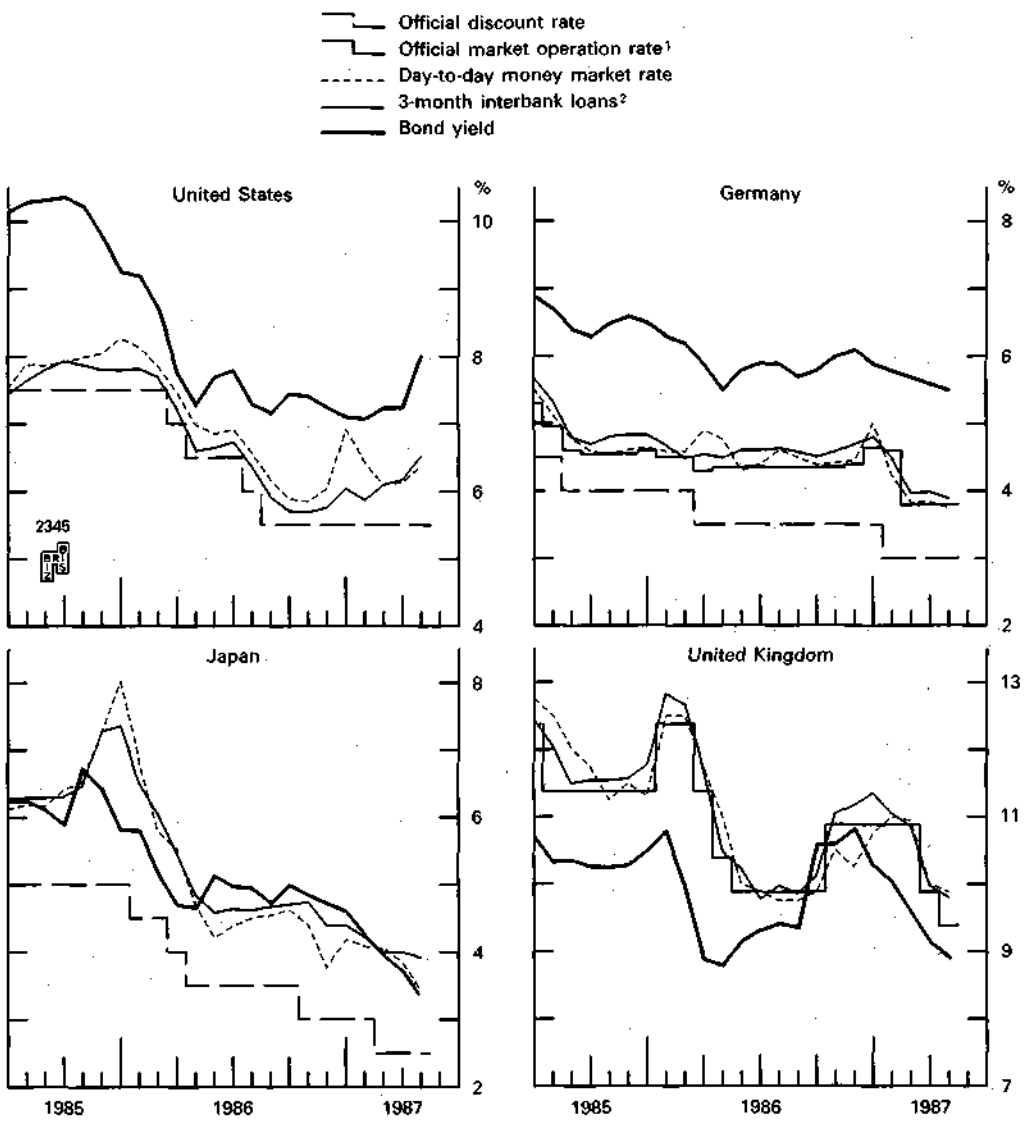
The experience of the United Kingdom and Canada illustrates the difficulty of taking objectives for the external current balance into account in monetary policy and the inflationary risks which efforts to manage a decline in the real exchange rate may entail. Clearly, it can be very difficult to maintain confidence in the exchange markets when monetary policy cannot be expressed in terms of either clear objectives for the money stock or explicit exchange rate targets.

Monetary policy interaction and "co-ordination". One result of the growing internationalisation of the capital markets is that floating exchange rates have increasingly responded to market participants' expectations as to the likely influences on exchange rates in the short and long run. The consequence has been frequent abrupt movements in exchange rates in response to news of actual and potential developments in policy and in the economy.

The effect of forward-looking expectations may be benign when market participants are confident that fundamentals are appropriate. At times, however, the markets have seemed to be extrapolating past developments in ways which have helped to push exchange rates far away from equilibrium. This is another example of a faster adjustment in financial markets than in goods markets tending to cause an "exaggerated" exchange rate movement in relation to what are usually considered to be the "fundamental" determinants of exchange rates. Explicit exchange market policies can at times help to stabilise expectations and to dampen excess volatility in exchange markets. Intervention by major countries can also be effective in stabilising expectations for short periods of time, especially when their actions are co-ordinated. However, experience shows that strong exchange market pressures can usually be resisted only by adjusting other policies. In some cases, such as that of US fiscal policy, adaptation is clearly needed at present.

Over the past two years awareness of the constraints countries face has led the authorities and the markets to focus, to an unprecedented extent, on the interaction of policies in different countries. The Plaza Agreement of the Group of Five countries, concluded in September 1985, recognised the need for orderly depreciation of the dollar. It marked a move by the US Administration, in particular, away from its earlier stance of leaving exchange rate determination entirely to market forces. Views about appropriate exchange rate levels, however, continued to differ between countries. Evidently, the concern felt by countries with depreciating currencies is in some cases not as great as that of countries with appreciating currencies. Though it was recognised that some supporting monetary and fiscal policy changes might be needed, only limited results were achieved in reducing the US budget deficit, and other countries were reluctant to jeopardise the progress already made towards better budgetary balance. In the United States, where the focus of monetary policy had clearly shifted back to short-run demand management, the key question was seen as being how to reduce a possibly unsustainable current-account deficit without inducing a slowdown in the domestic economy. When the trade balance failed to adjust quickly, the view was taken that the options for other countries were a further lowering of their short-term interest rates or continued depreciation of the dollar, perhaps involving large-scale overshooting. Certainly, the Federal Reserve clearly perceived the adverse implications of the latter for inflation in the United States. Other countries were willing to see a correction of the dollar's previous overvaluation, but doubted

Official and market interest rates, 1985–87.



[1] For Germany, Bundesbank transactions in securities under repurchase agreements; for the United Kingdom, Bank of England purchases of short-term bank bills. [2] For the United States, three-month certificates of deposit.

whether adjustment in a deficit country should be achieved by exchange rate changes alone.

A degree of international co-ordination of interest rate policies was expressed in the round of discount rate cuts in the United States, Japan and Germany in March 1986 and in the further synchronised cuts in the United States and Japan in April. Thereafter, the Federal Reserve acted alone in lowering its discount rate further in two stages in July and August, to reach 5.5 per cent., compared with 7.5 per cent. in January. The rapid appreciation of the effective real exchange rate of the yen implied a difficult economic adjustment in Japan, and in November, following the announcement of policy co-ordination understandings with the United States, the

Bank of Japan's discount rate was cut further. In early 1987 it also became apparent that economic growth in Germany had slowed down abruptly under the influence of a weakening in exports. The Bundesbank's discount rate, which had stood at 3½ per cent. since March 1986, was lowered to 3 per cent. in January 1987, following the EMS realignment. The Bank of Japan's discount rate, which had stood at 5 per cent. at the beginning of 1986, was brought down to an unprecedentedly low level of 2.5 per cent. in February, in advance of the Paris meeting of the major industrial countries.

The Louvre Accord (see Chapter VII) provided for periodic reviews of countries' intermediate objectives and performance, and may mark a genuine step forward in international policy discussions, though the interaction of countries' intermediate monetary objectives or fiscal policies is difficult to assess. With more immediate effect the Accord included a statement that the exchange rate movements since the Plaza Agreement had brought the major currencies into ranges more consistent with underlying economic fundamentals and an acknowledgement that further substantial shifts in exchange rate relationships could damage growth and adjustment prospects in the major countries. It envisaged that in present circumstances the countries involved would co-operate closely to stabilise exchange rates around the prevailing levels. In early May an agreement reached between the United States and Japan provided for a widening of the differentials between their short-term interest rates. It was followed by rises in money market rates in the United States and declines in Japan and Germany.

To initiate efforts towards international policy co-ordination clearly expresses a desire to make the exchange rate commitments effective. However, it is also the course most likely to strain countries' will to continue co-operating, particularly to the extent that stabilising exchange rates requires the adaptation of monetary policy, which may not be consistent with longer-term monetary objectives. In the past, the effectiveness of arrangements for orienting monetary policies towards exchange rate objectives has been dependent on the maintenance of a high degree of stability in a leading country which provided an anchor for the system. The present arrangements do not include long-term exchange rate engagements. Time is needed for adjustment to the depreciation of the dollar, and more stability in the relationships among the major currencies in future would clearly be helpful. It remains to be seen what will be needed to achieve it.

Monetary policy with explicit exchange rate targets.

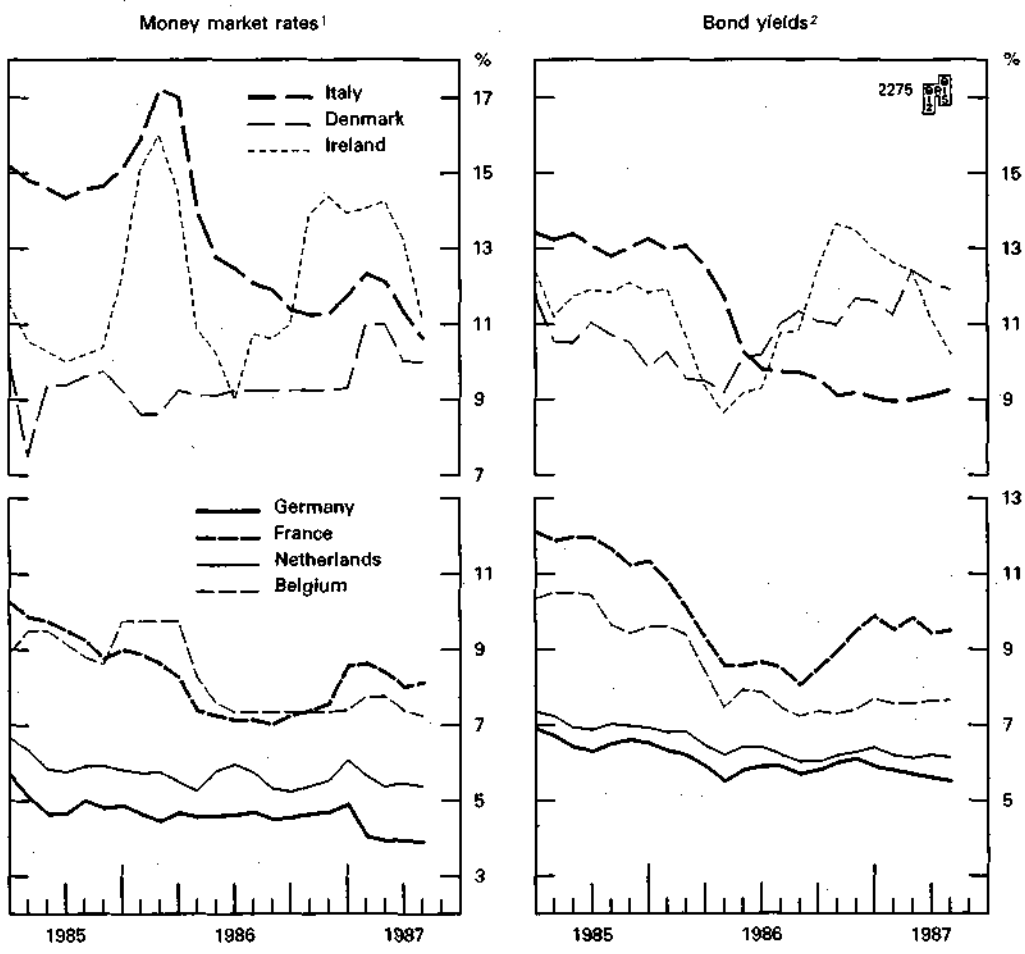
Explicit bilateral or effective exchange rate objectives remain the cornerstone of monetary policy in many countries. The conduct of such policies was complicated last year by changes in the exchange rate relationships of the major currencies, but a number of countries were also experiencing domestic problems. To a considerable extent, interest rates in individual countries came to reflect the varying degrees of credibility which countries have achieved in keeping to their exchange rate targets. The experience of countries using various types of exchange rate targets or norms in monetary policy suggests that any hopes that a greater preparedness to accept depreciation of the domestic currency will substantially increase a country's interest rate independence may be unfounded.

Monetary policy in EMS countries. Although the narrowing of inflation differentials between EMS countries, brought about in a period of regional exchange rate stability, continued last year, interest rate developments in these countries started to diverge during the second half of 1986. On the other hand, despite the general conviction that adherence to exchange rate targets was still the most appropriate strategy for keeping domestic inflation under control, some monetary authorities were evidently becoming more reluctant to let short-term interest rates rise to the extent necessary to support the domestic currency on the exchange market.

In the spring of 1986, following the first general adjustment of official parities for almost three years, money market interest rates were lowered substantially in Italy and Ireland and, to a lesser extent, in France and Belgium.

In the Netherlands short-term rates had to be raised for a time to counter the weakness of the guilder, which remained at the bottom of the EMS band together with the Deutsche Mark until the early summer. While the need to gear short-term

Short and long-term interest rates in EMS countries, 1985–87.



[1] Representative rates: for Italy, interbank demand deposits; for Denmark, day-to-day loans; for other countries, three-month instruments. [2] Representative rates: for Germany, France, Italy and Denmark, public sector bonds; for other countries, government bonds.

interest rate policy primarily to the exchange rate objective was accepted, the norm for the banks' net contribution to domestic monetary creation was expected to lead to a steepening of the term structure as banks expanded their non-monetary liabilities, which were exempt from the limit. In the event, however, the differential between interest rates in Germany and the Netherlands remained narrower at the long end of the market than at the short end.

In Belgium interest rate policy continued to aim at a balance between the objectives of maintaining confidence in the Belgian franc, on the one hand, and lowering the borrowing costs of the private sector and the Treasury, on the other. The compromise reached implied that the Belgian franc remained close to the bottom of the EMS band for most of the year. Short-term interest rate policy was constrained, however, by long-term capital outflows induced by sharp cuts in long-term interest rates in Belgium early in the year in relation to yields prevailing abroad.

In Ireland short-term interest rates had been raised sharply before the April 1986 realignment with a view to ensuring that a stable relationship of the Irish pound with the other EMS currencies continued to exert downward pressure on a relatively high domestic inflation rate. A dilemma arose, however, when the pronounced decline in sterling against the EMS currencies in July caused an appreciation of the effective exchange rate of the Irish currency. In the event, the Irish pound was adjusted downwards vis-à-vis all other EMS currencies in early August, only a few months after the general realignment of the spring. This unanticipated adjustment evidently influenced market expectations; both short and long-term interest rates rose sharply when sterling started to weaken again vis-à-vis the European currencies in the autumn.

In Denmark, where fiscal measures were taken last year to moderate the fast growth of private consumption, only limited adjustments in short-term interest rates were made in response to the weakness of the krone. The disappointing lack of progress made in reducing the current-account deficit seems to have affected the credibility of the fixed exchange rate policy, and as a result long-term interest rates edged upwards after mid-year.

Towards the end of the year the further fall of the dollar on the foreign exchange markets and political uncertainties in a number of European countries contributed to growing market expectations of a new realignment of parities within the EMS. The market also seems to have perceived differences in countries' views about the role of objectives for the monetary aggregates in a low-inflation environment. It became evident that exchange control instruments which had been used in the past to discourage the build-up of speculative positions were no longer available. In France, in particular, domestic interest rates were apparently more exposed than before to external rate pressures. In many countries short-term interest rates were raised in the first few weeks of January 1987, but very large foreign exchange market interventions were necessary to keep the exchange rates within the intervention limits.

In France, where short-term interest rates had remained high in relation to the rate of inflation, neither the domestic economic situation nor meeting the monetary target seemed to call for a rise in interest rates at the end of the year. However, bond

yields had moved up progressively as from September, and, although the French franc was allowed to move to the bottom of the EMS band, money market rates eventually had to be increased.

In Italy, on the other hand, increases in short-term interest rates seemed appropriate late last year in order to help moderate the growth of credit to the domestic private sector and the money stock. Italy also made more use of the flexibility available in the EMS band, and long-term interest rates remained particularly stable in December and January.

In conjunction with the new general realignment in January, money market rates were brought down in Germany. The subsequent reflux of funds was at first smaller than had been experienced following earlier realignments, and in March short-term rates in France and Denmark were still higher than in the autumn of 1986. In Italy, however, inflows brought short-term interest rates under downward pressure for a time.

Effective exchange rate objectives in the conduct of monetary policy. In recent years monetary policy in three of the Scandinavian countries has been based on exchange rate targets expressed in terms of a nominal effective exchange rate index. In the early 1970s Norway and Sweden had participated in the "snake" arrangement with several central European countries, while Finland had adopted an unofficial target for an effective exchange rate index. Partly because a hard-currency policy was felt to be inconsistent with domestic considerations, Sweden left the arrangement in 1977 and adopted an effective exchange rate target, and a similar move was made by Norway in 1978.

Norway had allowed the krone to appreciate by more than 15 per cent. in effective terms between 1973 and early 1977. The limited response of the domestic inflation rate weakened the competitiveness of "mainland" industries, but the balance of payments benefited from rising oil exports. Finland sought to avoid losses in competitiveness by periodic downward adjustments of the markka, thereby accommodating a relatively high domestic inflation rate. During the late 1970s and early 1980s devaluations took place in all three countries, the largest being that of the Swedish krona in 1982. Though stabilisation programmes were generally implemented, it became evident in all cases that improvements in competitive positions could be quickly eroded by rises in domestic inflation. Despite credit ceilings and exchange controls, interest rate regulations had to be relaxed and inflationary expectations ultimately came to be expressed in high long-term interest rates. In all three countries the authorities had eventually to acknowledge the need for firmer exchange rate policies.

In Sweden a flexible interest rate policy guided by "external currency flows" now aims at inducing private capital movements which just offset current-account imbalances. Following the removal of the credit ceilings in late 1985 and in a context of a rapid decline in interest rates, the broad money stock went up by 11 per cent. in 1986 and lending by financial institutions by nearly 25 per cent. Day-to-day money rates, which had fallen from a 16 per cent. peak in 1985 to 8½ per cent. in October last year, rose again to over 12 per cent. for a time in early 1987, and in March government bond yields, at over 11 per cent., were at about the same level as a year earlier.

In Norway the authorities sought to resist a downward adjustment of the exchange rate after the weakening of oil prices in early 1986 by heavy intervention on the foreign exchange market and a significant tightening of monetary policy. The Bank of Norway's marginal lending rate briefly reached 50 per cent. in the first week of May just before the Norwegian krone was devalued. Renewed exchange market tensions in December could be countered by a much smaller rise in money market rates but, against a background of strong consumer demand, sharp rises in nominal wages and a worsening external current-account position, the Bank of Norway's overnight lending rate stood at just under 14 per cent. in February 1987.

In Finland the policy of progressively lowering short-term interest rates from the 17.5 per cent. level reached in early 1984 was interrupted in the spring of 1986 following a minor depreciation of the currency within the announced margins after the devaluation of the Norwegian krone. In order to protect the official foreign exchange reserves, the interest rate for call-money advances from the Bank of Finland was raised to 40 per cent. at one point during the summer. Less severe external pressures were encountered in late 1986 and early 1987 and, with confidence improving, the official call-money rate was lowered to 11.5 per cent. by March 1987, which was 1 per cent. higher than a year earlier.

It will no doubt take time to establish the credibility of exchange rate objectives. Inflation rates in the three countries are still comparatively high. Experience also suggests that even use of the flexibility available under the index-based strategies — for changes in weights, for instance — can at times heighten uncertainty in the foreign exchange markets.

