BANK FOR INTERNATIONAL SETTLEMENTS

FIFTY-SECOND ANNUAL REPORT

1st APRIL 1981 – 31st MARCH 1982

BASLE

14th June 1982

TABLE OF CONTENTS

Page

* * *

Balance Sheet and Profit and Loss Account at 31st March 1982.

LIST OF TABLES AND GRAPHS

(Graphs are indicated by an asterisk)

International Balances of Payments

The International Credit and Capital Markets

The International Monetary Scene

Activities of the Bank

FIFTY-SECOND ANNUAL REPORT

submitted to the

ANNUAL GENERAL MEETING

of the

BANK FOR INTERNATIONAL SETTLEMENTS

held in

Basle on 14th June 1982

Ladies and Gentlemen,

I have the honour to submit herewith the fifty-second Annual Report of the Bank for International Settlements for the financial year which began on 1st April 1981 and ended on 31st March 1982.

The net profit for the year amounted to 66,938,821 gold francs, after transfer of 857,665 gold francs to the Provision for Exceptional Costs of Administration. This compares with a net profit for the preceding year of 67,004,609 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 16,938,821 gold francs in payment of a dividend of 135 Swiss francs per share.

The Board further recommends that 20,000,000 gold francs be transferred to the General Reserve Fund, 2,000,000 gold francs to the Special Dividend Reserve Fund and the remainder of 28,000,000 gold francs to the Free Reserve Fund.

If these proposals are approved, the Bank's dividend for the financial year 1981–82 will be payable to shareholders on 1st July 1982.

I. THE NARROW PATH OF POLICY.

The dominant feature of 1981 and the opening months of 1982 has been the near-stagnation of economic activity in the western industrial world as a whole, entailing a strong rise in unemployment. This disturbing phenomenon, its description and analysis, the evaluation of its consequences — both positive and negative — and an examination of the economic policy options available to governments form the thread of this Report. This introductory chapter presents the main elements of the analysis, dealing at some length with the rôle played by high real interest rates; it is left to the Conclusion to formulate the principal economic policy recommendations. The main point made in this chapter is that the western industrial world finds itself at present in a highly unstable situation. Substantial gains have been registered in the fight against inflation but the underlying inflationary expectations are still strong; on the other hand, there are numerous forces at work which are steering the world towards stagnation.

Several factors have helped to bring growth to a standstill. Some of them are by no means recent and have had a continuing rôle in the general slowing of economic development for almost ten years now. The erosion of corporate profitability is a key factor in the weakness of the overall volume of investment, while the level of real labour costs steers investment towards labour saving rather than expansion. Experience of inflation and highly variable exchange rates — no recent things either — worsens the climate of uncertainty in which economic decisions are taken, discourages capital formation and leads to a misallocation of resources. The growing burden of taxation and other levies on earnings saps initiative and the will to work and encourages the emergence of a parallel economy with all the distortions that this inevitably brings in its train. More generally, the rising share of the public sector gradually stifles the activity of the enterprise sector, while the justified aversion to large public-sector deficits precludes the implementation of an anti-cyclical fiscal policy along traditional lines.

Reinforcing the cumulative effects of these long-term constraints on growth came the two oil price shocks, the second of which dominated the world economy in 1980 and 1981 through its direct and indirect deflationary impact, the boost it gave to prices and the serious imbalances which it created in international payments.

Lastly, there can be little doubt that the restraining stance of policies over the last two years has contributed to the slowdown in growth. In contrast to the response to the first oil price shock, when governments reacted very differently from one country to another, in the face of the second wave of oil price increases almost all the major countries decided to give the fight against inflation priority over other policy objectives. In fact they had no other choice. In the international context, those countries that had been caught up in vicious circles of depreciation/inflation were not inclined to repeat this disastrous experience, while the others, with an eye towards the dangers of imported inflation, endeavoured to keep their exchange rates firm. In the domestic context none was tempted to exploit the so-called inflation/

unemployment trade-off to increase employment, persuaded as they had become that more inflation and higher unemployment had gone hand in hand. So, taking their lead from past experience, macro-economic policy-makers, with rare unanimity, adopted a globally restrictive stance. Since inflation has proved to be stubborn, the initial outcome of these policies has been a downturn of activity.

From the monetary point of view the most striking and, at the same time, the most disquieting aspect of recent economic developments has been the generalisation of high real interest rates. The recent slowing of inflation has further aggravated the phenomenon — as measured against the current rate of inflation. The high level of real interest rates hampers the revival of investment, weakens the financial structure of businesses and considerably increases the debt-servicing burden of countries which have borrowed on the international market. Consequently it arrests growth and exposes the financial intermediaries to risk.

The causes of these high real interest rates — since the end of the war an unusual occurrence in a period of stagnation — lie both in the influence of factors that are present to some degree everywhere in the industrial world and in the specific impact, on Japan and the Federal Republic of Germany, of the exceptionally high level to which real rates have soared in the United States.

It is the mix of counter-inflationary policies that bears much of the responsibility for the continuance of high real interest rates. In most countries the main burden of the fight against inflation has been borne by restrictive monetary policy, as is evident from the decline in real terms of a large number of monetary aggregates. On the other hand, with few exceptions, fiscal policies have not supported the counter-inflationary action of the monetary authorities. True, it is hard to measure the stance of fiscal policy in an environment combining underemployment and inflation: the effective public-sector deficit is itself affected by both unemployment and inflation. The same may be true of the real financial saving of the household sector. Nevertheless, it is safe to say that in a good number of countries fiscal policies have been less than restrictive, especially when viewed against long-term public-sector growth trends, and that in some major instances they have remained, or have become, openly expansionary.

The stubbornness of inflationary expectations also contributes to the high level of real interest rates. It is difficult to find a fully satisfactory explanation for the persistence of high real interest rates in a period of recession unless it is assumed that the recent decline of inflation is expected to be a temporary phenomenon — which is merely another way of saying that real interest rates are perhaps not so high when measured against the rate of expected inflation. The difficulty of moderating inflationary expectations ought not to come as a surprise. They are fed by a long experience of inflation, by observation of numerous rigidities in wage and income formation and by doubts about the public authorities' determination to pursue an unwavering counter-inflationary policy. For the anticipated inflation rate to merge with the current inflation rate there would have to be lasting experience of the pursuit of resolute counter-inflationary policies coupled with a continued process of disinflation. Such experience would certainly bring both nominal and real interest rates down to more acceptable levels — but with what time-lag?