Combining quantitative targets and exchange rate objectives. The increasing influence of external constraints on interest rate policy raises the question of the extent to which the pursuit of objectives for monetary and credit aggregates can be feasible and useful in countries with explicit exchange rate objectives. In the past, small countries have been able to rely on exchange rate objectives as an anchor for monetary policy because of the relatively high degree of stability achieved in large countries, where monetary policy was guided by other intermediate objectives, notably the money stock. However, even in small open economies, where price and wage developments are strongly influenced by the prices of imports and exports and where the financial markets are also fairly open, certain types of quantitative monetary norms may be useful, particularly when developments in the public finances are unsatisfactory. In the Netherlands in recent years limits on the monetary financing of the Government have been agreed between the Treasury and the Netherlands Bank. In Sweden and Belgium large budget deficits have in the past been associated with external current-account deficits or private capital outflows and large-scale government borrowing abroad in foreign currencies. In Sweden an undertaking by the Government to avoid borrowing abroad now underpins monetary policy. In Belgium the National Bank of Belgium has at times used norms for the official foreign exchange reserves as a guide to the appropriateness of the balance between domestic and foreign financing by the Government.

Especially in larger countries with exchange rate oriented monetary policies, targets for monetary aggregates may seem useful for influencing price and wage formation. To the extent that the domestic financial market is insulated from those in other countries by exchange controls, credit targets may help to keep monetary

policy on track in the medium term, though credit ceilings or special reserve requirements may be necessary to meet them. In Italy ceilings on domestic currency credit have also helped in the past to attract inflows of funds from abroad, and in France monetary targets have enhanced the credibility of the exchange rate objective. In both countries controls on external capital movements have recently been eased, and the impact of projected further liberalisation on the authorities' ability to achieve domestic monetary and exchange rate targets simultaneously is uncertain. The monetary norm in effect in the Netherlands (see page 127) might, in principle, be circumvented by non-bank borrowing abroad or in the open money markets, but the authorities consider that the domestic markets are sufficiently insulated to permit quantitative monetary restraint to be effective for some time.

Switzerland is an interesting case of a small country which has opted to aim independently at a target for a monetary aggregate. The target applies to annual averages and permits short-term deviations. In fact, given their experience with the overshooting of the Swiss franc, the authorities have for some years also paid close attention to the exchange rate. However, the fact that over a longer period the Swiss franc has been the only European currency to appreciate against the Deutsche Mark on balance has helped to keep interest rates in Switzerland below those in Germany.

Monetary policy and the increasing openness of the financial markets. Awareness that the further liberalisation of external capital movements to which EEC countries are committed will increase the external constraints on monetary policy in EMS countries has led to calls for more flexibility and more co-ordination of monetary policies in member countries. The impact of liberalisation is the more difficult to foresee because of the possibility of portfolio adjustments in countries where exchange controls have long been in effect and because two of these countries are relatively large. To date, only one large member of the EMS exchange rate mechanism, Germany, has permitted free cross-border capital movements, and it is difficult to judge how far this has conditioned the operation of the system.

During the negotiations which preceded the EMS realignment in January 1987 participants agreed to consider changes in the functioning of the system. One proposal was to make the short-term credit mechanism created at the inception of the EMS available to finance intra-marginal interventions designed to enable monetary authorities to counter speculative pressures more forcefully and at an early stage. There is some risk that this would facilitate large capital movements and make control of bank liquidity in individual countries more complicated. The experience of some countries, particularly the Netherlands, has shown that countering exchange market pressures by quick adjustments in short-term interest rates and avoiding currency depreciations discourages speculation. Countries could also make more use of the existing margin of fluctuation for the exchange rate, with a view to exposing speculators to a two-way risk of exchange rate movements. Flexibility could also be increased by widening the margins or by more timely and frequent adaptation of central rates.

More flexibility in any of these forms would be designed primarily to deal with the problem of discrete and, to some extent, predictable parity adjustments timed by political considerations, which have been a major cause of disturbances in the system. When exchange rate adjustments are not made promptly, the disturbing

monetary effects of large-scale exchange market intervention have to be weighed against the effects of adjusting short-term interest rates to protect the prevailing exchange rate relationship. The choice made inherently influences the sharing of burdens among member countries.

It has been argued that the prospect of further liberalisation of capital movements in the EEC implies a greater need for co-ordination of monetary policy among participants in the EMS. Much of the theoretical discussion assumes a zone of permanently fixed exchange rates, which has not been the objective of the current exchange rate arrangement. Though the full implications of the liberalisation of capital movements remain uncertain, it is to be expected that the sensitivity of capital flows to interest rates and exchange rate expectations will increase. In practice, in the near term there may be no practical alternative to the implicit methods of co-ordinating monetary policy which have evolved over time. While there may be scope for countering exchange market disturbances by more flexible interest rate adjustments and interest rate consultations, the latter might simply reveal underlying differences in countries' views about appropriate interest rate levels. Whether the greater convergence of inflation rates achieved in recent years can be maintained remains to be seen, and in some member countries the consolidation of budgetary policies, in particular, still has some way to go.

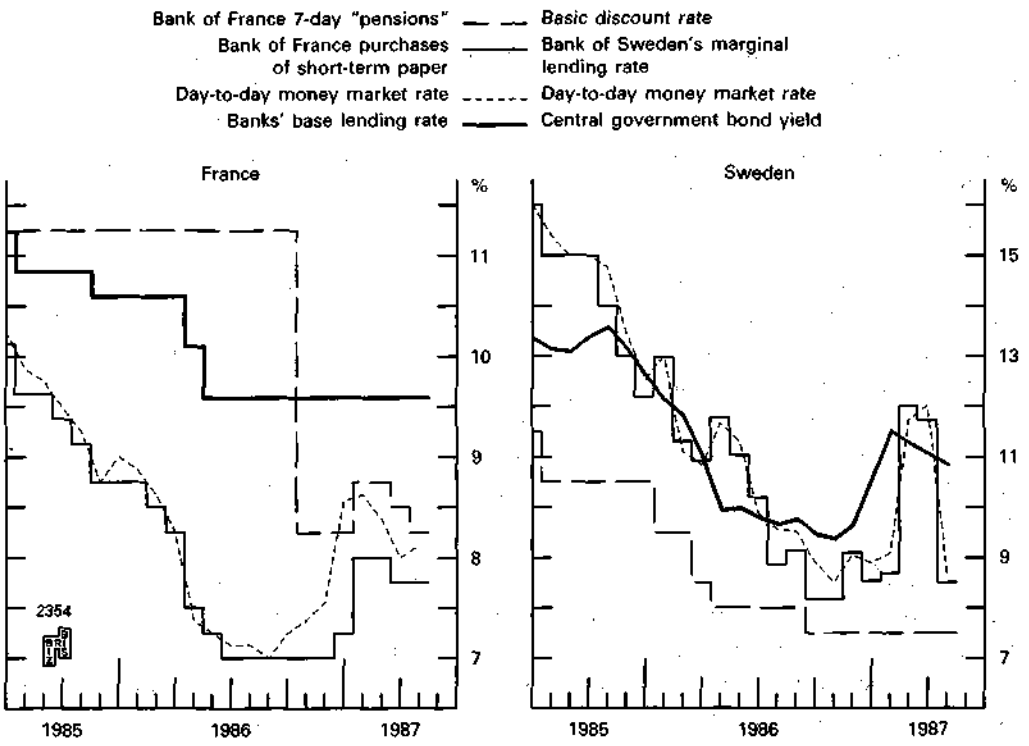
In Sweden, Norway and Finland controls over external capital movements have remained quite extensive. For the present it is proposed to retain exchange controls of certain types, notably those designed to limit short-term operations in the domestic currency by non-residents. Even so, it is recognised that such controls are likely to become less effective in preserving autonomy in monetary policy as the markets develop.

Money market management and external constraints.

In recent years the instruments and procedures central banks apply in seeking to meet their intermediate objectives for the money stock have been made more flexible and have operated more through market mechanisms. In many cases direct controls over credit-granting or interest rates have been abolished, the influence on interest rates exerted by money market operations has become more important and these money market operations have become more flexible. At the same time efforts have also been made to adapt the design of instruments, such as reserve requirements, to protect certain domestic interest rates from external pressures. The two tendencies are not unrelated. The removal of direct controls over external capital movements and increasing integration of the domestic and foreign financial markets have not only made domestic direct control instruments less effective but have also reduced countries' interest rate autonomy.

Changes in monetary policy instruments. Changes which have enhanced the role of money market operations in the implementation of monetary policy and increased the flexibility of these operations in almost all of the industrial countries were described in last year's Annual Report. Further major changes have taken place in France, Sweden and Finland, while in other countries central banks have continued to refine and adapt their instruments in an effort to cope with increasingly tight external constraints.

Selected interest rates in France and Sweden, 1985–87



In France quantitative controls on bank credit expansion, which in different forms had been in force since 1974, were abolished at the beginning of 1987. In 1986 the restraints had operated only as a safety net and the rise in credit was well within the norm. The attainment of objectives for the monetary aggregates now depends on the influence exerted by the authorities on interest rates in the money market instead of on credit ceilings. In practice, the authorities will continue to operate mainly in the interbank market, though official sales or purchases could take place in the markets for short-term negotiable instruments or bonds.

In December 1986 the daily morning fixing in the money market was terminated, so as to leave the day-to-day rate more free to vary during the course of the day and to provide more incentive for the development of term transactions. At the same time the range of agents with which the Bank of France was prepared to deal, previously limited to discount houses, was extended to include credit institutions.

As in the past, the Bank of France will supply central bank money mainly by periodically calling for offers to buy government or private paper maturing within a given period. Given the amounts and interest rates specified in these offers the Bank of France will decide an interest rate in the light of the amount of reserves it wishes to provide and will apply this rate to all offers accepted. The possibility of introducing a "Dutch auction" system (in which individual bids are accepted at the prices tendered) will be considered at a later date. Normally the rate chosen will tend to set a lower limit for fluctuations in the day-to-day money rate. An upper limit

will normally be set by a reactivated seven-day "pension" facility available for use at the initiative of the banks.

At the same time a move back from contemporaneous to semi-lagged reserve accounting was announced. The averaging period was reduced from three months to one and will overlap the holding period by two weeks when the scheme is fully operative. To offset the impact on bank liquidity of the termination of the reserve holding penalty for excess credit-granting, the ratios applying to deposits were increased.

In Sweden new money market mechanisms included a graduated scale of charges for central bank lending to the banks, with the steps based on each bank's borrowing in relation to its capital. The change resulted in the development last year of an active interbank market for day-to-day money at interest rates which can be flexibly influenced by changes in the banking system's need for accommodation brought about by central bank transactions in short-term government securities. Arbitrage ensures that the cost to the marginal borrower determines the day-to-day money rate.

In Finland the establishment in early 1986 of a differential between the interest rates applied for central bank call loans and deposits paved the way for the development of an interbank day-to-day money market in which interest rates could fluctuate over a narrow range. In December the margin was widened and, to promote the development of a term money market with interest rates subject to official influence, the Bank of Finland offered a new facility for three-month credits to the banks. In early 1987 a three-month central bank deposit facility was also provided, and to encourage the development of an open money market the Bank of Finland commenced dealing in CDs issued by the banks.

Special instruments for helping to reconcile domestic and external objectives. To a considerable extent, flexible instruments which permit money market rates to vary more than posted discount rates were designed to help central banks to cope with exchange market disturbances. In addition, several central banks have tried to take advantage of the remaining lack of substitutability between financial instruments by adapting reserve requirements to drive a wedge between bank lending charges and money market rates which have to respond to exchange market influences.

In France reserve requirements against deposits were raised on two occasions in early 1986, with a view to limiting the effect on banks' average costs, and hence their lending charges, of declines in official money market intervention rates. The 3 per cent. non-interest-bearing cash reserve requirement introduced in Sweden in late 1985 could, in principle, be used in similar ways. In Denmark the regulation of bank lending had been replaced in 1985 by a requirement under which the banks place on special deposit at the National Bank 20 per cent. of the rise in customer deposits in excess of an agreed norm. To help curb fast growth of bank deposits the return on the special deposits was lowered to as much as 5 percentage points below market yields in the spring of last year. As a result the banks became somewhat less willing to accept large deposit funds for investment in bonds. The penalty was subsequently removed, but, as the pace of bank lending became a matter for concern, the basic norm for deposit growth, which had already been cut from 14 to

9 per cent., was lowered further to 7 per cent. for February-June 1987. In the Netherlands, it may be noted, one consideration in introducing credit guidelines was that an attempt to control credit by a reserve requirement with a direct impact on bank costs and lending charges was thought likely to encourage circumvention.

In Italy inflows of funds in early 1987 seemed to be responding, as is usual in a period just following an EMS realignment, to uncovered interest rate differentials vis-à-vis other EMS currencies. In March, when the official discount rate was lowered, the increase in the net foreign liabilities of Italian credit institutions was made subject to a 25 per cent. reserve requirement, which had to be met by holding lira deposits at the Bank of Italy. It was hoped that these changes would encourage a fall in interest rates on domestic deposits and a rise in some interest charges for loans, which would help check the rapid rise in credit to the domestic non-state sector. In Spain inflows of funds following the downward adjustment of the peseta vis-à-vis EMS currencies in early 1987 came into conflict with the need to curb excessive rates of monetary expansion. In March the increase in convertible non-resident peseta funds with banks was made subject to a 19 per cent. reserve requirement. In April the requirement was raised to 19.5 per cent. and applied to the outstanding stock of these deposits as well as to the banks' net foreign currency liabilities.

While measures of these kinds can be useful in some contexts, there are limits to what they can be expected to achieve as the markets become more integrated over time.

The influence of external constraints on the use of instruments. Last year many countries continued to make use of flexible instruments for countering disturbances in the supply of bank reserves due, in particular, to official exchange market intervention. Given the way exchange rate constraints at times conflicted with domestic considerations, however, the larger countries made only limited use of the scope for flexibly influencing money market rates afforded by procedures established in recent years. They made more use of this kind of flexibility in early 1987, however.

In the United States the Federal Reserve accommodated banks' reserve needs last year and the Federal funds rate moved down closely in line with the official discount rate. In early 1987 a firming of money market rates, which may have reflected an increase in banks' demand for excess reserves, was not promptly resisted. In April the Chairman of the Federal Reserve Board indicated that developments in the dollar might become a factor bearing on the provision of bank reserves.

In Japan official exchange market interventions, though large, had a much smaller influence on changes in bank reserves than seasonal movements in the domestic government accounts. The call-money rate was moved down sharply in early 1986 and subsequently remained much closer to the official discount rate. However, the Bank of Japan continued to use flexible instruments, including purchases of Treasury bills and certificates of deposit and sales of bills drawn on itself, to encourage market rates to respond to changing exchange market pressures on the yen.

In Germany the Bundesbank continued to apply flexible instruments, including exchange market swaps, in regulating bank liquidity, but used fixed interest rate repurchase operations to help stabilise money market interest rates between March and November. A change to minimum interest rate tenders permitted some seasonal rise in the day-to-day money rate at the end of the year but the fixed interest procedures helped to establish a lower level of market rates in January 1987. In the absence of a large reflux of funds abroad, increases in minimum reserve requirements and a cut in banks' discount quotas were used to absorb most of the impact on bank reserves of official exchange market intervention in January so as to re-establish conditions in which interest rates could continue to be guided by the rates applied on the Bundesbank's security repurchase operations. A reduction from two days to one in the time needed to arrange repurchase agreements, announced in April, will further increase the flexibility of this technique, which was applied to guiding money market rates down further in May.

In France, under the new procedures, the day-to-day money rate was guided downwards in early 1986 in a context of abating inflation and, in general, a strong external position. Late in the year, when external and domestic considerations came into conflict, a rise in the official intervention rates eventually became necessary. In the United Kingdom unusual tactics were used to delay and limit the interest rate response needed to check the fall of sterling in the autumn. These included official lending to the market and a decision to refrain from issuing Treasury bills at the tender in order to avoid validating a rise in term money market rates.

In Italy the interest rate in the relatively new overnight money market continued to be closely influenced by changes in the official rate for temporary security operations. The slow response of the Treasury bill rate at times made control of bank reserves difficult. In Belgium, under the procedures introduced in 1985, the official discount rate remained above — and was adjusted in relation to — rates on short-term Treasury securities, though only small changes took place around the turn of the year. In the Netherlands a discount rate cut in March 1986 was synchronised with one in Germany. The pressures on the guilder in the summer were countered by increases in the interest rate for special loans granted by the Netherlands Bank and by imposing a surcharge on borrowing by the banks in excess of the basic quota. The rates on discounts and secured advances remained unchanged in early 1987 when the Bundesbank's action was followed by discount rate cuts in Switzerland, Austria, Italy, Belgium and Portugal, but by May the rate on special loans had come down almost to the level of that for secured advances.

External constraints and the effectiveness of interest rate policy. While monetary authorities retain the ability to control interest rates on the money market, external constraints limited their ability to pursue independent short-term interest rate policies last year. Countries with explicitly exchange rate oriented monetary policies have long been aware that exchange market disturbances may on occasion necessitate the acceptance of unwelcome movements in short-term interest rates for a time. Lack of credibility of the exchange rate policy may also result in relatively high rates for longer periods. In principle, floating exchange rates may enable countries to use monetary policy to control their own inflation and interest rates by accepting nominal exchange rate changes. However, the sluggish adjustment of domestic prices in fact means that changes in nominal interest rates often imply

changes in real interest rates, which in turn give rise to substantial changes in real exchange rates. Last year, in a context of rapid changes in real exchange rates, large countries became acutely aware of the need to take the resulting distortions of their economic growth and inflation prospects into account in short-term interest rate policies.

The constraints on countries' monetary policy seem the more obvious when it is recognised that monetary authorities have only limited influence on interest rates outside the money market. In particular, developments in long-term interest rates, which usually depend more on savings and investment relationships, exchange rate and inflation expectations and the market's risk assessment, have at times diverged sharply from those in money market rates. In the United States the linkages between long and short-term interest rates have become closer since 1979, but in many countries the influence on bond yields of long-term interest rates abroad has become relatively more important.

One striking development last year was the extent to which bond yields in the United States, Japan and Germany, though at different levels, moved in parallel during the year. Another was the limited response of yields in all three countries to declines in money market rates as the year progressed. On a number of occasions changes in real yields in the United States, under the influence of changes in the outlook for the Federal budget deficit and the economy, seem to have been reflected in yields in other countries. Abating inflation sentiment may have contributed to declines in yields in early 1986 in all three countries, but since then inflationary expectations seem to have come down no further and seem to have risen in the United States. Whether the prospects for official action to stabilise the dollar influenced market perceptions of the underlying inflation outlook in Japan and Germany is difficult to say, though the relatively steep yield curve in Germany in early 1987 was striking.

The nature of the constraints began to change in the spring of 1987 when the international debt tensions increased and the dollar came under strong downward pressure. In the United States CD rates, bank prime lending rates and bond yields all rose sharply in advance of the Federal funds rate. In other major countries short-term rates changed little but bond yields recorded substantial declines, especially in Japan.

In varying degrees nominal long-term interest rates in other countries are higher than in the three largest countries. The notable exception of Switzerland might be indicative of the expectation of a better inflation performance there in the longer run. Yields in many EMS countries as well as those in countries with other types of exchange rate arrangements seem to contain a significant inflation premium which may indicate that the market expects exchange rate adjustments to accommodate higher inflation rates over time. In fact, the movements last year in yields in many of these countries suggest that these premia are sensitive to the exchange market policies they have followed in recent years. Relatively large rises in long-term interest rates in countries that have accepted depreciation of their exchange rates in the past must reflect doubts about their future exchange market policies and awareness in the market that gains in competitiveness resulting from exchange rate adjustments are likely to be eroded in time by inflation.

Monetary policy in the context of general economic policy-making.

In countries with open and well-developed capital markets monetary policy has only one main instrument, control over bank reserves, and the rates at which reserves are made available, which in turn influences short-term money market rates. The application of this instrument has been guided in the past by intermediate monetary objectives chosen with a view to controlling inflation in the longer run. The effectiveness of cuts in interest rates in stimulating investment when other influences are unfavourable is open to question. Action affecting the structure of government revenue and expenditure, on the other hand, can potentially influence economic activity in many different ways. Overall economic performance can also be affected by changes in the regulatory framework. Tax reform and action to make economic structures more flexible and market-oriented are now on the agenda in many countries. Recently, however, in some countries the focus of attention has narrowed and earlier optimistic propositions about the short-run relationship between fiscal balances and economic activity have been revived.

In the industrial countries budgetary policy is determined by legislative processes which can at times make the implementation of changes slow and difficult. There is always a risk that long-run financing constraints will be left out of account in decision-making. In some countries the political response to proposals for fiscal action is often unpredictable, and experience suggests that increases in budget deficits, intentional or otherwise, are difficult to reverse. In designing strategies for monetary policy, procedures have been devised in recent years for managing short-term interest rates more flexibly and intermediate targets have been established to ensure that long-run objectives are taken adequately into account. This protection has been eroded to some extent as monetary policy has been called on to bear the additional burden of attempting to deal with distortions in the world economy, particularly in exchange markets. There is a risk that in becoming more politicised, interest rate policy will be less able to perform its stabilising function.

VII. THE INTERNATIONAL MONETARY SYSTEM.

Highlights.

The dominant feature of international monetary developments during the period under review was the continued decline of the US dollar, which helped to restore a more realistic exchange rate structure and should ultimately contribute towards a better balance in the world economy. At the same time, the pronounced weakness of the dollar had significant repercussions on exchange rate developments within the European Monetary System, on the situation in the gold market and on the growth of international liquidity.

Whereas in 1985 the depreciation of the dollar had been influenced by co-ordinated official action, including statements about the desirability of exchange rate realignment and official sales of dollars, from early 1986 onwards the dollar's decline became largely self-sustaining and was at times countered by large-scale official intervention. Moreover, in the course of 1986, as the realignment of exchange rates continued, the consensus established by the September 1985 Plaza Agreement between the main industrial countries on the desirable direction of exchange rate movements was succeeded by conflicting official signals to the exchange market. It was only in February 1987 that the Group of Seven countries agreed to co-operate closely to foster stability of exchange rates around the levels then prevailing. Nevertheless, despite very large-scale concerted official intervention and supportive monetary policies, from late March onwards the dollar continued to weaken even after the Group of Seven had in mid-April reaffirmed its February understandings, and around mid-May it was quoted nearly 50 per cent. below its February 1985 peak vis-à-vis the Deutsche Mark and the Japanese yen.

Although the economic performance of member countries continued to converge, the European Monetary System's exchange rate mechanism was repeatedly subjected to considerable strains. The success of the April 1986 realignment turned out to be relatively short-lived. Partly as a result of the falling dollar, renewed tensions within the EMS were already emerging in the early summer of 1986, and fears of a further decline of the dollar were also among the factors that precipitated the realignment of January 1987.

The gold market, too, was increasingly influenced by exchange rate developments. With private demand for gold underpinned by doubts about the dollar and fears of inflation, the price of gold rose steeply and touched a peak of $480 in the second half of May 1987, its highest level in over four years.

In 1986 foreign private demand for US assets no longer fully offset the mounting US current-account deficit. At the same time, the dollar value of official reserve assets held in other currencies was strongly boosted by the further depreciation of the dollar. As a result, official exchange reserves showed a sizable increase. The reserve gains were, however, heavily concentrated in a small number

of strong-currency countries, whereas a broad range of developing countries, particularly the oil exporters, suffered reserve losses.

In the first four months of 1987 reserve growth accelerated further, as a drying-up of private capital flows to the United States and a turn-round of capital movements within the EMS induced large-scale official exchange market interventions.

General exchange rate developments.

In 1986 and the early months of this year the dollar continued on a steep downward path. But whereas the earlier stages of its descent from unrealistic heights had required substantial policy backing, in the period under review the downward pressures became self-perpetuating and at times very strong.

This shift from managed correction to spontaneous decline occurred without any sharp further deterioration in the underlying fundamentals. Admittedly, the current-account deficit of the United States continued to increase, but it had already been very large in 1985, and some further deterioration was to be expected as a result of J-curve effects. The interest rate differentials in favour of the dollar were on average lower than in 1985, but they remained substantial and, given the more realistic levels to which the dollar had in the meantime fallen, should have rendered it a more attractive investment than in preceding years.

Apart from the return to more appropriate exchange rate relationships, what changed in the course of 1986 was apparently not so much the fundamentals as the markets' willingness to take them into account. There are several developments which may help to explain the markets' increasing pessimism about the dollar. One important influence was the slowness with which the dollar depreciation worked through to US export and import performance. This gave rise to conjecture that the exchange rate adjustment would, by itself, not go sufficiently far towards reducing the US current-account imbalance. Whereas in the preceding years the strength of the dollar had been interpreted as a reflection of the intrinsically superior dynamism of the US economy, fashions of thought now seemed to swing towards the opposite extreme of considering US industry as too inflexible to take sufficient advantage of the massive improvement in its competitive position. A second source of pessimism was the lack of evidence that the exchange rate adjustments would be supported in their equilibrating impact on current-account imbalances by policy actions, including stronger growth in other industrial countries. In fact, in the absence of compensating expansionary measures, economic growth began to slow markedly under the influence of the large exchange rate adjustments, initially in Japan and subsequently also in Germany.

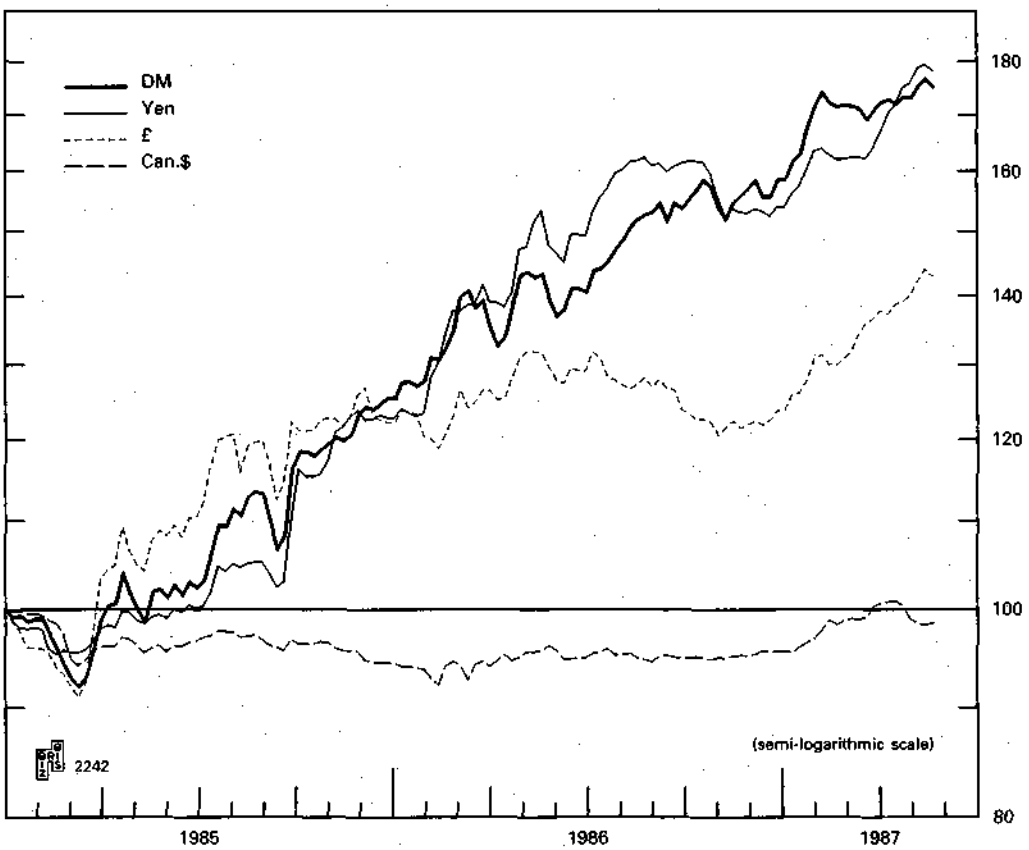
Perhaps the most important factor behind the change in the market climate, however, was that the longer the depreciation of the dollar lasted the more it bred expectations of further decline. Such extrapolative and volatile exchange rate expectations were, moreover, nurtured by the erosion of the consensus between the main industrial countries on exchange rate policy. Whereas in 1985 there had been unanimity about the direction in which the dollar should move, in the course of 1986 differences of opinion re-emerged. The authorities of the countries with

appreciating currencies began to think that the upward correction of their exchange rates had gone far enough and that a reorientation of their domestic policy stances was not required. The US authorities, by contrast, felt that such a reorientation was imperative and repeatedly expressed the view that in its absence a further depreciation of the dollar was desirable. Against this rather uncertain policy background, market conditions became occasionally unsettled, and even large-scale official intervention purchases of dollars did not make a lasting impression on the exchange markets.

It was only at the Paris meeting of the major industrial countries in late February 1987 that a new consensus with regard to exchange rate policy was reached. The agreement to co-operate closely to foster stability of exchange rates around the levels then prevailing was subsequently severely tested by the exchange markets. Co-ordinated intervention on a large scale, supported by monetary policy action, was quite successful in containing a further depreciation of the dollar against the European currencies, but did not prevent a sizable further downward adjustment of its exchange rate against the yen. On 13th May, against the background of continued exchange market fragility, the Japanese authorities appealed to major domestic financial institutions and trading companies to refrain from speculative trading in dollars.

Bilateral exchange rates of selected currencies against the US dollar, 1985–87.

Weekly averages, end-1984 = 100.



Developments in the early months of 1986 were already described in detail in last year's Annual Report. They were marked by co-ordinated rounds of interest rate cuts and a sharp further depreciation of the dollar. The latter occurred in two stages, the first lasting from the second half of January into early March and the second from the second week of April to the second week of May. It was during this second stage, which carried the bilateral dollar exchange rates of the Deutsche Mark, the Swiss franc and the yen to about 60 per cent. above their levels of fifteen months earlier, that for the first time doubts about the pace of the dollar's decline began to emerge in countries whose currencies were appreciating, and that the Bank of Japan began to intervene in the exchange markets in order to moderate the appreciation of the yen. Nevertheless, the outcome of the economic summit meeting in Tokyo in early May, notwithstanding calls for closer economic policy co-ordination, did not seem to indicate any general readiness to intervene in support of the dollar at that stage.

After a period of continued depreciation in early May, the dollar subsequently rebounded as a result of expectations of firmer US interest rates, appreciating by 10 per cent. against the yen and 7 per cent. vis-à-vis both the Deutsche Mark and the Swiss franc in the space of a few weeks. However, the recovery was short-lived, and in early June the dollar resumed its downward course. Despite occasional heavy support purchases by the Japanese authorities, it continued to decline until late August, depreciating by 13 per cent. vis-à-vis both the yen and the Deutsche Mark.

This fall occurred against the background of the comparatively disappointing performance of the US economy. With industrial production stagnant and employment in the manufacturing sector continuing to contract, it became more and more apparent that US economic growth would be slower than expected. At the same time, despite the large-scale exchange rate adjustment that had already occurred, there was hardly any evidence of an improvement in the country's current-account balance. Interest rate developments, too, weighed on the dollar. Under the impact of the poorer outlook for the economy, US short-term rates dropped by about 1.5 percentage points between early June and late August, accompanied by two 0.5 per cent. cuts in the Federal Reserve's discount rate on 11th July and 21st August. Japanese interest rates, by contrast, did not ease, while German rates fell only moderately.

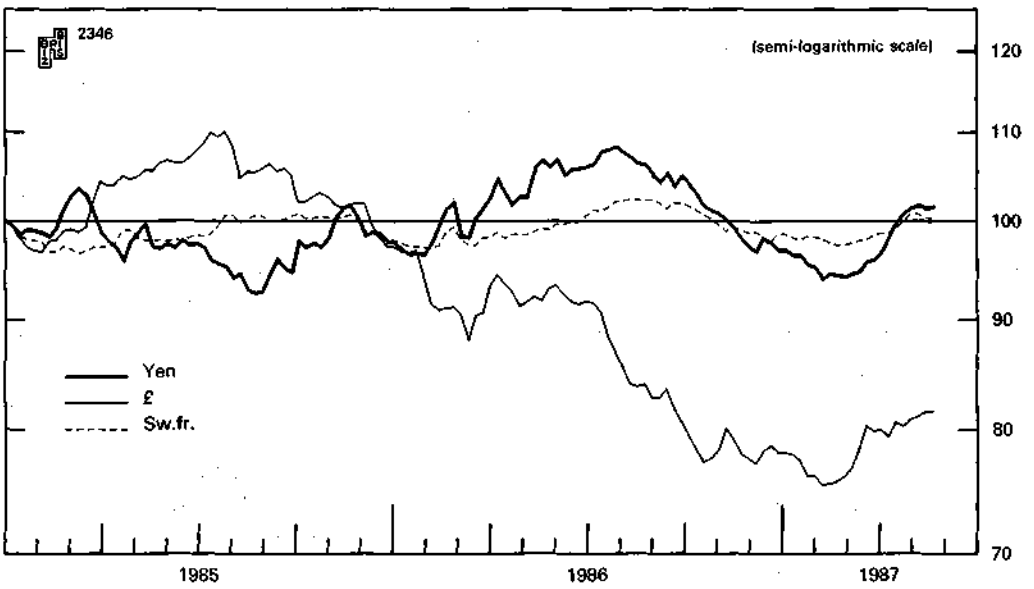
In the first half of September the dollar's decline was temporarily reversed by somewhat more favourable US economic news and an upward reaction of US interest rates. But while the dollar subsequently stabilised against the yen, it soon resumed its downward movement against the Deutsche Mark and other continental European currencies. Official statements by the EEC Finance Ministers and central bank Governors after the Gleneagles meeting, giving the impression that it had been agreed to use intervention in order to protect the EMS from the tensions caused by the dollar's decline, brought only temporary relief, particularly since no explicit agreement on exchange rate policy was reached at the subsequent Group of Five and Group of Seven discussions which took place on the eve of the annual meeting of the Bretton Woods institutions. In early October the Deutsche Mark quotations of the dollar began to fall below the DM 2.0 level, and, though concerted intervention by European central banks subsequently had some calming impact on the exchange markets, the dollar eased further to DM 1.97 by the middle of the month.

The greater stability of the dollar against the yen in this period of persistent Deutsche Mark appreciation was partly due to the difference in the economic performance of the two countries. The German economy, after its weakness in the early part of the year, appeared to be quite robust. The Japanese economy, by contrast, with its heavy dependence on the US export market, began to falter under the impact of the strong appreciation of the yen. The greater exchange rate concerns and the weaker outlook for the Japanese economy apparently persuaded market participants that Japanese economic policy was more likely to be oriented towards exchange rate stability than was German policy. Moreover, in contrast to Japanese and US interest rates, German interest rates had shown very little decline in the first nine months of the year, thereby increasing the relative attractiveness of Deutsche Mark assets.

In the second half of October signs of a stronger US economy and better US trade figures contributed to a temporary turn-round in market sentiment. In the space of three weeks the dollar recovered by over 6 per cent. and 5 per cent. against the yen and the Deutsche Mark respectively. Moreover, on 31st October the Bank of Japan announced a cut in the discount rate from 3.5 to 3 per cent., its lowest level since 1945. On the same day a joint statement was released by the Secretary of the US Treasury and the Japanese Finance Minister affirming their willingness to co-operate on exchange rate issues. In particular, the two countries appeared to agree that the exchange rate realignment that had occurred since September 1985 broadly reflected economic fundamentals and that no further adjustment was needed. This agreement was successful in taking the heat out of the exchange market, and from early November until late December the yen traded within a narrow range of Yen 161.5 to 164.0 to the US dollar.

Against the continental European currencies, by contrast, the dollar began to ease once more in the second week of November as the apparent strength of the

Bilateral exchange rates of selected currencies against the Deutsche Mark, 1985–87.
Weekly averages, end-1984 = 100.



German economy and officially voiced concerns about the overshooting of the German monetary aggregates gave rise to expectations that the interest rate differential in favour of the dollar would continue to shrink. At the beginning of December the dollar touched a new low of DM 1.96.

After a short breathing-space the pressure on the dollar began to build up again in the latter part of December, and in the course of January 1987 it became so intense as also to cause some concern in US official circles. There were several reasons for this further deterioration of market sentiment. One important factor was that the apparent upward trend of German interest rates in the last months of 1986, as well as the cautious German and Japanese approaches to fiscal policy, were conveying to the markets the impression that the sort of policy co-ordination considered by the US authorities as a precondition for preventing any further decline of the dollar was not forthcoming. A further jolt to confidence was the announcement at the end of December of preliminary US trade figures for November showing a new record deficit. This apparent lack of adjustment progress gave rise to fears that the US authorities might favour a further depreciation of the dollar — and in fact a number of US official statements at that time seemed to support this view.

The downward pressure on the dollar became particularly intense when, after the EMS realignment of 12th January, market participants felt that the German authorities would no longer need to buy dollars to keep the Deutsche Mark within the EMS exchange rate band. A cut in the German discount and lombard rates on 23rd January was erroneously interpreted as only a half-hearted move, since it was accompanied by measures to mop up the liquidity which had flooded into Germany on the eve of the EMS realignment. The Deutsche Mark continued to strengthen, and on 28th January the dollar touched a new low of DM 1.77, down by over 12 per cent. from its mid-December level.

In contrast to earlier months, the weakening of the dollar in late December and January was not restricted to its performance against the continental European currencies, but also encompassed its exchange rate vis-à-vis the Japanese yen and other major currencies. Despite heavy official support by the Bank of Japan, the dollar fell to a new low of Yen 150 on 19th January. A joint statement on 20th January by the Secretary of the US Treasury and the Japanese Finance Minister reaffirming their October understandings on exchange rate policy did not succeed in reassuring the exchange markets.

The turning-point did not occur until 28th January, when, for the first time since the turn-round of the exchange markets, the US authorities joined the Japanese authorities in extending support to the dollar. Although, at $50 million, the amount of the US intervention was only symbolic, the demonstration of unanimity had a strong psychological impact. Speculation about a Group of Seven meeting, fears of further official exchange market intervention, the publication of improved US trade and employment data and the pronounced decline of German and Japanese interest rates since the beginning of the year all contributed subsequently towards the restoration of a two-way dollar market. Although nervousness remained, the dollar had already stabilised ahead of the Louvre meeting of 21st and 22nd February, at which the Finance Ministers and central bank Governors of the main industrial countries agreed that further substantial exchange rate shifts could be harmful and

that they would co-operate closely to foster stability of the exchange rates at the levels then prevailing. Although this statement at first seemed to have made only a limited impression, it subsequently helped the market to digest a spate of bad US economic figures without engendering a renewed decline of the dollar. In the second week of March increasing evidence of a weakening of the German economy even led to a temporary easing of the Mark, but fears of potential central bank intervention aimed at preventing a further pick-up in the dollar soon reversed this movement.

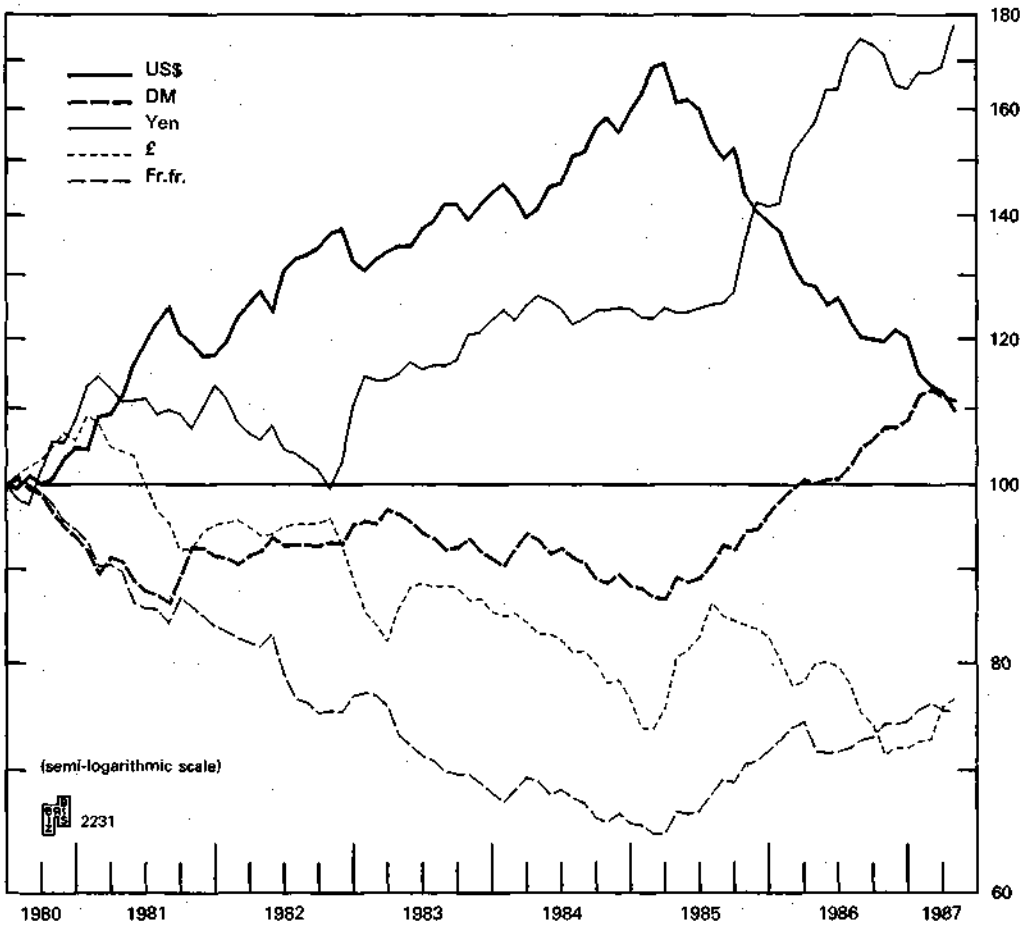
However, once more the period of calm did not last very long. In the last ten days of March official US statements denying the existence of commonly agreed exchange rate targets and mounting concern about trade frictions between the United States and Japan set in motion a new wave of dollar weakness. Unlike in the last four months of 1986, the upward pressures were this time concentrated on the yen, whereas the Deutsche Mark continued to benefit from the capital reflows to other EMS member countries following the earlier EMS realignment. Despite very heavy and concerted official intervention, in which the United States participated, and despite monetary policy support, the dollar fell below Yen 150 for the first time on 24th March and was quoted somewhat below Yen 146 in the days preceding the Washington meeting of the Group of Seven countries on 8th April.