The persistence of inflationary expectations is not unrelated to the public-sector deficit. It may be true that the public, judging by past experience, attributes the main responsibility for sustaining the inflationary process to excessive expansion of the money supply. But it is no less true that the public also associates the over-rapid growth of the monetary aggregates with the size of the public sector's financing requirements: it will expect the public-sector deficit to be financed sooner or later by monetary expansion. In other words, a persistently large and, above all, expanding deficit will fuel the public's fears that it cannot rely on the authorities' determination to fight inflation to the bitter end.

Of the developed industrial countries it is in the United States that real interest rates have reached the highest level, with, in the spring of 1982, rates in the long-term market exceeding 7 per cent., as against 2½ to 5 per cent. for comparable rates in the other major countries. The lead of the United States ought hardly to come as a surprise. For it is there that the conflict between a clearly counter-inflationary monetary policy and a deliberately expansionary budgetary policy is most pronounced. Despite increasing problems of definition and measurement, deceleration in the growth of the narrowly defined money stock in the United States appears impressive. At the same time, though the current public-sector deficit is still moderate compared with other countries, at any rate in relation to the size of the economy, all the forecasts indicate that the public-sector borrowing requirement will expand significantly in the future.

Besides the conflict between the stance of monetary policy and that of budgetary policy, there are other factors which tend to keep real interest rates high in the United States. Firstly, tax deductibility of interest payments is more pervasive than in most other countries. Secondly, the private sector's demand for credit remains high, perhaps influenced by the erosion of corporate profitability.

Lastly, two further factors deserve mention, both of them relating to the monetary control techniques in use in the United States. In the first place, the short-term difficulties that the US monetary authorities have experienced in achieving their quantitative objectives — difficulties which are intensified in a strongly innovatory financial environment and in the face of major economic cross-currents — may have added a measure of uncertainty to market participants' assessment of the determination with which the Federal Reserve is pursuing its counter-inflationary policy. However, this added only marginally to the greater uncertainty deriving from the prospect of continuing large budget deficits. The generally prevailing uncertainty appears to have survived until now both the noteworthy decrease in the rate of growth of M_1 for 1981 as a whole and the marked fall in the rate of inflation. Secondly, the increased volatility of short-term interest rates may have added another sort of uncertainty premium to long-term rates. Paradoxically, the strategic success of the US monetary authorities in the fight against inflation and what might, on a narrower view, seem to be a tactical failure — the greater volatility of both interest rates and the monetary aggregates at the same time — have joined forces with the budget to push real long-term rates upwards. It remains to be seen whether the influence of the purely technical factors on the long-term market is a lasting phenomenon or whether it is just part of a rather lengthy learning process that may

be inevitable in the use of a new operating technique, especially in a period that combines lively financial innovations with an active fight against inflation.

The level of real interest rates in the United States is disturbing in itself given its impact on the US economy and, thereby, on activity in the rest of the world. It is disturbing, too, in that it tends directly to keep the level of rates up elsewhere. Of course, it would be an exaggeration to say that the state of the US financial markets alone is responsible for the current level of interest rates in the other industrialised countries; as has already been said, almost everywhere the public authorities are placing heavy demands on the markets and inflationary expectations remain high for other reasons too. Moreover, though nominal rates look historically very high in some countries, real rates are not. Finally, though this is a dubious consolation, countries have in varying degrees sought to shield their interest rate levels by permitting their exchange rates to depreciate.

Nonetheless, it can be argued that without the American influence nominal and real interest rates in two major countries at least — Japan and the Federal Republic of Germany — would, in the spring of 1982, have been at levels more consistent with the requirements of domestic balance. This influence is, it is true, no longer as strong as it was last year for Germany and two years ago for Japan, when the two countries' current-account deficits spontaneously drove their respective currencies down at the very moment when the sharp increase in the oil price gave a fresh boost to external deficits and domestic inflationary pressures. The authorities of both countries had little choice but to allow their own interest rates to be dragged in the wake of the high rates in the United States.

In the spring of 1982 the situation is somewhat different. Both Japan and Germany have gained some room for manoeuvre in relation to US money-market conditions, for two reasons. For one thing, their current-account balances have recovered; for another, with the decline in the prices of oil and other commodities priced in dollars the depreciation of the yen and the Deutsche Mark vis-à-vis the dollar no longer has the same inflationary repercussions. However, notwithstanding this new measure of freedom, the dependence of German and Japanese market rates on rates on the US market, albeit reduced, has not altogether vanished: the strength of the dollar has demanded that rates be kept at a level needlessly high for the requirements of German and Japanese domestic economic equilibrium.

What, then, of the general economic repercussions of the near-stagnation of the developed industrial world? Not all are negative, far from it.

Among the positive effects, pride of place must be given to the marked deceleration of inflation which, after starting in Japan, the United States and the United Kingdom, has become evident almost everywhere since the end of 1981. Last year's Report already pointed to the beginnings of this development. Half forecast, half hope, it seems to have become a reality, all the more so since the easing of the inflation rate cannot be ascribed simply to the turn-round on the oil market, the fall in commodity prices or other phenomena that could prove to be short-lived. Part of the reason also lies in the more positive development of the underlying inflation rate, that is to say, the recent slowdown in the rate of nominal wage increases and the decline, which began earlier, in real wages. This latter development is of crucial

significance not only because it is decisive for the lasting success of the fight against inflation but also because it could lay the basis for a revival of investment and the restructuring of industry. Where it has occurred it reflects households' decision to accept part of the levy on real incomes resulting from the two oil shocks. It could therefore, in the longer term, correct one of the imbalances under which our economies are suffering, namely the fundamental erosion of company profitability.

The second positive repercussion is the impact on the oil market. The easing of the oil price and the elimination of the OPEC surplus constitute the major event of winter 1981–82. A further rise in oil prices, especially in real terms but even in nominal terms, would have meant an indefinite protraction both of stagflation and of the serious imbalances in international payments — both factors stifling growth. Though it has not been removed in the longer term, the energy constraint has been very much eased in the short term. At a juncture when doubts were forming about the capacity of the international banking system to go on financing the large deficits created by the OPEC surplus, and when the banks were under pressure from all kinds of political shocks, the elimination of the OPEC surplus must be seen as an event of exceptional significance. It is all the more notable in that it cannot be ascribed solely to the influence of the recessionary world climate. Savings in oil consumption, due both to global energy conservation and to the substitution of other energy sources for oil, have contributed just as much, perhaps even more. These economies reflect the market's remarkable ability to adjust and demonstrate, if any demonstration were needed, the efficiency of a price system operating freely. They in themselves are an encouragement.

On the other side of the coin, the most onerous of the negative repercussions for the industrialised countries domestically is the scale of unemployment. Unemployment had already begun to grow in the early 1970s. For some time the relatively rapid expansion of the labour force, caused partly by demographic factors and partly by the growing numbers of women entering the labour market, had not been matched by an equivalent increase in employment, which had nonetheless remained buoyant in several countries. The unemployment that this created already brought with it a good many problems; that which has been caused more recently by the decline in employment in practically all the advanced industrial economies has become intolerable. And the outlook is frankly bleak; the past weakness of capital formation would make it difficult to reach an acceptable level of employment even in the event of an economic recovery.

Internationally, the sluggishness of activity in the industrial world has considerably depressed growth in the developing countries and worsened their terms of trade. At these countries' standard of living the slowdown in growth entails much heavier sacrifices than near-stagnation for the high-income countries. This is obvious for the poorest among them. But it is also true for the many industrialising countries that have already taken off: how can they continue the development process? With the deterioration in their terms of trade, the high level of interest rates increasingly adds to their debt-servicing burden and could well wipe out a good part, perhaps all, of the benefits of the decline in the price of oil. Given their relatively low energy consumption the only way that these countries could gain from the spectacular

reversal on the oil market would therefore be indirectly, via its potentially positive impact on growth in the industrial world.

It is perhaps the first time since the war that the industrial countries have found themselves confronted with a situation of such stark contrasts: on the one hand, in the battle with inflation there have been some notable successes and developments on the oil market have removed a powerful factor of disequilibrium in international payments; on the other hand, rising unemployment in the industrial countries and the alarming worsening of the position of the developing countries, including that of some oil-producing countries, are a source of great concern.

It is a situation that economists would call a fundamentally unstable equilibrium. The gains that have been made are not yet so secure that they could not be easily lost again if anti-inflationary policies were relaxed too soon. At the same time, it would be a mistake to underestimate the power of those factors that could impede the orderly resumption of economic growth or depress the world economy even further. Chief among these is the high level of real interest rates, already discussed at some length in this introductory chapter. But there are others, which will be analysed in the body of the Report: the contraction in international liquidity; the adverse impact of the numerous political uncertainties on the international banking market; lastly, the behaviour of exchange rates, which are proving highly unstable and, in some cases, running directly counter to the evolution of the country's competitive position.

Between the Scylla of a renewed acceleration of inflation and the Charybdis of protracted stagnation the path looks extremely narrow.

II. RECESSION, RECOVERY AND GROWTH: PROBLEMS AND POLICIES.

Highlights.

1981 opened against the background of some recent acceleration in output growth in the industrial world as the US economy in particular rebounded from the short recession of mid-1980 and as the effects of the second oil price shock began to work themselves out. For the industrial countries taken as a whole, however, renewed stagnation set in again almost immediately. By the end of last year, with demand management policies having remained tight and inflation being slow to respond, output was falling again in North America, and also in Japan. Thus, as the European economies had been weak for most of the year as well, unemployment was rising quite strongly and generally through the autumn and early winter months.

Some of the consequences of these developments became quite vividly apparent early this year. The marked improvement in price performance will be covered in the following chapter, and was itself in part a consequence of the fairly spectacular weakening of the oil market. On the face of it, therefore, two of the more important constraints on economic performance had been significantly alleviated. Like a ghost at the feast, however, one of this chapter's rather melancholy rôles is to question how much fundamental adjustment is implied by these latest developments.

For some time now there has been growing recognition of a series of important constraints on economic progress ranging from price/wage rigidities and the energy supply situation, through natural resource availability to environmental concerns. In turn, it has been recognised that for some time economic growth is likely to be lower, and unemployment higher, than the world was accustomed to before 1973. The point about the most recent developments, however, is that output and employment performance have fallen short even of these more realistic expectations. Slow growth has temporarily given way to near-stagnation. The short-term question is thus whether the inflation and oil situations would have appeared in so favourable a light had some low growth been maintained — and, a fortiori, whether the previous problems would return with any mild recovery in activity. The longer-term question is whether there has been any fundamental change in the circumstances which had earlier led to a major qualitative scaling-down of expectations concerning growth trends and feasible levels of unemployment.

The analysis begins with a review of short-term developments and then moves on to the problems posed by US budgetary policy. The paradox lies in the fact that the announcement of future large budget deficits seems to have fed back on to the present situation via a higher level of interest rates than might otherwise have been the case — both inside and outside the United States. Thus, policy has been more contractionary in the short term than was probably intended. In turn this implies that a decision to reduce US budget deficits in the period ahead might itself, by

contributing to a lowering of interest rates, supply some short-term stimulus to the world economy independently of any change in monetary targets.

Indeed, that would seem to be one of the few major avenues for short-term intervention given the state of budgets in the rest of the world. The chapter goes on to discuss the implications of the emergence of large chronic budget deficits in nearly all countries, and notes the constraint which this situation places on the use of fiscal policy for traditional counter-cyclical purposes.

Finally, under the heading of public-sector problems, the growth in the size of the public sector itself is reviewed. It is noted that there is a need for public spending plans to take more account of medium-term growth prospects if the level of taxation is not to remain damagingly high.

For obvious reasons the medium-term energy supply situation is more difficult to assess. There seems little doubt that oil saving has run ahead of earlier projections. On the other hand, one cannot be sure whether this implies that conservation developments will be similarly favourable in future or whether the end of the process has simply been brought forward. Strategic considerations and the continuing risk of unforeseeable shock events argue in favour of pressing for still more conservation and, especially, substitution of oil in the industrial world.