The communiqué issued by this Group, which reconfirmed the Louvre understandings, but apparently on the basis of the lower levels to which the dollar had in the meantime fallen, did not reassure the markets; nor did the Japanese announcement of a planned $35 billion supplementary public expenditure package. Against the background of a further increase in the Japanese trade surplus and concerns about US trade sanctions against Japan, the dollar continued its downward movement, reaching a new low of Yen 138 on 27th April. Reassuring official US statements that a further decline of the dollar was undesirable, persistent exchange market interventions and very wide interest differentials subsequently brought some relief. However, exchange market pressure shifted towards the European currencies, with the dollar dropping to DM 1.76 on 5th May, its lowest level since 1980. Nevertheless, in comparison with its level earlier in the year, the appreciation of the Deutsche Mark remained quite modest. In the third week of May the dollar was quoted at around Yen 140 and DM 1.78, down by roughly 9 and 3 per cent. respectively from its levels in the three weeks before the Louvre meeting.

More so than during earlier episodes of dollar weakness, exchange market developments this time had a very direct impact on financial market developments. With private Japanese and other foreign investors shying away from dollar paper, Euro-dollar bond-issuing activity slowed down sharply. US interest rates began to go up quite steeply, with ten-year government bond yields soaring by 100 basis points between the third week of March and the third week of April and short-term interest rates rising by about 50 basis points. At the same time, Japanese long-term interest rates declined sharply, with yields on ten-year government bonds falling to 2.5 per cent. in mid-May, down by over 200 basis points from their February level. As a result of these interest rate movements, which were in part officially inspired, the differentials between long-term US and Japanese bond yields reached the unusually high level of 600 basis points. Moreover, in mid-May the Deutsche Bundesbank reduced the interest charged on security repurchase agreements with banks from 3.80 to 3.55 per cent.

Effective exchange rates of selected currencies, 1980–87.

Monthly averages, June 1980 = 100.



The Swiss franc followed the upward movement of the Deutsche Mark against the dollar quite closely during the period under review (see the graph on page 155), but was particularly strong from early March to early May 1987, when it even appreciated somewhat against the Deutsche Mark, and on 5th May the dollar dropped below Sw.fr. 1.45, its lowest level ever. Sterling and the Canadian dollar, by contrast, displayed at times quite different exchange rate patterns from those of the Deutsche Mark and the yen.

The performance of sterling continued to be heavily influenced by oil price factors. After a steep decline in the second half of 1985 and the early weeks of 1986, a reappraisal of the impact of lower oil prices on the British economy led to a considerable improvement in market sentiment, and from early February to early July sterling moved roughly in parallel with the other major currencies against the US dollar. However, from July onwards the continued weakness of oil prices, their implications for the UK balance of payments and more general concerns about economic developments in the country began to undermine sterling once more. As a result, it started to decline not only against the Deutsche Mark and the yen but even against the weakening dollar. By the second half of October the fall in the

weighted exchange rate of sterling from its mid-year level reached 12 per cent., while its decline against the continental European currencies amounted to about 16 per cent. Although in view of the drop in the oil price the UK authorities had originally welcomed a downward correction, the pronounced and persistent weakening of sterling ultimately prompted an upward adjustment in the UK banks' base lending rates by a full percentage point in mid-October.

Given its low exchange rate levels, the high interest rate differential in its favour eventually helped to stabilise sterling. With confidence being underpinned by the recovery of oil prices, in late 1986 sterling began to move up strongly against the dollar in line with the yen and the Deutsche Mark. In fact, in February and the first half of March 1987, when the other major currencies had temporarily stabilised against the dollar, sterling continued to strengthen and, despite official statements that a further appreciation would not be welcome, four base rate cuts and massive intervention by the Bank of England, it rose further to reach a peak of nearly $1.69 in early May, its highest level for over four years.

Owing to the strong focus of Canadian monetary policy on exchange rate stability, the Canadian dollar as usual fluctuated less against the US dollar than the other major currencies (see the graph on page 153). Nevertheless, the period under review witnessed a pronounced temporary turn-round of market sentiment in its favour. In the first two months of 1986 the Canadian dollar had declined, under the impact of the collapse in oil prices, the general weakness of commodity markets and budgetary uncertainties; this was countered by heavy official intervention and a sharp upward adjustment in interest rates, with the banks' prime lending rate being temporarily raised from 10 to 13 per cent. and short-term interest rate differentials vis-à-vis the United States widening to over 5 percentage points. In the course of the spring, however, the downward pressures subsided, and during the rest of the year the Canadian dollar was traded within a narrow range around US$0.72.

Towards the end of 1986, against the background of strengthening oil prices and high Canadian interest rates, the Canadian dollar began to look increasingly attractive to foreign investors. Although the interest rate differentials vis-à-vis the United States were allowed to contract sharply, massive capital inflows pushed the Canadian dollar up from $0.72 in November 1986 to a peak of almost $0.77 in mid-April despite heavy official intervention. At that point, however, a reappraisal of the outlook for the Canadian currency resulted in an abrupt turn-round of the market situation and its exchange rate dropped by nearly 3 per cent. within the space of a few days, while the interest rate differential vis-à-vis the United States widened from less than ½ per cent. to 1½ per cent.

Longer-term perspectives. Given the sharp movements that have occurred during the past two years, it may be of considerable interest to look briefly at exchange rate behaviour from a longer-term point of view. The graph on the next page shows the development since the 1971 Smithsonian Agreement of the bilateral exchange rates of the yen, the Deutsche Mark and sterling against the dollar, adjusted for differences in the movements of unit labour costs.

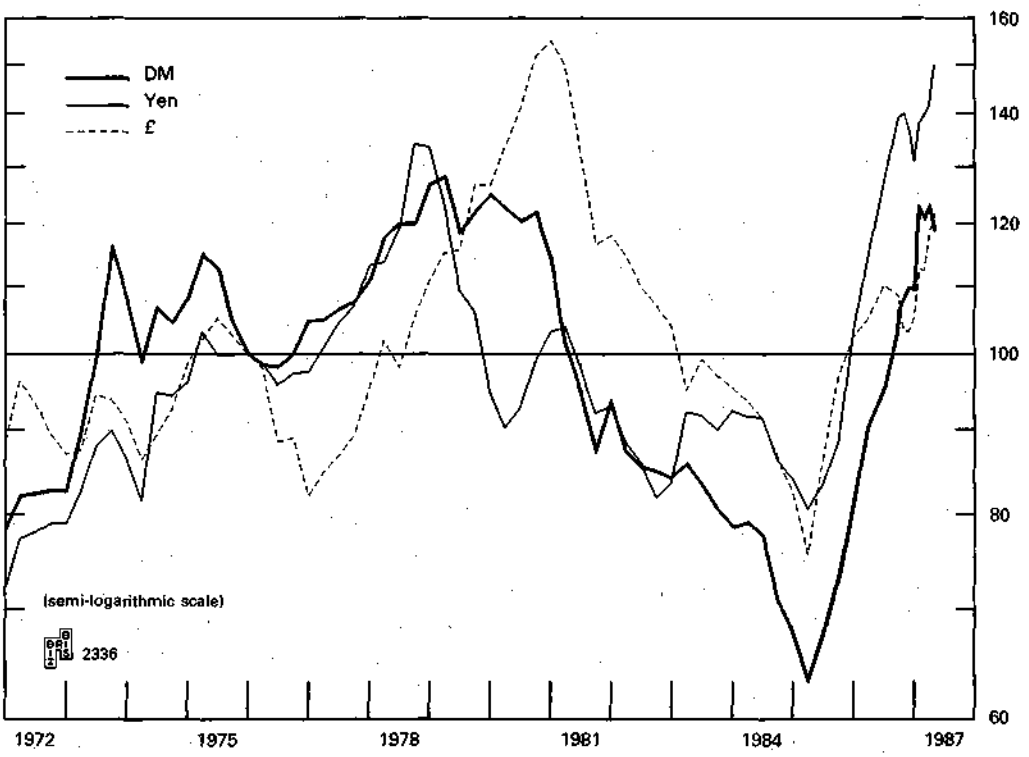
Several features stand out. The most striking is probably the huge amplitude of the medium-term exchange rate fluctuations that have occurred over the past ten years or so, with the individual phases comprising appreciations (depreciations) of

nearly 100 (50) per cent. It would appear on intuitive grounds that, in a highly integrated world economy, swings of that order of magnitude in real exchange rates must play havoc with the allocative role of price mechanisms. Moreover, there can be little doubt that the excessive appreciation of the real exchange rate of the dollar (mirrored in the graph by the depreciation of the other currencies) in the period from 1981 to early 1985 was a key factor in the build-up of the huge US current-account deficit and the undesirably large Japanese surplus. Although the exchange rate movements of the past two years appear to have corrected the overvaluation of the dollar, the recent US trade performance seems to suggest that, while market shares may be quickly lost, it is much more difficult and time-consuming to recapture them, particularly when vis-à-vis certain currencies, such as those of some newly industrialised countries in Asia, the exchange rates are still out of line. Finally, there can be little doubt that the displacement of factors of production caused by major distortions in real exchange rates entails serious economic and social costs and gives a strong impetus to protectionist pressure.

A second striking feature emerging from the graph is the speed of the recent dollar adjustment, which does not bear any great resemblance to a "soft landing". This impression is, however, somewhat misleading. Despite occasional heavy pressures and large-scale intervention, exchange market developments have, on the

Real bilateral exchange rates of selected currencies against the US dollar, 1972–87.*

Fourth quarter 1975 = 100.



Note: Data prior to September 1986 are quarterly averages; thereafter, monthly figures are shown.

* Adjusted on the basis of movements in relative unit labour costs.

whole, not got out of control. In fact, given the extent of original exchange rate distortions, it can be argued that from the point of view of resource allocation a quick exchange rate correction was preferable to a long-drawn-out one — at least to the extent that this did not lead to a collapse in market confidence. That such a collapse of confidence in the dollar did not occur is reflected in the fact that the key currency countries were on the whole not compelled to adopt policies that would have been totally undesirable on domestic grounds. Until early 1987 the drop in the dollar did not impose a halt on the easing of US monetary policy; and, although in Germany and Japan the timing of monetary relaxation was influenced by exchange rate considerations, these policies were justified in large measure by the state of these countries' domestic economies. It was only in the spring of this year that disruptive shifts in international capital flows and their exchange market consequences began to exert an overriding influence on monetary policies, thereby raising some broader questions concerning the proper functioning of a floating rate system in a world of free capital movements and globally integrated financial markets.

Probably the most encouraging feature of exchange rate developments during the past two years was that the very large downward adjustment of the dollar took place without a major resurgence of inflation in the United States. Although this was, admittedly, due in part to exogenous factors such as the weakness of the price of oil and other raw materials, the strong correction of nominal exchange rates was, therefore, accompanied by a nearly equivalent change in real exchange rate relationships. It is this successful avoidance of a vicious circle of depreciation and inflation which may give grounds for hoping that the imbalances and maladjustments that had resulted from the exaggerated appreciation of the dollar during the early years of this decade can ultimately be corrected without excessive damage to the stability of the world economy.

Finally, the graph suggests that, after the sharp movements that have recently occurred, exchange rates must by now have gone a long way towards eventually bringing the underlying current-account positions to more sustainable levels. Of course, the choice of base period — in this case the fourth quarter of 1975 — inevitably involves a large degree of arbitrariness. Nevertheless, it may plausibly be said that in the last months of 1975 exchange rates were not too far out of line, with the US current account in surplus and the yen, the Deutsche Mark and sterling in real terms standing respectively 39, 28 and 13 per cent. above their Smithsonian levels against the dollar.

It can be seen from the graph that in real terms the yen has, since the end of 1975, risen by another 50 per cent., thereby appreciating not only vis-à-vis the dollar but also, to a lesser extent, vis-à-vis sterling and the Deutsche Mark. This, admittedly, does not mean that the competitiveness of Japanese export industries has suffered a corresponding loss. The figures which have been used for the calculations of these real exchange rate indices are economy-wide averages. Countries with well above-average productivity growth in the internationally traded goods sectors, and a lead in the development and marketing of new products, may well be able over the longer term to afford a substantial appreciation in their real exchange rates without suffering an excessive deterioration in their international competitive position.

The real exchange rate of the Deutsche Mark, unlike that of the yen, has not gone beyond the high levels it had previously reached in the late 1970s and which

had contributed at the time to the emergence of a sizable German current-account deficit. The UK balance-of-payments situation has been favourably affected by the development of the North Sea oilfields, which may provide the rationale for sterling's 20 per cent. appreciation against the dollar since end-1975.

The problem with evaluating exchange rate relationships is, of course, that the "equilibrium exchange rate", while useful, perhaps, as an analytical concept, is not a parameter whose value can be objectively calculated. Instead, it must to some extent have the character of a target variable that is part of a broader policy strategy. The difficulty for policy-makers of deciding about appropriate exchange rate relationships will be particularly great when, as at present, the underlying current-account imbalances are very large and react only with long lags to exchange rate adjustments, when there are great uncertainties about the future development of the world economy and when, as a result of the increasing globalisation of financial markets, the volume of internationally mobile funds has become very large in relation to trade flows.

The difficulty, in such an environment, of judging the appropriateness of exchange rate relationships not only poses problems for policy-makers but also has direct consequences for the satisfactory functioning of a floating rate system. Unless exchange rate expectations are firmly anchored, there is a danger that market behaviour will be governed by mass psychology, extrapolative expectations and conjectures about official policy responses. Particularly when current-account imbalances are very large to start with and a reasonable degree of exchange rate stability requires a correspondingly large amount of private position-taking, it will be of crucial importance for the authorities to provide clear guidance as to their own exchange rate views and intentions. Any sign of official hesitation or international policy disagreement is bound, under those circumstances, to act as an invitation to currency unrest and exchange market turmoil. Given the internationalisation of financial markets and the huge volume of internationally mobile funds, the direct demand and supply effects of official exchange rate intervention will tend to be relatively moderate. In order to exert a more lasting influence, official intervention will have to make an impact on market psychology and exchange rate expectations, which will usually require that it be carried out in an internationally co-ordinated way and as part of a broader policy strategy.

Given the massive exchange rate adjustment that had already occurred and the long lags with which current-account imbalances respond to exchange rate changes, the Group of Seven countries decided at their February 1987 meeting in Paris that the then prevailing exchange rate levels were about right in current circumstances and that they would co-operate in trying to defend them. This agreement was subsequently reconfirmed, albeit not before a renewed decline of the dollar, on the occasion of the IMF Interim Committee meeting in the first half of April.

It might be tempting to argue that, in the interest of a speedier correction of the very large current-account disequilibria, considerable exchange rate overshooting would be desirable for a while. However, a further wave of dollar depreciation would give rise to renewed J-curve effects, and, through its impact on dollar interest rates and aggregate demand in the appreciating countries, it would tend to slow down world economic growth. The resultant widening in current-account imbalances might destabilise exchange rate expectations even further. Moreover,

from a longer-term point of view, the overshooting of exchange rates would give the wrong signals for resource allocation, and thereby risk sowing the seeds of future disequilibria and exchange rate instability. In the light of these considerations it would appear that, in line with the Group of Seven agreement, the safest strategy in present circumstances is to await the outcome of the very large realignment that has already occurred and to gear policies towards stabilising exchange rates around their present levels.

March 1986 exchange market survey.

In the spring of 1986 a co-ordinated survey was conducted by the Bank of England, the Bank of Japan and the Federal Reserve Bank of New York of turnover in the London, Tokyo and New York exchange markets. The period chosen for this synchronised survey of activities in the world's three largest exchange market centres was March 1986 (in the case of London the first ten working days only). The findings were remarkable in several respects.

Perhaps the most salient feature was the size of daily turnovers. Including both spot and forward operations, they averaged nearly $200 billion in the three markets taken together, viz. $90 billion in London, $50 billion in New York and $48 billion in Tokyo. These figures exclude the double-counting arising from interbank dealings within individual market centres but not that arising from operations between banks located in different centres.

A second salient feature was the rapid growth of turnover in recent years. In Tokyo turnover volume was four times as high as in 1983, and in New York it had nearly doubled over this three-year period (for London comparisons with earlier periods are not available). In the case of Tokyo this rapid growth was, of course, influenced by deregulation. Nevertheless, in comparison with the expansion of international trade — import values of industrial countries increased by less than 30 per cent. over this three-year period — the rate of growth of exchange market turnover seems extraordinary. It reflects, no doubt, the increasing global integration of national financial markets, with the concomitant expansion in the volume of cross-border capital transactions and associated hedging and arbitrage operations.

Thirdly, and not too surprisingly in view of the size of the turnover, the survey showed that only a relatively small proportion of exchange market transactions was with non-bank customers — around 10 per cent. in London and New York and 30 per cent. in Tokyo. Although these percentages would certainly be much higher if transactions that are indirectly related to business with customers were taken into account, it would appear that there must have been a very large amount of turnover generated by the banks' own capital transactions, arbitrage operations and market-making activities.

Fourthly, even outside New York, an overwhelming proportion of exchange market operations was channelled via the dollar. In London, for example, direct business between third currencies, such as sterling and the Deutsche Mark, accounted for only 3 per cent. of the total turnover. The indirect exchange of third currencies by going through the dollar is, of course, itself one of the main reasons for the huge volume of dollar transactions.

While at first sight the volume of daily exchange market turnover might look overwhelming, particularly in comparison with the amount of reserves available for official exchange market intervention, it is important to beware of premature policy conclusions. Adding to the net demand for one currency (and by the same token to the net supply of another currency) will, ceteris paribus, trigger a much greater number of transactions not only affecting the exchange rates between the two currencies directly concerned but also adjusting the cross rates to all other currencies and the relations between spot and forward rates. Seen in this way, a given amount of official intervention will tend to generate a much greater volume of exchange market transactions, which may be by no means insignificant in relation to the total turnover volume. Moreover, as already stressed, the impact of official intervention cannot be evaluated solely in quantitative terms. Its psychological impact will tend to be equally or even more important. All in all, there can be little doubt that official intervention has at times played a useful role in providing exchange market guidance during the past two years.

Developments within the EMS.