Finally, the chapter analyses the potentially self-reinforcing nature of slow growth. Slow market growth inhibits investment, which in its turn reduces the economy's supply and employment potential. Structural adjustments which are needed to alleviate the various constraints can also be slowed down in a stagnant environment. This applies both to the quality of the capital stock itself and, possibly, also to the quality and allocation of the labour force. The chapter ends by noting that the main hope for gradual but sustained improvement must lie with the encouragement of investment. In the meantime, however, it is difficult to see that this could do much to alleviate the immediate unemployment situation.

Demand and output: Short-term developments.

For the second year in succession GNP in the industrial countries grew by only a little over 1 per cent. in 1981. Taking the OECD area as a whole, virtually all of this increase in output occurred before the middle of the year and by the year's end GNP was actually falling in North America and Japan. In the United Kingdom and France, however, there were some signs of recovery during the year, in the former case as cyclical forces began to assert themselves, and in the latter under the influence of some policy relaxation. Even so, for western Europe as a whole the year saw no growth in output at all.

The three most immediate forces influencing these developments were the surge in import demand by the OPEC countries early in the year, the high level of interest rates in the United States and the continuing general anti-inflationary stance of demand management policies.

The volume of goods imports into the OPEC countries rose by some 25 per cent. last year — nearly double the previous year's rate — as the oil producers began

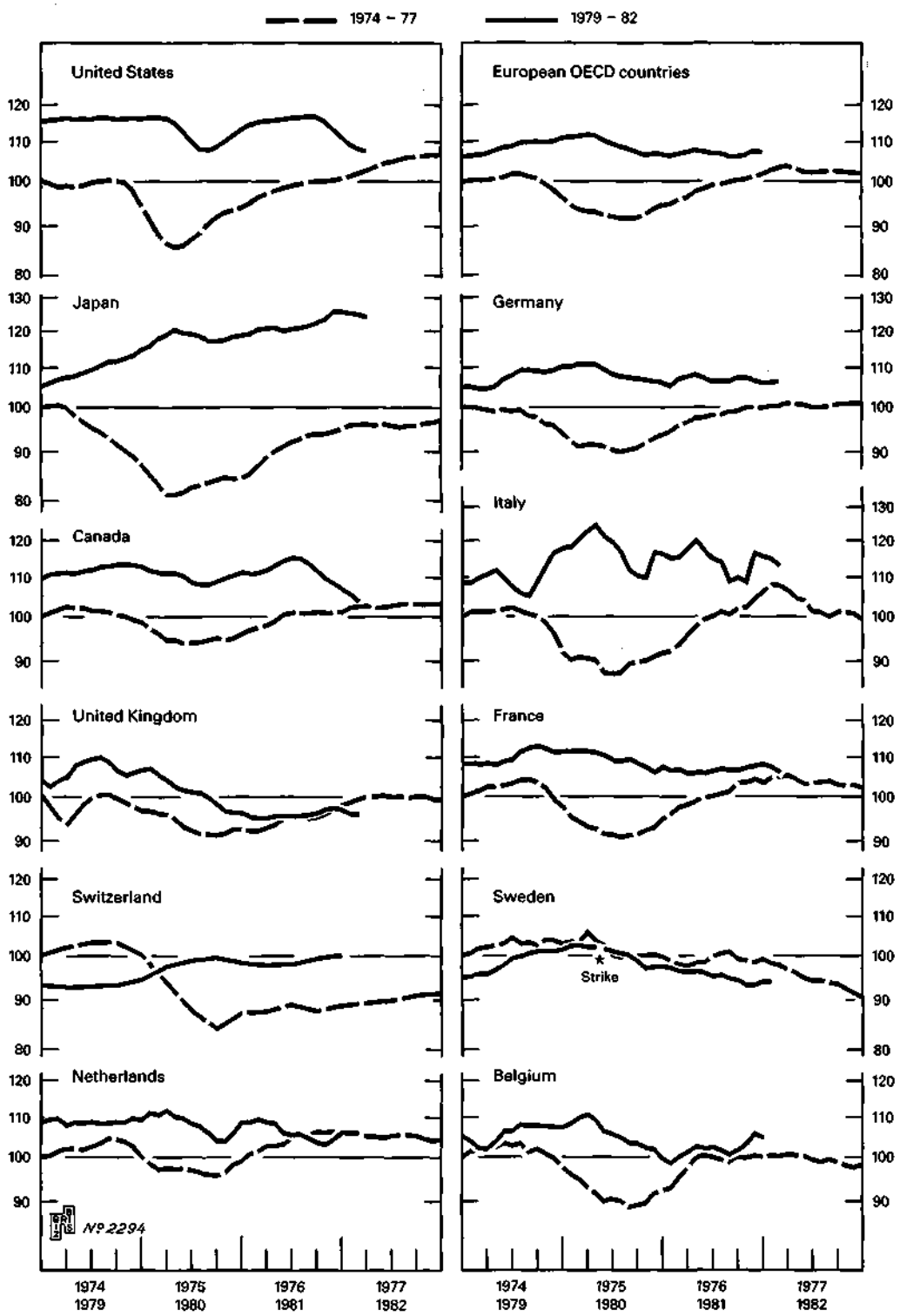
Larger industrial countries:
Changes in real gross national product and its components.