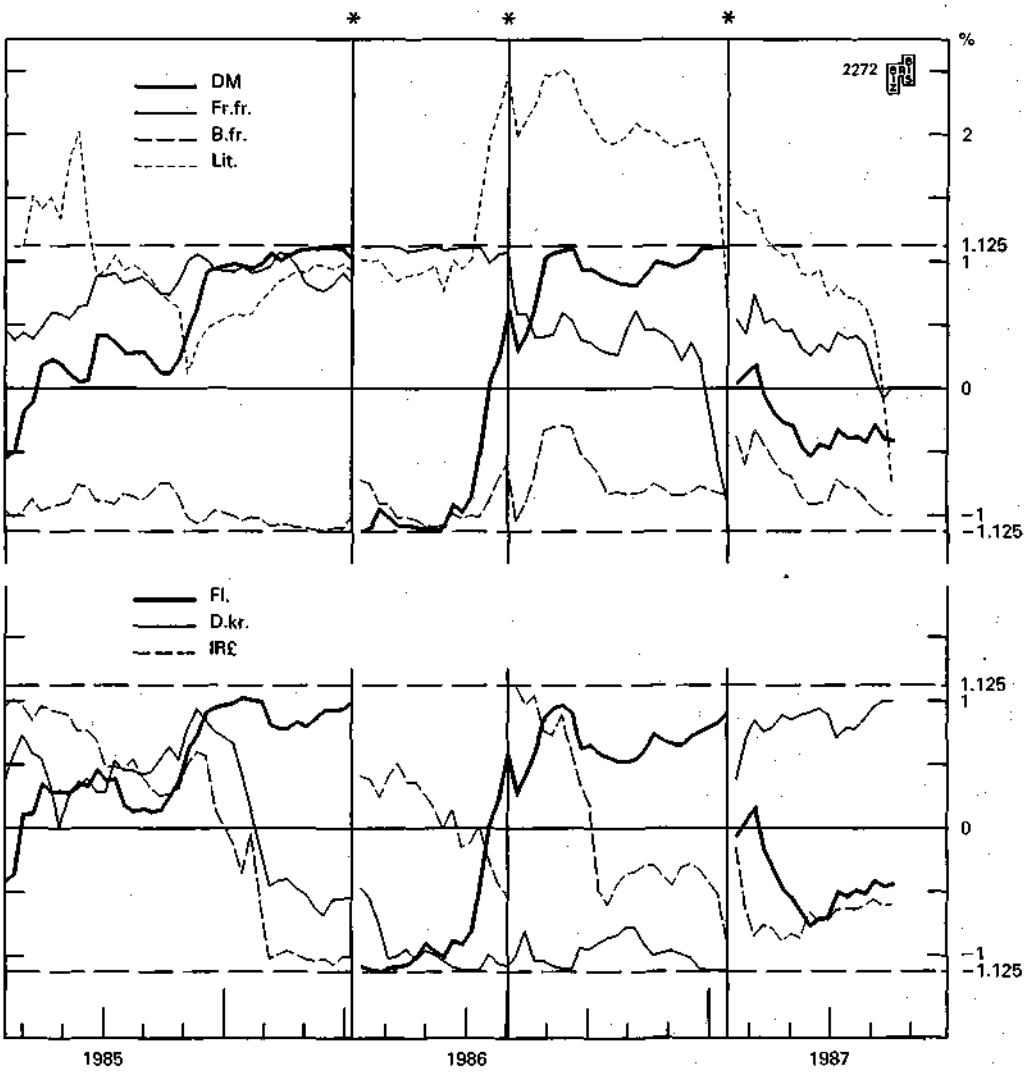
One important consequence of the weakening of the underlying market position of the dollar in 1986 was that it began to exert destabilising pressures on the EMS exchange rate mechanism. Nevertheless, even though for the European Monetary System the period under review was a rather difficult and agitated one, the trend among member countries towards convergence of economic performance continued. And the fact that the EMS exchange rate mechanism survived an unusually rapid and strong decline of the dollar without being forced to accept unduly large exchange rate adjustments between member currencies certainly testifies to its strength and resilience.

The April 1986 realignment, the principal outcome of which was to devalue the French franc by varying amounts against other member countries' currencies, was already described in detail in last year's Annual Report. This realignment was at first quite successful in reversing the earlier capital outflows and in attracting new funds to France, thereby permitting a substantial reduction of interest rates and a strong build-up of official reserves. Moreover, the French authorities used this leeway to undertake a far-reaching dismantling of exchange controls, including in particular more liberal rules with regard to the hedging of open currency positions and the abolition of the "devise-titre" regime for foreign portfolio investment by residents.

However, whereas after the preceding general realignment of March 1983 relative calm had prevailed for nearly three years, this time, against the background of dollar weakness, renewed strains within the EMS exchange rate mechanism began to emerge within less than three months. They affected in particular the Danish krone, which in late June dropped to the bottom of the exchange rate band, and the Irish pound, which because of the composition of Ireland's foreign trade was more strongly affected by the decline of sterling and the dollar than the other EMS currencies. The Irish pound was devalued by 8 per cent. against the other participating countries' currencies on 4th August. The French franc, too, weakened in the course of July as capital flows began to turn round once more, but with the help of official support it was kept in the upper half of the EMS exchange rate band.

Spot exchange rates in the EMS exchange rate mechanism, 1985–87.

Weekly averages of participants' currencies in relation to their intervention points, in percentages.



* Realignments of central rates with effect from 7th April 1986, 4th August 1986 and 12th January 1987.

The Deutsche Mark, which in the wake of the April realignment had fallen to the bottom of the EMS exchange rate band, began to move up steeply and in the course of August became the strongest currency within the band.

In September the strains within the EMS exchange rate mechanism intensified. Against this background the Finance Ministers and central bank Governors of the EEC countries, at an informal meeting at Gleneagles in late September, indicated their readiness to intervene jointly when necessary to insulate the EMS exchange rate relationships from further dollar weakness. Such co-ordinated intervention was subsequently implemented in the first half of October and appears to have had a calming effect on the markets.

From mid-December onwards, however, exchange rate pressures began to mount once more as social unrest in France, a temporary increase in German money market rates, the continuing large US trade deficit and related expectations of further dollar weakness contributed to renewed anticipation of an early EMS realignment. In the second half of December the French authorities, in order to curb speculators' potential gains from a future realignment, permitted the franc to drop into the lower half of the exchange rate band, which, with the Danish krone at the bottom and the Deutsche Mark at the ceiling, began to stretch to nearly its full potential width.

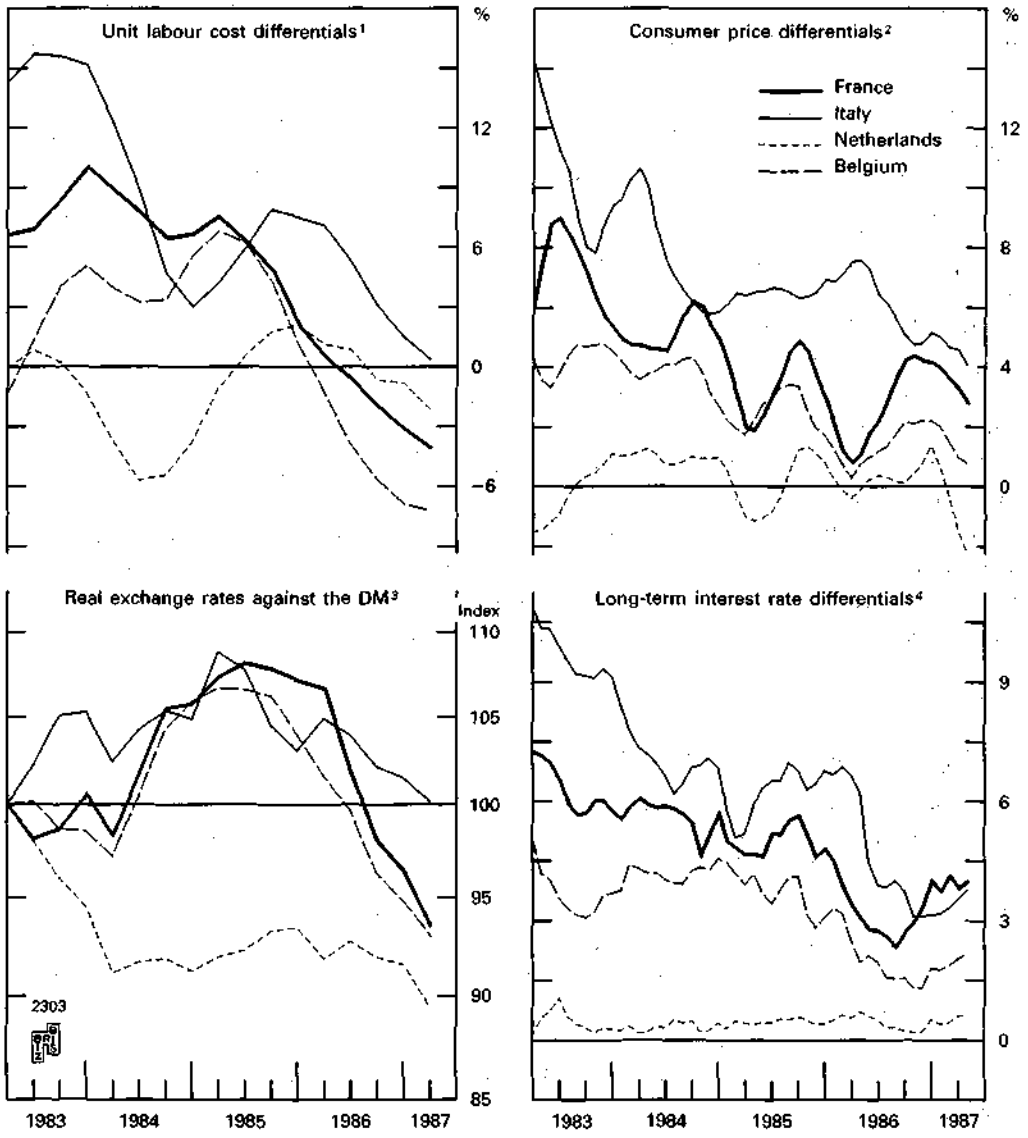
Capital flows into Germany continued to increase during early January 1987. The French franc and the Irish pound joined the Danish krone at the bottom of the band, while the Italian lira was allowed to fall by nearly 2 percentage points. Nevertheless, these exchange rate adjustments within the band were too small to allay market fears, and the degree of intervention necessary to maintain the existing EMS exchange rate structure became unsustainable. After tough negotiations the Finance Ministers and central bank Governors of the EEC member countries decided over the weekend of 10th–11th January to revalue the Deutsche Mark and the Dutch guilder by 3 per cent. each and the Belgian franc by 2 per cent. against the other participating currencies.

This relatively modest realignment, which was smaller than the 4.5 percentage point scope for bilateral exchange rate movements within the band, was viewed sceptically by many market participants. It nevertheless restored a degree of calm to EMS exchange rates, and the French franc returned promptly into the upper half of the EMS exchange rate band. With the sharply weakening dollar making for continued market uncertainties, the realignment was at first slow to produce a major turn-round in capital flows. However, in February nominal interest rate differentials began to reassert their influence on capital movements. The reversal of the earlier capital flows into Germany permitted other member countries to ease their policies and to recoup their earlier exchange reserve losses. Moreover, these intra-marginal interventions, by strategically shifting between Deutsche Mark and dollar purchases, tended also to exert a stabilising influence on the dollar/Deutsche Mark exchange rate. In mid-March the Bank of Italy reduced the official discount rate by ½ percentage point and imposed a 25 per cent. reserve requirement on increases in the banks' net foreign currency indebtedness.

After some hesitation in the weeks following the realignment, the Deutsche Mark and the Dutch guilder moved well into the lower half of the EMS band in the course of February. Exchange rate relationships between member currencies subsequently remained quite stable, except for the Italian lira, which had stood 1.5 per cent. above its central rate in the week after the January realignment but was allowed to drop to 1 per cent. below its central rate in the first half of May, when it came under considerable pressure in the exchange markets. Nevertheless, on 13th May the Italian authorities announced a widely anticipated package of exchange control liberalisation measures, including the abolition of the 15 per cent. non-interest-bearing deposit requirement in respect of residents' purchases of foreign securities.

As already indicated, the process of economic convergence among EMS member countries continued in the period under review. Despite negative inflation rates in Germany, inflation differentials between other member countries and

Selected EMS countries: Cost and price developments relative to those in Germany, 1983–87.



[1] Domestic minus German unit labour costs in manufacturing, calculated as four-quarter percentage changes of three-quarter moving averages of the indices (most recent data are estimated). [2] Domestic minus German consumer prices, calculated as annualised percentage changes over six months. [3] In terms of relative unit labour costs: first quarter 1983 = 100 (semi-logarithmic scale). [4] Domestic minus German public sector bond yields.

Germany tended to show a further decline — a development which was particularly pronounced in the field of unit labour costs. Interest rate differentials among member countries, too, narrowed in 1986, and among the countries whose currencies at times came under attack Belgium, France and Italy recorded substantial improvements in their current-account balances. This contrast between convergence of economic performance and exchange rate unrest reflected the vulnerability of the EMS exchange rate mechanism to two kinds of influence — dollar weakness and the increasing international integration of national capital markets.

In view of Germany's strong international trade position and its large current-account surpluses, there tends to be a market perception that Germany will be in a better position than other member countries to weather a strong depreciation of the dollar. Moreover, when, because of exchange rate expectations, foreign financial investment tends to shy away from the United States, it is likely that, partly for the same reasons, Germany will attract a disproportionately large share of this capital. It may, however, be hoped that, since the dollar has declined to much more realistic levels, this source of disturbance will become less important in the future.

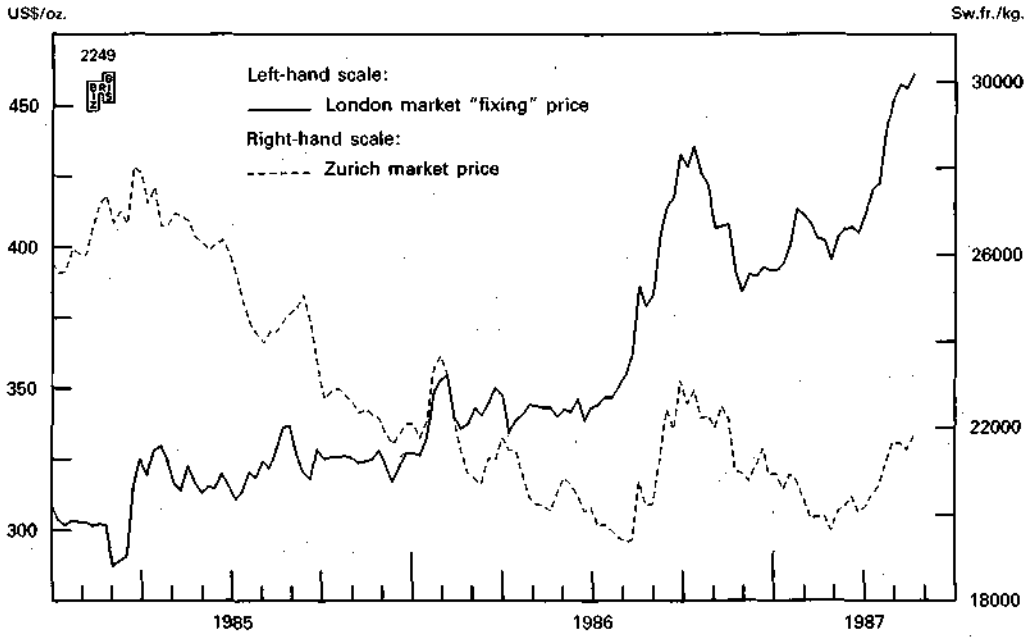
The same cannot necessarily be said about capital mobility. In a world of increasing financial integration there may be at times an inconsistency between a system of fixed nominal exchange rates and realistic interest rate levels that adequately reflect inflation differentials. As long as confidence in the stability of the prevailing nominal exchange rate relationships persists, capital will tend to flow into the countries with higher nominal interest and inflation rates. But once real exchange rates have got too far out of line, or there are some other factors (such as excessive dollar weakness) undermining the credibility of the existing nominal exchange rate structure, nominal interest rate differentials will lose their grip and capital will flood back into the low-inflation countries, thereby ultimately creating pressure for a realignment. There may be a danger that, as long as significant inflation differentials persist, greater European financial integration will not necessarily contribute to greater exchange rate stability because of continuing capital flow disequilibria.

Gold production and the gold market.

Developments in the gold market during 1986 contrasted in a number of respects with those of the preceding years. Total estimated new market supplies of gold, which had been fairly stable at around 1,300 tons during 1982–85, rose quite sharply to 1,615 tons under the combined influence of increased output and higher net sales by communist countries. However, the strength of non-monetary demand for gold was such that this increased supply was absorbed at dollar prices which rose during 1986 by nearly 20 per cent. to $391 per fine ounce, with quotations reaching nearly $443 at one point in September. Measured in terms of the appreciating currencies, such as the Swiss franc, the market price of gold again declined on balance during 1986, although by much less than in 1985. However, when the dollar price of gold again rose sharply in the spring of 1987, prices in the principal strong currencies also began to go up markedly.

The strength of non-monetary demand for gold in 1986 resulted from a combination of heterogeneous factors, including the continuing weakness of the dollar, lower interest rates, strong monetary growth, related fears of renewed inflation and an imperial anniversary in Japan. Moreover, it occurred despite a decline in industrial use of the metal related to lower demand for jewellery in the Middle East following the drop in oil prices. Demand for gold for investment and hoarding purposes, therefore, appears to have picked up strongly. A salient feature of this development was a surge in purchases of gold coins. The use of gold for minting purposes is estimated to have nearly trebled in 1986, to about 315 tons. A substantial part of this increase can be attributed to the issue in Japan of the commemorative Hirohito coin, while elsewhere, partly as a result of restrictions on

Market prices of gold, 1985–87.
Weekly averages.



sales of Krugerrands, there was a shift to purchases of North American coins, with the American Eagle becoming the most popular official coin of standard issue from October 1986 onwards. The Australian Nugget, the Britannia and the gold ECU, which have recently been, or are shortly to be, issued, will further diversify the

Estimated world gold production.

Countries	1953	1970	1980	1982	1983	1984	1985	1986
	in metric tons							
South Africa	371	1,000	675	664	680	683	673	640
United States	61	54	31	45	63	66	80	108
Canada	126	75	52	67	73	86	90	108
Australia	33	20	17	27	31	39	59	75
Brazil	4	9	35	35	59	62	72	67
Philippines	15	19	22	31	33	34	37	40
Papua New Guinea	.	1	14	17	18	19	31	36
Colombia	14	7	17	16	18	21	26	27
Chile	4	2	7	19	19	18	18	19
Venezuela	1	1	1	2	6	10	12	15
Zimbabwe	16	15	11	13	14	15	15	15
Japan	7	8	7	6	6	7	9	14
Ghana	23	22	11	13	12	12	12	12
Peru	4	3	5	7	10	11	11	11
Dominican Republic	.	–	12	12	11	11	10	9
Mexico	15	6	6	5	7	8	8	8
Zaire	11	6	3	4	6	10	8	8
Total listed	705	1,248	926	983	1,066	1,112	1,171	1,212
Other countries	50	25	33	45	49	48	62	69
Estimated world total*	755	1,273	959	1,028	1,115	1,160	1,233	1,281

* Excluding the USSR, other eastern European countries, China and North Korea.

Source: Consolidated Gold Fields PLC (London).

supply of new coins. In addition to larger purchases of gold coins, investment in gold bars appears to have picked up markedly in 1986.

As for the supply of new gold, mining production grew by 48 tons to 1,281 tons last year, whereas sales by communist countries amounted to an estimated 350 tons, compared with 250 in 1985. South African output fell by 33 tons to 640 tons as the higher gold price led to a further shift towards the mining of lower-grade ores. South Africa now accounts for only half of total production in non-communist countries. In 1970, at the peak of its gold production, South Africa's share had amounted to nearly 80 per cent. In other countries, where gold mining occurs in an environment quite different from that in South Africa, the rising gold price had a more conventional impact on supplies. Production rose by 28, 18 and 16 tons in the United States, Canada and Australia respectively.

Last year's estimated sales by communist countries (excluding European IMF members) were the highest since 1978. As usual, the bulk of this supply came from the Soviet Union, but there also seem to have been very significant sales by China and, to a lesser extent, North Korea. The large Soviet offerings can be attributed in part to the weakness of the price of oil. The resultant shortfall in export earnings induced the country to sell as much gold as was possible without exerting a major negative impact on price trends.

Estimated market sources and uses of gold.

Items	1982	1983	1984	1985	1986
	in metric tons				
Production	1,030	1,115	1,160	1,235	1,280
Estimated net sales by communist countries[1]	200	100	150	250	350
Estimated changes in official gold stocks through market transactions[2] (– = increase)	100	70	20	–165	– 15
Total (= estimated non-monetary absorption)	1,330	1,285	1,330	1,320	1,615

[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.

Unlike in 1985, official gold stocks showed only a slight increase last year. Sizable additions to holdings were made in India (33 tons), the Philippines (24 tons), Taiwan (18 tons) and Mexico (6.5 tons), whereas Brazil, the United States, Romania (figures up to November only) and Canada reduced their official stocks by 21, 19, 15 and 12 tons respectively.