Countries	Years	Real GNP	Consumption		Gross fixed investment			Exports	Imports	Changes in stocks*
			private	public	private non-residential	private residential	public			
		annual volume changes, in percentages								
United States	1978	4.8	4.7	1.4	9.1	3.0	7.3	12.6	12.8	1.0
	1979	3.2	2.9	2.4	6.5	– 5.3	– 5.6	15.2	6.0	0.7
	1980	– 0.2	0.5	3.1	– 3.0	–18.6	1.3	10.0	– 0.1	– 0.2
	1981	2.0	2.5	1.5	2.5	– 6.0	– 6.8	– 0.4	5.9	0.5
	1981 IV	0.9	1.1	3.2	3.6	–22.1	– 8.6	0.0	8.5	0.3
Japan	1978	5.1	4.7	5.1	6.6	6.6	16.1	0.2	6.5	0.6
	1979	5.2	5.9	4.3	11.8	– 1.0	3.1	6.6	14.7	1.1
	1980	4.2	0.6	2.2	6.5	– 9.6	– 3.5	18.7	– 4.0	1.0
	1981	2.9	0.6	3.6	1.6	– 1.0	4.8	16.4	5.7	0.3
	1981 IV	1.8	1.2	3.2	1.0	1.0	0.0	13.5	13.3	0.3
Germany	1978	3.6	4.0	4.2	5.8	2.6	6.4	4.1	5.2	0.8
	1979	4.4	3.3	3.3	8.4	7.9	9.1	5.8	11.0	2.1
	1980	1.8	1.7	2.8	3.3	2.9	5.7	5.9	5.8	1.4
	1981	– 0.3	– 1.1	2.1	– 2.1	– 3.7	– 6.9	8.9	2.1	– 0.1
	1981 IV	0.8	– 1.2	1.3		– 4.9		17.4	2.0	– 1.2
France	1978	3.8	4.7	4.3	4.1	– 1.7	– 3.0	6.1	6.2	0.9
	1979	3.3	3.5	1.8	4.0	2.6	1.5	7.4	11.4	1.7
	1980	1.1	1.7	1.3	5.2	– 3.5	1.4	2.9	7.3	2.0
	1981	0.2	2.2	2.3	– 2.3	– 1.4	– 0.7	5.1	1.0	– 0.1
	1981 IV	2.3	2.7	1.6		– 2.8		8.1	4.9	1.4
United Kingdom .	1978	3.3	5.6	2.1	10.2	14.1	– 8.8	1.9	3.9	0.8
	1979	1.4	4.7	1.7	6.0	–15.1	– 3.9	2.6	11.2	1.3
	1980	– 1.7	0.1	2.1	3.8	–13.4	– 5.0	0.3	– 3.4	– 1.8
	1981	– 1.0	0.2	0.9	– 1.8	–13.5	–17.9	– 2.0	– 2.0	– 1.8
	1981 IV	0.8	0.7	– 0.4	– 0.6	4.5	–18.8	3.1	11.7	0.0
Italy	1978	2.7	3.0	2.3	– 0.1	1.2	– 2.1	10.1	8.1	0.9
	1979	4.9	5.3	1.7	7.9	3.0	3.0	9.1	13.8	1.7
	1980	3.9	4.3	2.1	9.8	4.9	14.9	– 4.3	8.3	3.6
	1981	– 0.2	0.2	1.8	– 2.5	0.7	6.4	6.0	– 5.4	– 0.8
	1981 IV	0.6	– 3.2			– 1.2		12.1	– 2.8	.
Canada	1978	3.7	2.8	1.6	2.2	– 3.3	– 2.1	10.3	4.6	0.2
	1979	3.0	2.0	0.5	12.1	– 7.3	– 5.6	2.7	6.0	1.5
	1980	0.0	1.0	– 0.5	8.6	–10.6	– 0.4	1.0	– 2.2	– 0.6
	1981	3.0	1.7	2.0	6.9	1.4	1.8	1.4	3.1	0.5
	1981 IV	1.0	0.3	1.8	6.7	–11.6	4.7	– 2.3	0.6	– 0.4
Total OECD	1978	3.8	3.9	3.4		4.6		5.6	5.1	0.5
	1979	3.4	3.3	2.1		3.5		6.4	8.2	1.0
	1980	1.2	1.1	2.6		– 1.0		5.6	1.3	0.7
	1981	1.1	1.0	1.5		– 0.5		4.0	0.5	0.2
	1981 IV	1.0	1.0	2.0		– 2.5		7.0	5.5	.

* As a percentage of previous year's GNP.

reacting more strongly to their new surplus revenues. In the second half of the year there was a sharp slowdown as increased oil saving and recession in the industrial countries reduced the OPEC current-account surplus substantially. For the year as a whole, however, total export demand in the OECD area rose by 4 per cent. in volume, with especially strong growth in Japan and Germany.

Industrial production.*



* Uncentred three-month moving averages of seasonally adjusted data. Fourth quarter 1973 = 100.

In the United States, on the other hand, exports fell slightly last year, partly in response to the loss of competitiveness implied by the strength of the dollar. In turn, this last factor was one result of the high interest rate environment in the United States. Another result was, of course, a weakness of interest-sensitive expenditures, not only in the United States itself, but, to varying degrees, in the rest of the world as well. Interest rates outside America were influenced not only by firm underlying monetary policies domestically but also by the desire to protect exchange rates in the face of the dollar's strength. Thus, as the table shows, private residential fixed investment fell in many countries last year, especially in the United Kingdom, the United States and Germany. In addition, consumer durables expenditures were weak, especially in North America where a sharp fall was registered in the fourth quarter. But perhaps most serious was the evidence of a further weakening of business fixed investment expenditures. Outright declines in investment were registered in many countries, including the Netherlands, Sweden, Belgium, France, the United Kingdom and Germany. And in the United States business investment began to fall in the final quarter of the year.

The attempt by most countries to achieve some fiscal restraint was reflected last year in the slow rate of growth of government direct expenditures. (Transfers, however, continued to rise rapidly.) Overall, public consumption expenditures probably rose by about 1½ per cent. Thus, for some time now, public consumption growth has been significantly lower than in earlier years. In addition, outright declines in public investment spending were seen in the United States and again in the United Kingdom, and also in Germany. In Japan, however, an attempt was made to accelerate some public programmes to boost flagging domestic demand.

Last year's disappointing growth performance was not entirely new, and must to some extent be seen as part of the generally slow growth forced on the world economy over the last decade. As the following chapter describes, perhaps the most important constraining factor has been inflation and, especially in 1981, its failure to respond sufficiently quickly to policies of general restraint. But, as this chapter now goes on to discuss, there have been other important constraints, both of a short-term and, in particular, of a long-term nature, which have adversely affected the prospects for growth and a more satisfactory level of employment.

Public-sector problems.

The achievement of improved economic performance is first of all constrained by certain unresolved difficulties in the public sector itself. These may be conveniently divided into two relatively short-term issues and a longer-term one. There is, firstly, the unusual — and still evolving — situation in the United States, where there appears to be a serious mismatching of the stances of fiscal and monetary policy. The second issue concerns the more general difficulty in the industrial countries, so far, of achieving any significant reduction in their underlying budget deficits as a means of combating inflation. Thus, even if other circumstances now allowed some general budgetary stimulus to be considered (which in most cases they do not), this particular policy tool might now be found to have lost some of its previous flexibility. Finally, the longer-term problem of the size of the public sector

relative to the economy as a whole remains acute. Hence — and given the need to reduce budget deficits as well — the desired reduction in the burden of taxation has so far proved an elusive goal.

The US budget.

The central feature of the US policy-mix problem is the perception by financial-market participants that the Administration's medium-term attempt simultaneously to stimulate real growth and reduce inflation conflicts with the normal pattern of the past. In terms of policies, the clash is between the much firmer monetary stance adopted since October 1979 and the unusually expansionary stance of fiscal policy planned for this and future years. Thus, the market belief is that either money and credit markets will become tighter as the policy conflict intensifies, or monetary policy may in the event be relaxed, in which case there may be a resurgence of inflation. Under either scenario, interest rates could be expected to remain high. Consequently, although the budget deficit for the current year may be justified on the grounds of recession, expectations of a potential problem in the future are combining with fears based on past misplaced hopes to keep current interest rates higher than they might otherwise be. Short of a policy change itself, the resolution of the problem will depend upon the extent to which a further lessening of inflationary pressures in 1982, combined with at least a short-term recovery of economic activity, induces a marked change in expectations.

The new Administration which assumed office early last year brought with it a bold new approach to economic policy designed to deal with the relatively poor performance of the US economy over the past decade. The core of this approach, popularly known as "supply-side economics", was a significant reduction in the rôle of government. This was thought desirable both for its own sake and, more

The US Federal budget deficit and gross private saving.

Years	Federal Government deficit						*Memorandum items:*	
	NIPA[1,2]		unified[3]		unified plus off-budget outlays[3]		gross private saving[1]	state and local surplus, NIPA[1]
	in billions of dollars	*percentage of saving*	in billions of dollars	*percentage of saving*	in billions of dollars	*percentage of saving*	in billions of dollars	
1966-69 average .	− 3.2	*2.3*	− 8.6	*6.2*	.	.	138.5	0.3
1970–73 average .	−14.2	*7.5*	−16.0	*8.5*	.	.	189.0	7.9
1974–77 .	−45.1	*15.9*	−40.3	*14.2*	− 46.7	*16.5*	283.5	14.3
1978	−29.2	*8.2*	−48.8	*13.7*	− 59.2	*16.7*	355.4	29.0
1979	−14.8	*3.7*	−27.7	*6.9*	− 40.2	*10.1*	398.9	26.7
1980	−61.2	*14.1*	−59.6	*13.8*	− 73.8	*17.1*	432.9	29.1
1981	−62.5	*13.0*	−57.9	*12.1*	− 78.9	*16.5*	479.7	36.6
1982[4]	.	.	−98.6	*18.4*	−118.3	*22.0*	537	.
1983[4]	.	.	−91.5	*14.4*	−107.2	*16.9*	636	.
1984[4]	.	.	−82.9	*11.4*	− 97.2	*13.3*	730	.

[1] Calendar years. [2] NIPA = National Income and Product Accounts. [3] Fiscal years (October–September). [4] Administration forecasts as of February 1982.

importantly, as the key to lowering the burden of taxation. The latter, in turn, was seen as a means of improving incentives to work, save and invest, with the aim of increasing productivity and output. A faster-growing economy would bring with it rising tax revenues, even from a lower tax rate structure, and the budget could eventually be balanced within a relatively few years. In the meantime, however, deficits might continue — especially given the proposed major build-up of defence spending — but the potential inflationary consequences of this were to be kept in check by continued monetary restraint.

Congress at first reacted favourably to the Administration's proposals, even though the personal tax cut was reduced from 10 to 5 per cent. for the first year and its introduction delayed by three months until October 1981. For later years, however, Congress in fact added to the Administration's tax reductions, both in the indexing of personal taxation and, especially, in the field of corporate investment relief. Meanwhile, interest rates rose again during the summer to very high levels, raising the Government's outlays on debt interest and worsening the short-term outlook for economic activity and hence for tax revenues. Together with the threat of expenditure overruns, these developments prompted the Administration in September to propose further expenditure and revenue adjustments with the aim of keeping the deficit in the Federal unified budget down to $43 billion for the (current) fiscal year 1982 (October 1981–September 1982).

It is a measure of the deterioration in the situation that when the 1983 budget came to be presented in February 1982, the deficit estimated for the current fiscal year had leapt to nearly $100 billion. What is more, as the table shows, further very large deficits were projected for the fiscal years 1983 and 1984. The goal of balancing the budget had been pushed much further into the future. According to the President's statement, the most important single cause of the revision to these estimates is a lower-than-expected level of activity. But a significant increase has also occurred in government payments of net interest, which may now rise to around $85 billion this fiscal year compared with a little over $50 billion only two years ago. In addition, the somewhat faster-than-expected decline in inflation, though welcome for its own sake, has decreased the buoyancy of the revenue.

The sheer size of these revisions has, not surprisingly, given rise to fears in financial markets that further upward changes may occur, especially as even the current estimates assume further and rather uncertain expenditure economies. The Congressional Budget Office, for example, suggested in February that the outturns may be considerably above the official estimates, with unified budget deficits of $111 billion this fiscal year, $121 billion in 1983, and further increases in later years. In addition, there is concern about the growing size of the Government's credit activities, most of which do not appear in the unified budget. Some of these — the direct loan programmes — involve Treasury borrowing for on-lending to the private sector (as opposed to public spending). Others involve borrowing by the agencies concerned, the government-sponsored enterprises, again for on-lending to the private sector. Yet others involve only guarantees to private-sector credit activities. As the table shows, the last two in particular have grown rapidly in recent years, even when scaled by the rising flow of saving. There are thus fears that these government activities may also be increasing the pressure on credit markets. For

example, when all the credit programmes which do not appear in the unified budget are combined with it, the total "deficit" may in the current fiscal year be equivalent to something like 35–40 per cent. of gross private saving. In the years 1970–73 the figure averaged around 20 per cent.

The US Federal credit budget.

Items	1970–74[1]	1975–79[1]	1980	1981	*1982*[2]	*1983*[2]
	in billions of dollars					
Total net direct loans (on- and off-budget)	2.6	14.9	24.2	26.1	*20.9*	*14.2*
Net government-sponsored enterprise loans	5.0	12.9	24.1	32.4	*50.1*	*53.1*
Net loan guarantees	14.4	14.8	31.6	28.0	*44.0*	*46.0*
Total	22.0	42.6	79.9	86.5	*115.0*	*113.3*
Total as percentage of gross private saving	11.6	12.2	18.9	18.7	*21.4*[3]	*17.8*[3]

Note: Fiscal years.
[1] Annual averages. [2] Administration forecasts. [3] As percentage of calendar year saving.