Under the combined impact of the factors mentioned on page 168, the London fixing price of gold rose from around $320 per ounce in early December 1985 to above $470 in the third week of May 1987. However, price movements were not spread evenly over the period under review. After rising in January 1986, quotations remained fairly stable in the $330–350 range up to mid-year. In July, however, against the background of renewed dollar weakness, concerns about South Africa and strong platinum prices, they started to climb steeply, reaching a peak of nearly $443 in September, before falling back to below $390 in November. Prices firmed

again in January 1987 and began to go up steeply in late March amid growing concern about the dollar, touching a peak of $480 in the third week of May, their highest level in over four years. Expressed in appreciating currencies, on the other hand, the picture was somewhat different. In Swiss franc terms, for example, a clear downward trend continued until late July 1986. Subsequently, however, the gold price movement began to outweigh exchange rate changes, and in the third week of May gold quotations in Swiss francs were about 15 per cent. above their end-July 1986 low.

As part of the general change in the regulation of financial markets in the United Kingdom, the authorities began in December 1986 a process of consultation with major participants in the London gold market. A consultative document was issued setting out proposals for the codification of the market's long-established informal club-like trading arrangements. Dealers recognised by the Bank of England will be able to engage in wholesale trading in gold, unencumbered by regulations designed to safeguard small investors. In order to be recognised, a dealer will need adequate capital, an ownership structure that prevents conflicts of interest and proper systems of management and control.

Reserves and international liquidity.

Last year was marked by a strong expansion of countries' international reserve holdings measured in current dollar terms. However, this growth was heavily concentrated in a limited number of countries. Total official reserves other than gold rose by $69 billion, or over 15 per cent., in 1986 and amounted to $510 billion at the end of the year, with Taiwan and Japan alone accounting for 57 per cent. of the total increase. Indeed, reserve gains were greatest in countries which already had large holdings and where their marginal utility was therefore presumably quite small. The non-gold reserves of the Group of Ten countries rose by $49.6 billion, whereas those of the developing countries other than Taiwan fell by $13.8 billion. There was thus no general increase in reserve ease in 1986. Moreover, the current dollar figures overstate reserve expansion, since the sharp depreciation of the dollar has reduced its international purchasing power. Expressed, for example, in terms of SDRs, non-gold reserves rose by only SDR 15 billion, or 4 per cent., last year. On the other hand, owing to the fall in oil prices and the weakness of other raw material prices, dollar unit values of international trade showed on balance only a relatively moderate increase of about 4 to 5 per cent., so that from this point of view the increase in the dollar value of official reserves was to a large extent a "real" one.

Valued at market prices, countries' official gold reserves expanded by $60.4 billion to $368.7 billion last year. This increase was, however, mainly due to a 19.5 per cent. rise in the US dollar price of gold. The significance of such an increase in the dollar value of official gold stocks for international liquidity is, of course, rather limited under present arrangements. Official gold holdings are largely concentrated in the developed countries, and any attempt by a major country to meet its external payments needs by marketing a sizable proportion of its official stocks would very quickly depress the price. The use of gold would therefore be essentially confined to that of collateral, which presupposes the collaboration of other countries.

Changes in global reserves.

Areas and periods	Gold		Foreign exchange	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							
1984	– 0.6	–53.7	4.4	– 0.1	0.6	– 6.8	– 1.9
1985	– 0.2	13.2	15.8	0.8	2.9	3.3	22.8
1986	– 1.0	46.8	38.5	0.3	2.9	7.9	49.6
Amounts outstanding at end-1986	*736.6*	*288.0*	*157.8*	*25.9*	*17.7*	*48.0*	*249.4*
Other developed countries[2]							
1984	– 0.3	– 6.4	6.7	–	0.4	– 0.3	6.8
1985	– 1.8	1.0	6.3	0.1	0.3	0.4	7.1
1986	– 0.8	5.1	8.8	0.2	0.4	–	9.4
Amounts outstanding at end-1986	*83.9*	*32.8*	*60.0*	*2.4*	*2.1*	*0.8*	*65.3*
Developing countries							
1984	– 0.8	– 8.7	13.9	–	0.1		14.0
1985	4.2	3.5	14.0	0.9	0.6		15.5
1986	2.2	8.5	9.3	0.2	0.5		10.0
Amounts outstanding at end-1986	*122.6*	*47.9*	*175.8*	*14.9*	*4.1*		*194.8*
of which:							
Middle Eastern oil exporters[3]							
1984	0.2	– 1.6	– 5.1	0.7	–		– 4.4
1985	– 0.2	0.4	3.7	0.7	0.1		4.5
1986	–	1.4	– 6.5	0.1	–		– 6.4
Amounts outstanding at end-1986	*23.0*	*9.0*	*34.8*	*12.1*	*1.3*		*48.2*
Other							
1984	– 1.0	– 7.1	19.0	– 0.7	0.1		18.4
1985	4.4	3.1	10.3	0.2	0.5		11.0
1986	2.2	7.1	15.8	0.1	0.5		16.4
Amounts outstanding at end-1986	*99.6*	*38.9*	*141.0*	*2.8*	*2.8*		*146.6*
Total							
1984	– 1.7	–68.8	25.0	– 0.1	1.1	– 7.1	18.9
1985	2.2	17.7	36.1	1.8	3.8	3.7	45.4
1986	0.4	60.4	56.6	0.7	3.8	7.9	69.0
Amounts outstanding at end-1986	*943.1*	*368.7*	*393.6*	*43.2*	*23.9*	*48.8*	*509.5*

[1] Gold reserves valued at market prices. [2] Excluding eastern European countries. [3] Iran, Iraq, Kuwait, Libya, Oman, Qatar, Saudi Arabia and the United Arab Emirates.

As in 1985, one of the main reasons for the growth of non-gold reserves was the depreciation of the dollar, which pushed up the dollar value of assets denominated in other currencies. About $43 billion, or nearly two-thirds, of the 1986 increase in non-gold reserves can be attributed to such exchange rate effects.

The most important factor underlying the remaining $26 billion of genuine reserve growth was a shift in the financing of the US current-account deficit. Whereas in 1985 it had been more than funded by spontaneous capital inflows, with US liabilities to foreign official institutions having declined by $2.5 billion, in 1986 private capital inflows no longer covered the whole deficit, which had in the meantime expanded to $141 billion. The resultant exchange rate pressures at times prompted substantial official intervention purchases of dollars, notably by countries, such as Japan, which feared that the appreciation of their currency might get out of control. This development was reflected in a $29 billion increase in US liabilities to

foreign official institutions, most of which had a counterpart in a reported increase in other countries' official reserve holdings. Indeed, additions to official dollar balances may have been even larger than $29 billion, since to the extent that such dollars are invested in financial markets outside the United States they will tend to give rise in part to an increase in US liabilities to foreign non-official rather than official holders of dollars.

The United States itself did not intervene to support the dollar last year. On the contrary, the dollar value of the country's foreign exchange holdings, which consist largely of Deutsche Mark and yen, went up markedly, by $4.5 billion. This was mainly the result of exchange rate gains, but in part it also reflected interest accruals and other receipts.

On the other hand, non-dollar reserves held by European central banks in connection with their participation in the European Monetary System declined last year. This was the result of the exchange rate pressures which re-emerged within the EMS exchange rate mechanism. Countries whose currencies came under downward pressure tried to prevent their exchange rates from moving to the lower limit of the EMS exchange rate band; for protracted periods in 1986, this entailed substantial official sales of their holdings of other member currencies.

Another contractionary influence on international reserves was net repayments to the International Monetary Fund of large credits that had been extended in the early years of the decade. These repayments contributed to a fall of over $4 billion in constant dollar terms in the reserve positions of member countries whose currencies had been used for the disbursements of the credits. On the other hand, countries' SDR holdings increased by $1.6 billion in volume terms, mainly as a result of the Fund's use of its own SDR stocks for credit disbursements and interest payments.

By types of reserve asset, over 80 per cent., or $56.6 billion, of the overall increase in non-gold reserves was in the form of foreign exchange holdings. One-half of this growth was, however, the result of the increase in the dollar value of assets held in other currencies. In volume terms the rate of growth of foreign exchange reserves amounted only to 8 per cent. Valuation effects, moreover, accounted for more than the whole of the reported $7.9 billion increase in official ECU holdings. In volume terms such holdings decreased by $0.7 billion, which was more than accounted for by the lower gold conversion price used within the EMS for gold/ECU swaps.

Countries' SDR holdings and reserve positions in the Fund expanded by $3.8 billion and $0.7 billion respectively last year. Valuation effects, totalling $7 billion, accounted for $2.2 billion of the SDR growth and for more than the whole increase in Fund positions. In fact, in SDR terms, reserve positions in the Fund contracted by SDR 3.4 billion. As already explained, this decline reflected in large measure the swing in the Fund's position from net lender of new funds to net recipient of repayments. In all, gross repayments to the Fund totalled SDR 5.7 billion, whereas gross drawings (excluding those on reserve tranches) totalled only SDR 3.8 billion. As a result, the amount of Fund credit outstanding declined from SDR 35.2 to 33.4 billion. In 1984 and 1985 the Fund had been a net lender to the tune of SDR 5 and 0,4 billion respectively.

The decline in Fund credit encompassed most regions, the only exception being Latin America, where net claims showed small increases. Within Latin America the principal recipients of new Fund credit were Mexico (SDR 0.6 billion), Argentina and Chile (SDR 0.1 billion each), whereas Brazil repaid SDR 0.5 billion. China, which received SDR 0.6 billion, was the only large borrower outside Latin America. Sizable net repayments were made by India, Pakistan, South Africa and Turkey (SDR 0.3 billion each). At the end of the year there were thirty-one standby and extended credit arrangements in effect. Total undrawn amounts under these facilities came to SDR 2.8 billion, down from SDR 4.7 billion a year earlier. In addition, nine arrangements were concluded under the structural adjustment facility established in March 1986 to provide funds for low-income developing countries implementing programmes designed to alleviate protracted balance-of-payments problems and to promote economic growth. The total amount disbursed under this facility was SDR 0.1 billion, with a further SDR 0.1 billion approved but undrawn.

The 1986 expansion in global non-gold reserves was not very broadly distributed across countries. It was the net result of large reserve increases in a small number of countries and very little growth or actual declines elsewhere. Developed countries' reserves grew by $59 billion in dollar terms, and in the developing world Taiwan recorded a $23.8 billion increase in its foreign exchange holdings. On the other hand, the official reserves of Middle Eastern oil-exporting countries shrank by $6.4 billion and those of other developing countries (excluding Taiwan) by $7.4 billion, despite the substantial valuation gains registered in respect of reserves held in non-dollar forms.

The Group of Ten countries' non-gold reserve holdings expanded by $49.6 billion, with volume changes accounting for $27 billion of this amount. Japan recorded by far the largest gains, its reserves expanding by $15.5 billion, or nearly 60 per cent. Moreover, very sizable increases in reserve holdings in dollar terms were recorded by Germany ($7.4 billion), the United Kingdom ($5.6 billion), France ($4.9 billion), Italy ($4.5 billion) and Switzerland ($3.8 billion). The United Kingdom's reserve gains were to a large extent the result of a $4 billion Euro-floating rate note issue launched by the British Government in September 1986 for the purpose of boosting the country's foreign exchange reserves. In all of these five European countries, in contrast to Japan, valuation effects contributed strongly to these increases. A large reserve gain of $5.4 billion, or 17 per cent., was, moreover, recorded by the principal reserve currency country, namely the United States itself, but more than the whole of this increase was the result of exchange rate effects.

In other developed countries the dollar value of non-gold reserves expanded by $9.4 billion, or nearly 17 per cent. New Zealand and Spain recorded the largest reserve gains of $4.2 and 3.6 billion respectively. Declines were concentrated among the Nordic countries, with Finland and Norway registering falls of $2 and 1.1 billion.

The expansion in the developing countries' aggregate reserve holdings totalled $10 billion; excluding Taiwan, however, there was a decrease of $13.8 billion, the sharpest yet recorded. The reserve losses were largely concentrated in OPEC countries that had earlier recorded large increases at times of buoyant oil prices. In current dollars, Saudi Arabia's official non-gold reserves fell by $6.7 billion, or 27 per cent., Venezuela's by $3.8 billion and Algeria's by $1.2 billion. As regards non-

OPEC developing countries, the region in which the largest reserve losses occurred last year was Latin America with its heavy concentration of debt servicing difficulties. Brazil drew down its official reserves from $10.6 to 5.8 billion, while Argentina suffered a decline from $3.1 to 2.3 billion. Mexico's reserves shrank from $4.9 billion at the end of 1985 to $3.3 billion in September 1986, but rose to $5.7 billion during the rest of the year as the country benefited from a reflux of capital induced by its stringent domestic economic policy stance.

The sharp rise in Taiwan's reserves contrasts with the changes recorded by most other developing countries in Asia, including the newly industrialised ones. For example, South Korea added only $0.5 billion to its reserves, although the rise would have been larger had it not repaid some of its external debts. China reduced its reserve holdings by $1.3 billion. On the other hand, strong reserve growth was shown by the Philippines, whose holdings nearly trebled to $1.7 billion, and Malaysia (+ $1.1 billion). Taiwan's reserve gains exceeded those reported for any other country in the world, and at the end of the year the country's holdings, at $46.3 billion, were second only to those of Germany.

The year 1986 saw a pronounced change in the pattern of investment of official exchange reserves. Official dollar balances held in the United States, which had shown only a fairly marginal increase in 1985, expanded strongly by $28.1 billion, or 21 per cent. At the same time, identified official reserve holdings in national markets outside the United States or deposited with banks in the Euro-markets declined by $14.8 billion in volume terms (i.e. on an exchange rate adjusted basis), whereas in 1985 they had recorded a $7.3 billion increase.

These developments do not seem to have been primarily a result of shifts in official reserve preferences, but were largely explained by the ways in which reserve movements came about last year. Firstly, as already mentioned, the weakening of the dollar led to large official dollar support purchases by countries such as Japan that hold the bulk of their reserves in dollars and in the United States. And, secondly, the emergence of exchange rate pressures within the EMS induced some member countries to extend support to their own currency by drawing on their holdings of other member currencies which had largely been invested in the Euro-market. As can be seen from the table on the following page, the main element in the volume decline in official Euro-currency deposits last year was a $9.1 billion drawdown in official Euro-Deutsche Mark balances.

In addition to these withdrawals of EMS countries' deposits, there was a large reduction of $21.4 billion last year in total OPEC deposits with banks outside the United States, as can be seen from the second memorandum item in the table. Part of this decline will have represented withdrawals of official dollar balances from the Euro-dollar market. The fact that official Euro-dollar deposits nevertheless showed virtually no change last year can probably be explained by large new official Euro-dollar deposits from Taiwan offsetting the withdrawals of official OPEC funds.

Another salient feature of 1986 was the very sharp increase in the unallocated item, by $15.6 billion in constant dollar terms. The main factor behind this development may have been the spread of securitisation to reserve portfolios through official purchases of international securities, such as Euro-commercial paper and floating rate notes. A substantial proportion of such assets is undoubtedly

The pattern of investment of exchange reserves.

Items	Flows						Amounts outstanding at end-1986
	in current dollars			at constant exchange rates			
	1984	1985	1986[1]	1984	1985	1986[1]	
	in billions of US dollars						
1. Official reserves held in the United States[2]	4.7	2.4	28.1	4.7	2.4	28.1	162.9
2. Official reserves held in other national markets:[2]	5.7	18.6	11.9	11.7	5.2	– 4.0	82.3
Deutsche Mark	2.0	9.4	9.3	4.6	3.6	1.1	39.7
Swiss francs	−0.4	1.0	−1.1	–	0.3	−2.1	2.5
Yen	2.7	5.4	2.8	3.5	1.9	−2.2	22.1
Pounds sterling	1.5	1.3	0.2	2.9	−0.7	–	10.1
French francs	–	1.1	0.1	0.4	0.3	−0.6	3.9
Dutch guilders	0.1	0.5	0.2	0.4	−0.1	−0.4	2.5
Other currencies	−0.2	−0.1	0.4	−0.1	−0.1	0.2	1.5
3. Official Euro-deposits with banks in European countries,[3] Canada, Japan and with certain offshore branches of US banks:[4]	11.7	9.0	– 2.2	14.7	2.1	−10.8	97.3
Dollars	8.8	1.2	0.2	8.8	1.2	0.2	64.9
Deutsche Mark	2.8	3.3	−3.8	4.7	−1.4	−9.1	16.2
Swiss francs	–	0.5	0.6	0.5	−0.4	−0.5	4.6
Yen	0.5	2.6	0.1	0.7	1.8	−1.3	5.7
Pounds sterling	–	0.1	−0.2	0.1	–	−0.2	0.4
French francs	0.1	–	0.1	0.1	−0.1	–	0.5
Dutch guilders	−0.2	0.5	0.4	−0.1	0.4	0.1	1.5
Other currencies	−0.3	0.8	0.4	−0.1	0.6	–	3.5
4. Unallocated	2.9	6.1	18.8	4.4	2.9	15.6	51.1
Total	25.0	36.1	56.6	35.5	12.6	28.9	393.6
Memorandum items:							
Reported US liabilities to foreign official holders (excluding dollars swapped against ECUs)	*4.7*	*– 2.5*	*28.9*	*4.7*	*– 2.5*	*28.9*	*194.7*
Total OPEC[5] deposits with reporting banks[6] outside the United States	*– 4.7*	*12.1*	*−15.6*	*– 1.1*	*6.2*	*−21.4*	*123.3*

Note: The figures in the table include changes in the dollar value of reserves held in other currencies resulting from movements in exchange rates.

[1] Provisional. [2] Partly based on IMF data. [3] Austria, Belgium-Luxembourg, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Spain, Sweden, Switzerland and the United Kingdom. [4] In the Bahamas, the Cayman Islands, Panama, Hong Kong and Singapore. [5] Figures exclude Bahrain. [6] Figures cover the banks of the countries listed in footnote 3, as well as data for all banks in the Bahamas, the Cayman Islands, Hong Kong, Singapore, all offshore units in Bahrain and all offshore banks operating in the Netherlands Antilles.

denominated in dollars, and it may therefore be estimated that, all in all, official dollar reserves rose by somewhat over $35 billion last year, whereas expressed in terms of constant exchange rates reserves denominated in other currencies declined by about $7 billion. The picture is, of course, quite different if the impact of dollar depreciation on the dollar value of reserve assets denominated in other currencies is taken into account. Expressed in current dollars, the value of other currency reserves may be estimated to have risen by over $20 billion.

In the first quarter of 1987 the trends in international reserve growth already discernible in the course of 1986 were intensified. With private capital flows into the

United States dropping off sharply and being at times actually reversed, the US current account was financed essentially through official dollar purchases. Even more so than in 1986, reserve growth was concentrated in a small group of countries. Exchange reserves of the Group of Ten countries alone rose by $34.8 billion, or by nearly as much as during the whole of 1986, with dollars accounting for $28.3 billion of this increase. The largest reserve gains were recorded by Japan ($15.8 billion), Italy ($4.6 billion), Canada ($3.7 billion), Germany ($3.3 billion), the United Kingdom ($3.1 billion) and France ($2.9 billion). The Italian and French reserve gains largely reflected the reversal of capital flows after the January EMS realignment. Outside Europe, Taiwan's exchange reserves soared by a further $8.2 billion in the first three months of the year.

Over recent years the meaningfulness of mechanical measures or indicators of the general state of international liquidity has become increasingly doubtful. Fluctuations in the exchange rates of the key reserve currencies have been large, which means that the length of the yardstick itself has been changing. Moreover, as the first part of this section demonstrates, the size of the valuation effects makes it essential to look at both nominal changes and exchange rate adjusted figures, particularly in cases where a substantial proportion of reserves is denominated in currencies or units of account other than the dollar.

Secondly, the considerable changes that have taken place in financial markets have given the authorities new options in the management of their international liquidity positions. To the extent that countries increasingly rely on their ability to obtain liquid funds by borrowing, calling on swap networks or using standby facilities, the data on official reserve assets provide only an inadequate picture. In particular, global reserve figures obscure the differences in reserve ease between individual groups of countries, since official swap networks and other short-term credit facilities are in place mainly between the developed countries, while a large number of developing countries neither have official credit facilities at their disposal nor are in a position to borrow at short notice in the private markets.

Moreover, it is not completely clear how much netting-out of external short-term liabilities is required for international liquidity measurement. As long as the situation is normal and a country does not have to draw on its reserves, the answer might seem to be "none". However, when problems are encountered and countries are obliged to use their reserves, the refinancing of the external debt may become difficult, and the presumed policy leeway provided by access to borrowed reserves may turn out to be illusory.

Finally, global measures of changes in international liquidity ease become particularly inadequate when, as in 1986, reserve growth is very unevenly distributed and is primarily focused on countries with very high reserve levels, for which the marginal utility of additional holdings tends to be correspondingly small.

Summing up, it can probably be said that the international liquidity situation presents itself in the following terms: in some major developed countries and in a few Asian developing countries there is a situation of reserve ease, which has even increased recently; in the rest of the developed world there is, broadly, a fairly comfortable liquidity position with no uncreditworthy countries; in most of the

developing countries the international liquidity situation remains tight, as it has been for many years. It is doubtful whether continued strong overall international reserve growth, resulting from a larger proportion of the US current-account deficit being financed through official dollar purchases, will bring about a major change in this overall picture over the next few years.

VIII. ACTIVITIES OF THE BANK.

1. Conclusion of a Headquarters Agreement with the Swiss Federal Council.

On 10th February 1987 the Bank concluded with the Swiss Federal Council a Headquarters Agreement, whose text was published on 3rd March 1987 in the Compendium of Laws of the Swiss Confederation. Nearly all the international organisations established in Switzerland now have such agreements, which define their legal status in the host country.

The Headquarters Agreement of the BIS includes express recognition of the international legal personality of the Bank, as well as provisions pertaining to the Bank's freedom of action and freedom to hold meetings, its exemption from any censorship of official communications, the Bank's free disposal of funds and freedom to conduct its operations, and the inviolability of the Bank's premises, documents and archives; it defines the Bank's tax and customs treatment, and the legal status within Switzerland of the Bank's Directors and staff and of the representatives of central banks. The Agreement also repeats the provisions of the Bank's Statutes which deal with the immunities from jurisdiction and execution. Finally, the Headquarters Agreement provides for the establishment of an Administrative Tribunal of the Bank, whose function is to settle any dispute which might arise between the Bank and members of its staff, whether active or retired.

The main effect of the Headquarters Agreement is to consolidate and bring up to date the status of the Bank in Switzerland in the light of the administrative practice which has evolved over the years. It complements the Convention respecting the BIS of 20th January 1930, the Bank's Constituent Charter, its Statutes and the Brussels Protocol of 30th July 1936, which all remain in full force and effect. The Agreement thus confirms the international status of the BIS and represents an important landmark in the history of the Bank.

2. 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 to examine matters such as the development of the gold and foreign exchange markets. It has also, as in the past, provided the Secretariat for various groups of experts.

The Euro-currency Standing Committee continued to monitor regularly international banking and capital market developments and to discuss in this context issues relating to the functioning of international financial markets. In addition, the Committee drew up a programme for the implementation of the statistical recommendations made in the report on Recent Innovations in International Banking prepared by a study group of officials from the central banks of the Group of Ten countries, more than 17,500 copies of which have been distributed worldwide since April 1986. These recommendations aim at improving the statistical data on developments in the international capital markets, including data on the banks' own holdings and issues of international securities and data on the evolution of the Euro-note market. The Bank also 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 monitoring developments affecting the soundness and stability of international banks and of encouraging collaboration among supervisory authorities. With the objective of promoting high and more closely convergent standards of capital adequacy among international banks, the Committee devoted particular attention to the framework of measurement it has devised to permit broad comparisons of standards on a consistent and comprehensive basis. As regards international collaboration between parent and host supervisory authorities, following on from the 1983 "Concordat", the Committee worked together with supervisors from other countries in the preparation of a report recommending a number of practical measures in that area. Reports on both these subjects were discussed last October in Amsterdam at the Fourth International Conference of Banking Supervisors, jointly organised by the Netherlands Bank and the Committee, which was attended by representatives of almost ninety countries.

The Group of Experts on Payment Systems continued to exchange views on current developments in payment media and systems in the Group of Ten countries. It also embarked on an analysis of the problems that may arise at the various stages of a cross-border payment operation.

The Group of Computer Experts held special meetings to examine the following matters: the joint use of data processing and telecommunications; the changing roles of data-processing users and services in project development; and the development of data processing and automation in the central banks. It also paid close attention to security issues, especially to the technical precautions to be taken in order to ensure, even in the event of a serious breakdown, the uninterrupted

operation of the data-processing systems and telecommunication networks which serve, in particular, as the vehicle for electronic funds transfer systems.

The Group of Experts on Monetary and Economic Data Bank Questions made further progress in the development of a data bank service for the central banks of the Group of Ten countries and the BIS. Attention continued to be focused on the automated reporting and accessing of international banking statistics, and major achievements were realised, with several institutions transmitting and processing such data in accordance with agreed standards. The Group also experimented with interactive techniques for central bank economists and statisticians, especially designed to give rapid access to statistical tables and related documentation via telecommunication links to the data bank.

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 and to be assisted by a Secretariat provided by the Bank. 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, 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 — for example, in 1986, the consequences of the increasing use of market instruments in the implementation of monetary policies.

In the financial year 1986–87, as in previous financial years, a major part of the activity of the Committee of Governors, and consequently of its sub-committees and groups of experts, was concerned with the administration of the EMS established on 13th March 1979. This included, in particular:

- ensuring that the arrangements governing the system were properly applied;
- strengthening the co-ordination of exchange rate and domestic monetary policies pursued by the EEC central banks as a prerequisite for the smooth operation of the EMS.

In addition, the Committee of Governors has been paying particular attention to matters relating to the liberalisation of capital movements in the Community; it expressed its opinion on the further liberalisation measures taken in the autumn of 1986 and is continuing to assess the implications, in particular for monetary policy and the operation of the EMS, of full freedom of capital movements; the achievement of that objective is one of the steps in completing the internal market by 1992. The Committee has also followed very closely the development of the use of the private ECU.

3. 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 balances still available in the accounts opened for that purpose will be returned to the Commission of the European Communities, Luxembourg, as soon as possible, the last loan having been redeemed during the financial year 1985–86.

(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 1986 to 31st March 1987, interventions carried out by EMS central banks in other member countries' currencies were particularly substantial. Most of them were carried out within the fluctuation margins and so did not give rise to any financing or settlement operations through the intermediary of the EMCF. However, the EMCF did record interventions carried out at the exchange rate limits primarily during two periods — firstly, in the wake of the realignment of 7th April 1986 and, secondly and more importantly, in the days leading up to the realignment of 12th January 1987.

The volume of ECUs issued by the EMCF through quarterly swap operations with each of the EEC central banks amounted to ECU 44.8 billion at 31st March 1987, or approximately US$51 billion at the rate of exchange prevailing at that date. It may be recalled that at 31st March 1986 the volume of ECUs had stood at ECU 43.8 billion. The slight increase over the year in fact masks two movements in opposite directions: on the one hand, an increase of more than one-third in the dollar contributions of member central banks, reflecting the expansion of their reserves, and, on the other, an appreciable fall in the exchange rate of the dollar. Transfers of ECUs between the EMS central banks' "ECU reserves" accounts and

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* For a description of the structure and functions of the Fund, see the fifty-fourth Annual Report, pages 162–164.

of interest paid in respect of these central banks' net positions in ECUs totalled ECU 3.9 billion.

As regards the administration of Community borrowing and lending operations, during the period under review the Agent continued to receive from the borrowers 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 and Greece.

(1) At the interest maturity date of 8th July 1986 the Agent carried out the transfers relating to the advance repayment in full of the US$ 1,800 million variable rate loan 1983–90, the proceeds of which had been lent to the Republic of France in 1983.

(2) By virtue of the Decision of the Council of the European Communities of 9th December 1985 and under the terms of Regulation (EEC) No. 682/81 adjusting the Community loan mechanism designed to support the balance of payments of member states, the Community granted to Greece a loan in two equal tranches for a total amount of ECU 1,750 million, or its equivalent in other currencies. The first tranche was made available in early 1986 and was covered by four financial operations (see the fifty-sixth Annual Report, page 171); the second tranche of the loan was made available in February, March and April 1987. The corresponding loan contracted by the Community took the form of the following five public issues:

- ECU 350 million (ECU 150 million of notes 1992 at 7 1/2 per cent. per annum and ECU 200 million of notes 1994 at 7 5/8 per cent. per annum),
- US$ 250 million of notes 1993 at 7 1/4 per cent. per annum,
- Yen 25 billion of notes 1993 at 4 3/4 per cent. per annum,
- DM 300 million of notes 1993 at 5 3/8 per cent. per annum,
- DM 30 million in the form of a borrower's note 1992 at 5.54 per cent. per annum.

The following table shows, as at 31st March 1987, the total of outstanding Community borrowing and lending operations under the terms of Council Regulations (EEC) No. 682/81 and No. 543/85.

Outstanding Community loans.

Borrowing countries	US dollars	Deutsche Mark	Swiss francs	Yen	ECUs
	in millions				
France	940	–	–	–	150
Greece	400	830*	227	25,000	700
Total	1,340	830	227	25,000	850

* DM 30 million made available to Greece on 2nd April 1987.

(c) Agent for the private ECU clearing system.

In the course of the last financial year the Bank commenced its functions as agent for the private ECU clearing and settlement system in accordance with the provisions of the agreement which it had signed on 21st March 1986 with the ECU

Banking Association (EBA). That agreement came into force on 1st October 1986 for a twelve-month trial period. The system thereby set up is described in last year's Report (pages 172–173).

The experience gained during the initial months of the trial period led the Bank and the EBA, as had been foreseen from the outset, to amend and supplement certain provisions relating to the technical operation of the clearing system. These amendments, aimed chiefly at facilitating the daily execution of the clearing operations, appear in a revised agreement which replaces, with effect from 30th April 1987, the agreement of 21st March 1986.

In addition, it is planned that the clearing system will be opened to new clearing banks as from July 1987, the number of participants being raised by stages in the light of the technical possibilities and according to the procedures approved by the competent bodies of the EBA.

4. Financial assistance to central banks.

In August 1986 a facility of US$1,600 million was arranged for the Banco de México, US$1,100 million of which was financed by the US Treasury, the BIS and four Latin American central banks (those of Argentina, Brazil, Colombia and Uruguay). The balance of US$500 million was provided by a group of commercial banks. The US$1,100 million official facility was drawn in two successive tranches and repayment began at the end of September 1986, in conjunction with drawings on the IMF, and ended in mid-February 1987. The BIS's share amounted to US$400 million and was arranged with the guarantee of eleven member central banks.

In October 1986 the BIS was asked to participate in a facility for the Central Bank of Nigeria to bridge the gap between the institution of new domestic policy arrangements approved by the World Bank and endorsed by the IMF and expected receipts from various World Bank loans. This facility totalled US$250 million — US$176 million provided by the BIS with guarantees from five member central banks, US$37 million by the US Treasury and US$37 million by the German Kreditanstalt für Wiederaufbau. The BIS facility was divided into two tranches, of which the first was made available on 31st October 1986 and had a final maturity date of 27th February 1987. The second tranche was never drawn and the whole facility was liquidated in advance of maturity on 10th December 1986.

A bridging facility arranged in March 1987 on behalf of the Banco Central de la República Argentina amounted to a total of US$500 million, of which US$275 million from the BIS and US$225 million from the US Treasury. These facilities were linked to an IMF programme which includes, in particular, SDR 388.7 million of assistance under the Compensatory Financing Facility, expected to be in place by 15th July 1987 at the latest. This facility also takes account of a Fund standby credit of SDR 1,113 million. The whole facility was utilised on 9th March 1987 and is to be repaid by 15th July next. The BIS's contribution is covered by a guarantee from eleven member central banks.

5. Operations of the Banking Department.

The Balance Sheet of the Bank and the Profit and Loss Account at 31st March 1987, certified by the auditors, are reproduced at the end of this Report; both are expressed in gold francs.*

At the end of the financial year 1986–87, on 31st March 1987, the balance-sheet total amounted to GF 29,944,209,515
On 31st March 1986 it had stood at GF 26,558,446,075
There was thus an increase of GF 3,385,763,440
or 13 per cent.

This increase in the balance-sheet total, the fifth in succession, was slightly lower than that recorded at the end of the preceding financial year. It was again due for the most part to the appreciation, in gold franc terms, of the balance-sheet items denominated in currencies other than the US dollar. This trend continued almost without interruption throughout the financial year; only in the months of May and October 1986 and February 1987 was there a movement in the opposite direction. A smaller part of the rise in the balance-sheet total reflected the receipt of new deposits in currencies and, to a lesser extent, in gold.

It should be pointed out that this net rise in resources in the form of deposits in currencies — in US dollars and Deutsche Mark — occurred in the course of the last few months of the financial year; it brought the balance-sheet total to its highest level ever, both for the end of a month and for the end of a financial year.

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
1983	20,358	+ 1,301	+ 7
1984	21,276	+ 918	+ 5
1985	22,852	+ 1,576	+ 7
1986	26,558	+ 3,706	+ 16
1987	29,944	+ 3,386	+ 13

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 Depositary or 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 3 above;

* 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.

– gold under earmark held by the Bank for the account of various depositors. On 31st March 1987 this item amounted to the equivalent of 1,165 million gold francs (compared with 1,155 million and 1,164 million gold francs respectively at the end of the two previous financial years).

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			
1983	1,037	18,987	334	20,358
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

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 per cent.

(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 in fact remained unchanged since 1971, when it reached 10 per cent. 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 1986–87 GF 550,352,793

This compares with 523.9 million gold francs on 31st March 1986; the difference of 26.4 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 1986–87 GF 25,530,055

The balance of this Fund had remained unchanged at 21.5 million gold francs since the end of the financial year 1981–82. In accordance with the provisions of

Article 51(4) of the Statutes it has been proposed that an amount of 4 million gold francs be transferred to this Fund from the net profit for the financial year.

(4) *Free Reserve Fund*

after allocation of the net profit for 1986–87 GF 368,530,236

This compares with 332.9 million gold francs on 31st March 1986. It has been recommended that an amount of 35.6 million gold francs be transferred to this Fund, also from the net profit.

The total of the Bank's reserves, after allocation of the net profit for 1986–87, thus amounts to GF 974,483,397
an increase of 66 million gold francs.

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
	1986	1987	
	in millions of gold francs		
Deposits of central banks	23,836	26,229	+ 2,393
Deposits of other depositors	848	1,397	+ 549
Total	24,684	27,626	+ 2,942

The item "Deposits of central banks" showed an increase of approximately 10 per cent., while "Deposits of other depositors" recorded a much sharper increase, although only in relative terms. The latter rise was mainly due to the receipt of new deposits from an international organisation.

As a proportion of total borrowed funds, the total of central banks' deposits declined slightly to 94.9 per cent., from 96.6 per cent. at the end of the financial year 1985–86. Accordingly, the share of other depositors' deposits rose from 3.4 to 5.1 per cent.

BIS: Borrowed funds, by nature and term to maturity.

Term	Deposits in gold			Deposits in currencies			Total		
	Financial years ended 31st March		Movement	Financial years ended 31st March		Movement	Financial years ended 31st March		Movement
	1986	1987		1986	1987		1986	1987	
	in millions of gold francs								
Sight	4,426	4,526	+ 100	924	1,636	+ 712	5,350	6,162	+ 812
Not exceeding 3 months	10	8	− 2	18,611	20,866	+2,255	18,621	20,874	+2,253
Over 3 months	−	−	−	713	590	− 123	713	590	− 123
Total	4,436	4,534	+ 98	20,248	23,092	+2,844	24,684	27,626	+2,942

While the total of borrowed funds increased, a further decline was recorded in deposits with a residual maturity of over three months, continuing a trend already observed at the end of the preceding financial year. As a result, such deposits accounted for only 2.1 per cent. of total borrowed funds, compared with 2.9 per cent. a year earlier. Sight deposits represented 22.3 per cent. of total borrowed funds, compared with 21.7 per cent. previously, and deposits at up to three months 75.6 per cent., compared with 75.4 per cent.

The total of deposits in gold rose by 2.2 per cent.; their share in total borrowed funds, however, declined to 16.4 per cent. from 18 per cent. at the end of the preceding financial year. Resources in currencies thus accounted for 83.6 per cent. of borrowed funds, compared with 82 per cent. on 31st March 1986.

(a) Deposits in gold GF 4,533,669,882

This compares with a figure of 4,436 million gold francs at the end of the financial year 1985–86, representing a rise of 98 million.

The growth of this item was due to the receipt of new sight deposits, while the total of time deposits declined.

(b) Deposits in currencies GF 23,091,882,488

This compares with 20,248 million gold francs at the end of the preceding financial year, giving a rise of 2,844 million, or 14 per cent.

New deposits in US dollars were again responsible for the greater part of the movement in this item. The increase was principally in resources received for periods of up to three months, but there was also an appreciable rise in sight deposits. The amount of deposits with maturities of over three months decreased further and now accounts for only a very small proportion of total deposits in currencies.

C. Other liabilities.

(a) Staff pension scheme GF 97,509,839

This item, previously incorporated in "Miscellaneous", appears for the first time following the entry into force of the Bank's new Headquarters Agreement (see Section 1 of this chapter). It represents the gold franc equivalent of the amount of the Bank's liability in respect of staff pensions, which is established in Swiss francs.

(b) The item "Miscellaneous" stood at GF 925,879,694

against 652 million gold francs on 31st March 1986.

Despite the transfer of 97.5 million gold francs to a separate item entitled "Staff pension scheme" (see above), there was again, as at the end of the preceding financial year, an appreciable increase in this item, amounting to 274 million gold francs. This was largely due to the rise in the gold franc value of the items denominated in currencies other than the US dollar, to which reference has already been made.

(c) Profit and Loss Account, *before* allocation GF 91,081,090

This figure represents the net profit for the financial year 1986–87.

Details of the proposed allocation of the net profit, in accordance with the provisions of Article 51 of the Statutes, are given in Section 6 below. A sum of 25,081,090 gold francs, compared with 19,171,806 gold francs in the preceding financial year, is being set aside in respect of the dividend of 155 Swiss francs per share payable on 1st July 1987. The amount of the dividend in Swiss franc terms, however, is identical to that paid in the preceding financial year; the higher countervalue in gold francs is attributable to the appreciation of the Swiss franc in gold franc terms.

ASSETS (EMPLOYMENT OF RESOURCES).

The following table gives a breakdown of the main items of the assets according to their nature.

BIS: Distribution, by nature, of sight assets and other investments.

Nature	Financial years ended 31st March 1986		1987		Movement	
	in millions of gold francs					
Sight assets						
Gold	5,071		5,072		+ 1	
Currencies	10	5,081	16	5,088	+ 6	+ 7
Treasury bills						
Currencies		919		558		− 361
Time deposits and advances						
Gold	81		117		+ 36	
Currencies	17,959	18,040	21,064	21,181	+ 3,105	+ 3,141
Government and other securities at term						
Currencies		2,506		3,111		+ 605
Total						
Gold	5,152		5,189		+ 37	
Currencies	21,394	26,546	24,749	29,938	+ 3,355	+ 3,392

(a) Gold GF 5,071,459,425

This figure is virtually unchanged compared with that for the end of the preceding financial year.

(b) Cash on hand and on sight account with banks GF 15,913,315

This compares with 10 million gold francs on 31st March 1986.

(c) Treasury bills GF 558,053,904

This item, which had stood at 919 million gold francs on 31st March 1986, declined by 361 million. It had increased appreciably in the course of the preceding financial year as a result of purchases on various markets of bills denominated chiefly in US dollars and Deutsche Mark. The partial liquidation of these securities in the course of the financial year was responsible for the decline in this item.

(d) Time deposits and advances GF 21,181,296,299

This compares with a figure of 18,040 million gold francs at the end of the preceding financial year, giving a rise of 3,141 million, or 17 per cent.

Investments in currencies increased in line with the development of resources received by the Bank.

(e) Government and other securities at term (formerly "Securities at term") GF 3,111,188,232

This portfolio had amounted to 2,506 million gold francs on 31st March 1986. There was thus an increase of 605 million, reflecting purchases of public and private sector securities 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
	1986	1987	
	in millions of gold francs		
Not exceeding 3 months	17,459	20,088	+2,629
Over 3 months	3,087	4,204	+1,117
Total	20,546	24,292	+3,746

It may be noted that there was an increase in investments with maturities of over three months; as a result, their share in total investments rose from 15 to 17.3 per cent., whereas that of investments with maturities not exceeding three months fell from 85 to 82.7 per cent.

(f) Miscellaneous GF 6,298,339

This item had stood at 12 million gold francs on 31st March 1986.

Forward gold operations.

These operations, which are mentioned in Note 2 to the Balance Sheet, resulted in a positive balance of GF 6,888,888 whereas at 31st March 1986 there had been a negative balance of 54.5 million gold francs. The reversal of this position was due to the liquidation during the financial year of swaps (gold received spot) against currencies; the balance now shown corresponds to the amount outstanding in respect of a similar operation in the opposite direction.