The implications of these developments have already manifested themselves forcefully in financial markets. Interest rates have fluctuated widely and long-term rates have risen to record levels. For example, in the spring of 1982 government bond yields were in the region of 14–15 per cent., compared with a rate of inflation over the past year of around 7 per cent.

The consequences of this situation are twofold: those which affect the US economy itself, and those which affect the rest of the world. Within the United States a new recession developed in the fourth quarter of last year as interest-sensitive expenditures on housing and cars fell sharply. There are also signs that business fixed investment has begun to be affected — a form of "crowding-out" which has potentially serious longer-term consequences for the economy as well as purely short-term demand effects. It could well be the case, too, that any further increase in the degree of policy mismatching would be much more than proportionately deflationary if interest rate levels became such as to cause major corporate balance-sheet problems. In addition, with short-term dollar interest rates rising at times to very high levels, the dollar has been strong in the foreign exchange markets. This situation has probably been further exacerbated by an opposite policy-mix strategy being pursued in Japan. The combined result, for the United States, has been a deteriorating net export performance which has added to domestic recessionary tendencies.

An alternative view, it must be recognised, is that high interest rates are serving, within the context of a transitional decline in overall activity, to bring about the reallocation of resources implied in the Administration's growing defence budget. But, here again, it remains to be seen whether the scheduled tax cuts, weighted in favour of higher incomes, will lead to a substantial increase in personal saving.

A recession in the United States, of course, also affects the rest of the world. But additional international implications of the American policy mismatch have been viewed as stemming from the high level of interest rates even before, as well as during, this latest recession. Even countries with significantly lower underlying inflation rates have felt impelled to raise interest rates at a time of rising unemployment so as to limit further inflation via a decline in their exchange rates. (By the same token, however, these pressures may in many cases have helped strengthen the resolve to make some needed reductions in budget outlays.) For developing countries, too, high levels of real interest rates have seriously exacerbated their debt problems, while simultaneously increasing the flow of interest payments to some oil producers enjoying a strong external position.

The obvious conclusion seems to be that the present American budget plans remain over-lax. But to be able to draw that conclusion in a convincing and balanced way requires that some other considerations be dealt with first. The situation is also not without interest from the point of view of theoretical economic analysis.

The first caveat to enter is that, with the economy moving into recession, some allowance must be made for the automatic budget effects of this development. The Chairman of the Federal Reserve Board, for example, has publicly stated his view that, given the rise in unemployment, the problem does not lie particularly with the current year's posture. And the Department of Commerce has estimated that, even for the third quarter of last year, the actual deficit would have been lower at an annual rate of around $60 billion had the economy been operating at a "high-employment" level. This figure will no doubt have since risen further.

There is also the question of the precise significance of the Federal credit budget. It is clearly not entirely legitimate to add net lending programmes to the revenue/expenditure deficit as if the two were completely comparable phenomena. The lending programmes create an offsetting financial liability in the private sector in a way that outright goods and services expenditures and transfer payments do not. Loan guarantees do not even do that, and involve only minimal net outlays except in the case of major default. Nevertheless, although these programmes may only conduct or influence lending operations of which some might well have happened anyway, they must also almost certainly have some net effect on credit-market conditions. There must, in other words, be some potential risk of financial crowding-out. Again, however, this may not be a serious problem at the moment: much Federal credit activity is connected with housing finance and there is at the present time an extremely large margin of excess capacity in the housebuilding industry.

Finally, there is the question of the counterpart volume of savings in the rest of the economy. One element of this is relatively clear, as can be seen in the table on page 14. The state and local levels of government have been running growing surpluses over the past decade or so. These surpluses may, of course, fade again. But so long as they exist they should either be deducted from the Federal deficit to give a measure similar to the general-government balance used for international comparisons, or else they should be added to the pool of private savings as an additional supply of funds to the credit markets.

More important, potentially, is the Administration's claim that the tax cuts, together with other measures to encourage saving, will raise the proportion of GNP going into private saving by 2–2½ percentage points, an amount equivalent to $90–100 billion by fiscal 1984.

There may well be some merit in all these considerations — the current recession, the difficulty of assessing the credit budget and the possibility of a rise in savings. Nevertheless, the fundamental problem remains, namely that the present fiscal plans involve continuing deficits in conjunction with real growth projected at 5 per cent. per annum or more beginning later this year, and that at a time when monetary policy is set to produce a continuing fall in inflation. Put another way, the economic programme requires an unusual combination of accelerating growth and decelerating inflation as well as perhaps some large increases in the velocity of circulation of money. Financial-market participants therefore expect that interest rates will have to remain very high, especially if reviving activity actually puts upward pressure on the inflation rate. In turn, this could produce renewed pressure on the budget via higher interest outlays.

The concern is thus mainly about future years. Despite the current recession, high real interest rates have, as it were, been "brought forward" from the future because of adverse expectations. In turn, these high rates may be making the immediate recession worse, in contrast to the intent of the policy package, which was to achieve an acceleration in growth.

Economists have for some time now been alive to the possibility of sluggish or even perverse reactions of the private economy in the face of policy changes. As the criticism of counter-cyclical fine-tuning grew during the late 1960s and early 1970s several theoretical mechanisms — the most famous involving the "rational expectations" hypothesis — were adduced to suggest that private-sector reactions might in time come to immobilise the scope for active policy initiatives. From this point of view the current American dilemma, while being a serious matter in its own right, is also an interesting example of one possible mechanism in practice. Indeed, it may well be an example of a perverse reaction. If so, plans for reduced deficits in the period ahead might help to alleviate the immediate output and demand situation somewhat, and at the same time improve the longer-term prospects for a continued reduction in inflation. In turn, such a reduction in planned budget deficits might permit more scope — within the existing monetary targets — for a decline in interest rates to reinforce the prospects for a more durable recovery.

The problem of chronic budget deficits.