6. Net profits and their distribution.

The accounts for the fifty-seventh financial year ended 31st March 1987 show a net operating surplus of 95,214,480 gold francs, compared with 81,718,965 gold francs for the preceding financial year.

Costs of administration amounted to 24,471,248 gold francs, an increase of 39 per cent. over the year largely attributable to 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 some 4 per cent. only.

The Board of Directors has decided to transfer 4,133,390 gold francs to the Provision for Exceptional Costs of Administration. After this transfer the net profit amounts to 91,081,090 gold francs, against 80,171,806 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 91,081,090 gold francs be applied by the General Meeting in the following manner:

- an amount of 25,081,090 gold francs in payment of a dividend of 155 Swiss francs per share;
- an amount of 26,400,000 gold francs to be transferred to the General Reserve Fund;
- an amount of 4,000,000 gold francs to be transferred to the Special Dividend Reserve Fund; and
- an amount of 35,600,000 gold francs, representing the remainder of the available net profit, to be transferred to the Free Reserve Fund. This Fund can be used by the Board of Directors for any purpose that is in conformity with the Statutes.

If the above proposals are accepted, the dividend will be paid on 1st July 1987 to the shareholders whose names are contained in the Bank's share register on 20th June 1987.

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 1987 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.

7. Changes in the Board of Directors and in the Management.

On 16th January 1987 M. Jacques de Larosière succeeded M. Camdessus as Governor of the Bank of France and consequently took his place on the Board of the BIS as an ex officio member. At the meeting of the Board held on 13th January

the Chairman expressed the Board's appreciation of the eminent services rendered by M. Camdessus during a term of office of over two years.

The mandate of Mr. Bengt Dennis as a member of the Board being due to expire on 31st March 1987, he was re-elected under Article 27(3) of the Statutes at the meeting of the Board held on 10th March 1987 for a further period of three years ending on 31st March 1990.

Lord Richardson of Duntisbourne, whose mandate as a member of the Board was due to expire on 6th May 1987, was re-appointed in April 1987 for a further three-year term of office by Mr. Leigh-Pemberton, Governor of the Bank of England, under Article 27(2) of the Statutes.

Prof. Dr. F.-E. Klein, who had joined the BIS in 1953 and had been the Bank's Legal Adviser with the rank of Manager since 1974, retired at the end of December 1986. At the meeting of the Board held on 9th December 1986 the Chairman thanked Prof. Klein on behalf of all members of the Board for the great skill and professional competence he had displayed in carrying out his work for the Bank.

In accordance with the formal appointment made by the Board at its meeting on 11th November 1986, Dr. Mario Giovanoli, who had joined the Bank in 1968, became Head of the Legal Service as from 1st January 1987 and was at the same time promoted to the rank of Assistant Manager.

At the meeting of the Board on 10th March 1987 the Chairman announced that the Bank had decided to promote M. Jean Vallet, M. André Bascoul and Herr Joachim Mix to the rank of Deputy Manager as from 1st April 1987 and also to appoint M. Vallet Deputy Secretary General as from the same date.

* * *

The Bank learned with deep regret of the death of Dr. Otmar Emminger on 3rd August 1986 and of Baron Ansiaux on 9th April 1987. Dr. Emminger had been President of the Deutsche Bundesbank and an ex officio member of the Board from June 1977 until December 1979. He had previously been an Alternate on the Board for eight years. Baron Ansiaux had been a member of the Board from August 1957 until January 1982. For the first thirteen and a half years, as Governor of the National Bank of Belgium, he had been a Director ex officio; for the remaining period he had been a Director under Article 27(2) of the Statutes. He had previously been an Alternate on the Board from December 1944 until January 1955.

CONCLUSION.

The challenge facing the industrial countries today is not simply to reduce their current payments imbalances; it is to do so without causing disruptive developments in the foreign exchange and financial markets, a resurgence of inflation in the United States or a slide into recession there or elsewhere — and, at the same time, without compromising medium-term strategies in the fields of public finance, monetary policy and structural adjustment and, most important of all, without endangering the freedom of trade. This is a much more formidable undertaking, and one which, in an increasingly interdependent world, is unlikely to be successful without a relatively high degree of policy co-ordination. This, in a nutshell, is the main conclusion of this Report.

There are weighty reasons for concern about the very large imbalances in the current accounts of the industrial world. They reflect real imbalances between expenditure and output in the domestic markets — imbalances that have already led to the resurgence of protectionism and the risk of a spreading trade war. They have gone hand in hand with a massive misallocation of resources which may have far-reaching consequences for the growth potential of the industrial world. They are engendering a climate of uncertainty which is the worst enemy of investment. Last but not least, because of their scale and duration, they are bringing about a major shift in the international investment positions of the countries concerned and in the composition of financial portfolios. As a result, there have already been signs that private investors are no longer so readily financing the US current-account deficit at prevailing exchange and interest rates. This has contributed to the downward pressures on the dollar. A further decline of the dollar would clearly have detrimental implications for the world at large: it would push up prices and interest rates in the United States and slow down growth in Japan and western Europe even further, with dismal prospects for employment in the industrial world. In the end, of course, market forces would establish a new pattern of current-account balances. But when? With what risk of causing another round of exchange rate misalignments? What lasting damage would in the meantime be inflicted on the free trading system? And what price would have to be paid in terms of output losses and financial upheavals for this market-led adjustment?

Nor is that all. What would be the consequences of a failure to achieve an orderly reduction of the present large payments imbalances, and to avoid disruptive developments in the exchange markets, for the international debt situation? The main conclusions of this Report about the debt situation are set out at the end of Chapter V. In the present context it is enough to make two points. Firstly, there is no way of relieving the debtor countries of the primary responsibility for restoring their external creditworthiness, by improving the efficiency of their economies and setting themselves on the path of diversified, export-led growth. But, secondly, how could they succeed in growing out of their external debt problems, if they could not count on the maintenance of steady economic growth, and the avoidance of further protectionist measures, in the industrial countries which are their principal export markets?

Anyone who might be tempted to disregard these warnings on the grounds that they are based on gratuitously pessimistic conjecture should look at developments so far this year in the capital account of the US balance of payments, long-term dollar interest rates, US import prices and economic activity in the major surplus countries of the industrial world. These are signals that policy-makers cannot afford to ignore. If, on the other hand, these signals are recognised for what they are — an invitation to take policy co-operation further — there is a reasonable hope that the situation can be kept under control and that the dangers associated with an adjustment process in which the market is left to its own devices will be avoided. In considering further policy action, two encouraging facts should be regarded as helpful foundations on which to build.

The first is that under the influence of the exchange rate realignment that has taken place since the spring of 1985 real trade flows have clearly started to adjust. There is not the slightest doubt that in real terms the trade surpluses of both Japan and the Federal Republic of Germany have declined from their earlier peaks. As for the United States, real exports have also started moving in the right direction, although on the import side the figures are not yet conclusive. These developments have, of course, been masked by price effects. The stabilisation of exchange rates would be bound to translate the real adjustment into a perceptible improvement in the trade and current-account balances. Moreover, as real trade flows respond only sluggishly to exchange rate changes, further real adjustment is certainly still in the pipeline.

The second encouraging fact is that in their attitude towards the exchange rate the US authorities have moved from a position of benign neglect to one of active concern. First came the Plaza Agreement, under which they recognised the need for an active exchange rate policy in order to correct the growing current-account imbalances. This was followed in February this year by the Louvre Accord, in which all the major participants, including the United States, set themselves the objective of stabilising exchange rates at "around current levels". In terms of policy objectives and the underlying analysis, there was a quantum leap between the two agreements. At the time of the Louvre Accord, the US trade deficit was close to its peak — yet the objective of exchange rate stability was accepted because it was recognised that the dangers inherent in a further fall of the dollar would outweigh whatever benefits could be expected to accrue for the US current account.

How can one build on these foundations?

To begin with, by recognising both the strengths and the limitations of exchange market intervention. Here, a comparison between the situation in 1985 and that of today may be helpful. By February 1985 the dollar had reached a level which prompted even the most bullish market participant to have second thoughts about its future course. The co-ordinated intervention undertaken on the initiative of the Deutsche Bundesbank at that time may have tipped the balance of market sentiment towards a more bearish attitude. The same can be said about the post-Plaza interventions, which helped to confirm market opinion that a further decline of the dollar could be expected. In both instances, this was an intervention which did not lean against the wind; rather, it provided extra momentum and helped to deflate what had come close to being a speculative bubble.

The situation in which we find ourselves today is different from that of two years ago in at least one very important respect: the policy objective is now to stabilise the exchange rate of the dollar rather than to nudge it in a certain direction. And this stabilisation has to be achieved at a time when a large and apparently sticky US current-account deficit is fostering bearish expectations in the minds of market participants regarding the future course of the dollar. In such circumstances, the task of stabilisation cannot be left to intervention alone. The effectiveness of intervention, when it entails leaning against the wind, hinges to a very large extent (perhaps almost exclusively) on its signal effect. If market participants interpret it as reflecting the authorities' decision to put their money where their mouth is, i.e. as an indication that they are willing and able to take appropriate policy measures to push the fundamentals in the right direction, then intervention will indeed serve its purpose. Otherwise, it runs the risk of gradually losing its effectiveness.

The Louvre Accord has so far been reasonably successful in stabilising the value of the dollar against the Deutsche Mark, and moderately so in containing its slide against the yen. The main reason for this relative success is that monetary policy has been supportive of intervention. An indication of this can be seen in short-term interest rate movements. Since February the differential in favour of the three-month dollar interest rate in the Euro-market has widened significantly vis-à-vis both Deutsche Mark and yen interest rates. This has been brought about by a decline in DM and yen rates and an increase in the dollar rate — a fact that the market has rightly interpreted as the manifestation of a deliberate co-operative effort by the monetary authorities.

The questions, then, are whether these policy measures will prove sufficient to keep the situation under control and, if not, what others should be undertaken to supplement them. To answer these questions one has to bear in mind that the main way in which monetary policy co-ordination can help to keep the situation under control is to prevent a further decline of the dollar by inducing capital flows into the United States that are sufficient to finance the current-account deficit at the prevailing exchange rate. It can do so directly, through wider interest rate differentials and by adjusting the relative rates of growth of money supplies, and indirectly by underscoring the resolve of the authorities to persevere with their policy endeavours. However, while monetary policy co-ordination can make a significant contribution to the orderly financing of existing imbalances, its effect on their size is unlikely to be significant in the absence of an appropriate fiscal adjustment; it would not, therefore, remedy the underlying cause of the present weakness of the dollar. This does not mean that it has not performed, nor that it could (or indeed should) not continue to perform, a useful role. By halting the J-curve effect, it can help to ensure that the very large exchange rate adjustments that have occurred are reflected in a reduction in the current-account imbalances and thereby steer expectations in the right direction. But as long as the size and the duration of the current payments imbalances are considered to be the most important problem, both in their own right and through their effect on exchange rates, monetary policy co-ordination alone will not provide the solution.

Another consideration to be borne in mind is that a further widening of interest differentials through an increase in US interest rates would not be without costs. Higher short-term dollar interest rates would have a clearly detrimental

impact on the major debtor countries' ability to service their external debt and would, to say the least, not be of much help either to the financial markets or to domestic investment in the United States. With the sharp decline of long-term bond prices that has already taken place in the United States under the influence of market forces, the apparent stamp of official approval in the form of higher short-term rates could add further impetus to the upward movement of long-term rates. Nor can one see much scope, arithmetically speaking, for any further significant decline of money market rates in Germany and Japan, while the very high liquidity of the Japanese financial markets, as witnessed by the "levitation" of Tokyo stock market prices, in any case raises questions about the wisdom of further monetary expansion in Japan. And monetary expansion in Germany has, by any standard, been quite strong, too.

In short, while monetary policy co-ordination has given the authorities a helping hand in their holding operation, the effectiveness of its contribution to the reduction of payments imbalances (rather than just to their financing) depends to a large extent on whether it is supplemented by fiscal policy. Moreover, the sole use of monetary policy entails actual and potential costs that we would be well advised to try to minimise.

This leads straight to the role that fiscal policy should play in reducing the present payments imbalances to sustainable proportions, that is, to a size that private capital is willing to finance without putting further pressure either on exchange rates or on interest rates. No one can claim to know by how much the current imbalances will have to be reduced before the market will be ready to do this. But it is arguable that, at least over the medium term, the decline need not be spectacular. Current interest rate differentials in fact provide a comfortable cushion for investors looking beyond the short run; confidence in the economy and the social and political system of the United States remains unimpaired; and the practical alternatives to the great variety of investment opportunities offered in the United States are limited. What seems to be needed in order to restore confidence in the present value of the dollar is that the beginning of the external adjustment process should become visible and fiscal policy action be seen to be taken. As is pointed out above, the first of these conditions is likely to be met once the J-curve effects subside. To fulfil the second, however, puts the burden of responsibility on the shoulders of governments.

The first requirement in this respect would be a gradual change in the domestic saving/investment ratio in the United States. This would call for policy measures leading to a credible decrease in the US budget deficit during the coming years — also beyond fiscal 1988 — and to an increase in the appallingly low saving ratio of US households, without which there can be little hope of reducing the country's current-account deficit by more than what is already in the pipeline, short of a further decline of the dollar combined with a recession. Although fiscal restraint could actually lead to a lowering of US interest rates — a good thing from many points of view — the prospect of restoring the US current account to a better state of health would certainly lend support to the dollar. It is, of course, also true that a recovery in domestic demand expansion in Germany to the quite satisfactory rate experienced last year and the speeding-up of domestic expansion in Japan are just as indispensable for better growth prospects and the achievement of a more sustainable international pattern of current accounts as is a shift in US fiscal policy. It is difficult to imagine how this could come about, given the investment-eroding effects of the

recent exchange rate adjustment and of the present broad world economic environment, without fiscal stimulus.

All three governments argue that they have already taken decisions in the fiscal field which are steering, or will soon begin to steer, their effective fiscal stances in the right direction. They are probably right. The German and Japanese authorities are also on solid ground when they point out that the long-term objective of fiscal consolidation in their respective countries could be jeopardised by further measures; just as the US Administration can argue that, given congressional resistance to expenditure cuts going beyond what is already in the offing for the coming fiscal year, an additional decline in the deficit would require tax increases that would run counter to long-standing policy commitments. And it is conceivable that financial market participants, who have repeatedly demonstrated their ability to change their views when, suddenly and collectively, they see what in fact has been there for some time, will recognise the beginning both of the process of real external adjustment and of a change in domestic fiscal stances. But what if they do not? Or what if they do not regard as sufficient the adjustment they see in both areas? Governments will have to face up to the fact that international financial integration (which, incidentally, they have been actively promoting) has led to a drastic curtailment of domestic policy independence, even for the largest countries and for debtors and creditors alike. This does not only mean that if they want to give guidance to the market they will have to speak with one voice and to do so more consistently than in the past. They will also have to weigh the risks of taking further fiscal measures — and the inconvenience these measures would imply from a directly domestic point of view — against those that would without any doubt arise if private capital flows continued to be insufficient to finance the US current-account deficit. It is arguable that in the very long run the two sets of risks have equal weight. But it is difficult to avoid the conclusion that those in the second category, were they to materialise, would in the nearer future be a source of greater trouble not only for the world economy as a whole but also for the leading countries individually. Hedging against such risks, by taking further steps in policy co-ordination, would seem a worthwhile and manageable exercise.

22nd May 1987

A. LAMFALUSSY
General Manager

BALANCE SHEET AND PROFIT AND LOSS ACCOUNT

AT 31st MARCH 1987

BALANCE SHEET

ASSETS (Before and after

			Gold francs
Gold			5,071,459,425
Cash on hand and on sight account with banks			15,913,315
Treasury bills			558,053,904
Time deposits and advances			
Gold			
Not exceeding 3 months	82,959,439		
Over 3 months	34,411,448		
Currencies			
Not exceeding 3 months	18,287,235,688		
Over 3 months	2,776,689,724		
			21,181,296,299
Government and other securities at term			
Not exceeding 3 months	1,718,536,388		
Over 3 months	1,392,651,844		
			3,111,188,232
Miscellaneous			6,298,339
Land, buildings and equipment			1
			29,944,209,515

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 1987, gold receivable against currencies on forward contracts amounted to 6,888,888 gold francs.

AT 31st MARCH 1987

allocation of the year's Net Profit)

LIABILITIES

		Before allocation Gold francs	After allocation Gold francs
Capital			
Authorised: 600,000 shares, each of 2,500 gold francs	1,500,000,000		
Issued: 473,125 shares	1,182,812,500		
of which 25% paid up		295,703,125	*295,703,125*
Reserves			
Legal Reserve Fund	30,070,313		*30,070,313*
General Reserve Fund	523,952,793		*550,352,793*
Special Dividend Reserve Fund	21,530,055		*25,530,055*
Free Reserve Fund	*332,930,236*		*368,530,236*
		908,483,397	*974,483,397*
Deposits (gold)			
Central banks			
Sight	4,525,458,708		
Not exceeding 3 months	8,210,775		
Other depositors			
Sight	399		
		4,533,669,882	*4,533,669,882*
Deposits (currencies)			
Central banks			
Sight	1,611,719,309		
Not exceeding 3 months	19,493,996,290		
Over 3 months	589,520,159		
Other depositors			
Sight	24,270,907		
Not exceeding 3 months	1,372,375,823		
		23,091,882,488	*23,091,882,488*
Staff Pension Scheme		97,509,839	*97,509,839*
Miscellaneous		925,879,694	*925,879,694*
Profit and Loss Account		91,081,090	—
Dividend payable on 1st July 1987		—	*25,081,090*
		29,944,209,515	*29,944,209,515*

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 1987 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, 30th April 1987

PRICE WATERHOUSE & CO.

PROFIT AND LOSS ACCOUNT
for the financial year ended 31st March 1987

		Gold francs
Net interest and other operating income		119,685,728
Less: Costs of administration:		
Board of Directors	302,098	
Management and Staff	17,606,693	
Office and other expenses	6,562,457	24,471,248
Net operating surplus		95,214,480
Less: Amount transferred to Provision for Exceptional Costs of Administration		4,133,390
Net Profit for the financial year ended 31st March 1987		91,081,090

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: 155 Swiss francs per share on 473,125 shares		25,081,090
		66,000,000
Transfer to General Reserve Fund		26,400,000
		39,600,000
Transfer to Special Dividend Reserve Fund		4,000,000
		35,600,000
Transfer to Free Reserve Fund		35,600,000
		—

MOVEMENTS IN THE BANK'S RESERVES
during the financial year ended 31st March 1987

in gold francs

I. Development of the Reserve Funds resulting from allocations for the financial year 1986–87

	Legal Reserve Fund	General Reserve Fund	Special Dividend Reserve Fund	Free Reserve Fund
Balances at 1st April 1986, after allocation of Net Profit for the financial year 1985–86	30,070,313	523,952,793	21,530,055	332,930,236
Add: Allocations for the financial year 1986–87 ...	—	26,400,000	4,000,000	35,600,000
Balances at 31st March 1987 as per Balance Sheet	30,070,313	550,352,793	25,530,055	368,530,236

II. Paid-up Capital and Reserve Funds at 31st March 1987 (after allocation) were represented by:

	Paid-up Capital	Reserves	Total
Net assets in			
Gold	295,703,125	366,346,193	662,049,318
Currencies	—	608,137,204	608,137,204
	295,703,125	974,483,397	1,270,186,522

BOARD OF DIRECTORS

Jean Godeaux, Brussels	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
Dr. W.F. Duisenberg, Amsterdam
Pierre Languetin, Zurich
Jacques de Larosière, Paris
The Rt.Hon. Robert Leigh-Pemberton, London
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
J.E.W. Kirby, 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
Robert Chaptinel	Deputy Manager, Banking Department
André Bascoul	Deputy Manager, Secretariat of EEC Governors
Joachim Mix	Deputy Manager, Banking Department
Paul A. Hauser	Assistant Manager, General Secretariat
Dr. H.W. Mayer	Assistant Manager, Monetary and Economic Department
Kevin J. Kearney	Assistant Manager, General Secretariat
Dr. Kurt Spinnler	Assistant Manager, Banking Department
Dr. Joseph R. Bisignano	Assistant Manager, Monetary and Economic Department
Dr. Gunter Baer	Assistant Manager, Monetary and Economic Department
Dr. Mario Giovanoli	Head of the Legal Service