In other countries as well, a rather more general obstacle in the path of improved economic performance continues to be posed by the persistence of unusually large budget deficits. The very existence of such deficits may have adverse effects both on inflationary expectations and on perceptions of the likelihood of a general improvement in the economic environment. For such reasons, the use of the budget for traditional counter-cyclical purposes has probably been somewhat circumscribed. In addition, with the highest priority being given to a reduction in

inflation, the primary rôle of budgetary policy has to be to support monetary restraint.

For this reason, most governments have been making determined efforts to reduce public-sector deficits, in particular by trying to restrain expenditure growth. So far as direct expenditure is concerned — that is, public consumption and, especially, public investment — there is evidence of some success. Nevertheless, this success has not been translated into equivalent progress on budget deficits. Two important reasons for this failure are apparently the automatic effect of recession in raising transfer payments and reducing tax revenues, and the effect of high interest rates on debt interest outlays. There is thus some question as to whether it is legitimate for assessment purposes to make some adjustment for these factors.

Despite the generally restrictive orientation of fiscal policy there are, however, one or two exceptions which suggest some redirection of emphasis towards fighting unemployment. The unusual case of the United States has just been discussed, though it cannot simply be classified as a shift of emphasis towards a different policy goal. The aim of the US Administration's programme is simultaneously to stimulate growth and reduce inflation.

The French case is more clear-cut. In June the new Government introduced a revised budget for 1981 which added an amount equivalent to nearly 1 per cent. of GDP to the central-government deficit. And in September budget proposals for 1982 foreshadowed a further widening of the deficit ratio by an additional ¾ percentage point. The express aim of these measures was to combat unemployment. There were, however, signs in November of some limit being put on the scale of reflation when social security contributions were raised by some Fr.fr. 36 billion to offset a threatened deficit of the same amount in that sector of the budget. And, more recently, a budget deficit "ceiling" of 3 per cent. of GDP was announced for next year. Even so, there are at present no other major examples in which budgetary policy is being used so clearly to try to deal with unemployment.

For the rest, varying degrees of restriction remain the norm, at least when measured against most analytical criteria. Fiscal policy has been, and is planned to

General-government financial deficits[1] as a percentage of gross private saving, 1966–81.

Countries	1966-69	1970–73	1974–77	1978	1979	1980	1981[2]
	annual averages						
United States	– 0.4	0.5	7.4	– 3.3	– 3.1	7.3	4.3
Japan	.	– 3.0	9.2	20.1	17.5	15.4	14.2
Germany	1.2	– 1.2	15.9	13.1	13.6	16.6	21.5
France	– 1.1	– 4.0	3.8	8.4	3.2	– 2.1	14.7
United Kingdom	4.7	4.9	29.9	25.3	18.2	19.1	17.5
Italy	.	28.2	33.9	35.1	33.7	29.4	37.5
Canada	– 6.3	– 3.3	7.4	16.5	9.5	9.8	3.3
Belgium	6.8	9.5	17.0	23.8	30.0	40.6	50.0
Netherlands	4.0	– 0.2	9.3	13.0	18.5	20.0	.
Sweden	–31.1	–32.1	–19.8	3.6	17.4	20.2	.

[1] The government sector's current-account saving minus its own investment, i.e. net borrowing requirements. Gross borrowing requirements, including lending to other sectors, would be higher still in relation to gross private saving. [2] Estimates.

remain, especially tight in the United Kingdom, Canada and Japan. In the latter case, although inflation is low and private saving high, financial-market difficulties relating to a large rise in outstanding public debt are a major spur to attempts to cut back the public-sector deficit. The low rate of inflation has, however, permitted the authorities some leeway to use monetary policy to support domestic demand. And even within the budget there has been some attempt to concentrate public-works expenditures in what was expected to be the weakest period, namely, in the fourth quarter of 1980 and the first three quarters of 1981. Further attempts of this nature are also to be made in the current year.

In Germany, although the budget deficit was even higher than expected last year, there has been increasing official concern over the rising trend of unemployment. Thus — within an overall stance which remains restrictive — the Government has recently introduced some measures temporarily to stimulate investment. Such devices, which put a time-limit on the eligibility of expenditures for extra tax relief, have previously been used in Germany to some effect. Plans to finance the latest measures by an increase in VAT next year have had to be dropped.

The 1981 budget plans of the Netherlands began with some attempt to bolster investment and housebuilding expenditures. But a deterioration in the budget position during the year led to attempts to curb expenditures in such areas as public administration and social security. However, it is in Belgium that one of the clearest cases is to be found of the present inappropriateness of a budgetary stimulus against high unemployment. With the main problems being a lack of competitiveness and an insufficiently adaptable industrial structure, both the balance-of-payments and the budget position deteriorated dramatically last year, while unemployment rose to a record level. The February devaluation of the Belgian franc, together with the stabilisation programme to accompany it, was thus a recognition that the unemployment problem had basically to be tackled by means which deal with some of the underlying causes.

The Belgian case is not, however, typical of the more general constraints now placed on the traditional use of budgetary policy for demand management purposes. In the first place, the mere existence of large budget deficits may adversely affect expectations of inflation and foster doubts about the sustainability of any programmes to stimulate demand in the short term. If so, the response of investment spending in particular might be inadequate. In addition, any accompanying acceleration in inflation would increase the likelihood of a reversal of policy stance at some stage. Thus, offsetting private-sector spending reactions could be set in train either, as in the rather special case of the United States, through financial-market reactions, or via pessimistic perceptions of the business cycle on the part of entrepreneurs.

Consumers, too, have in some cases been seen to adapt their spending cautiously in the face of an acceleration in inflation. In several countries a sharp rise in savings ratios occurred as inflation accelerated in the early 1970s. On the level of the world economy there is also the possibility that, even if a renewed upturn could be set off in the short term, the OPEC surplus would re-emerge on a significant scale. There is a sense in which this can also be seen as an adverse "savings" reaction

for the world as a whole. Thus, from these two sources, domestic consumers and the oil producers, could come additional and offsetting effective demand reactions in response to traditional counter-cyclical policies.

When we add to this catalogue of difficulties the unlikelihood of any international co-ordination of short-term policies, it becomes clear that the obstacles in the path of individual country initiatives are formidable indeed. But overriding all, for most countries still, is the imperative of reducing inflation. In turn, this fact carries an important implication for the kinds of adjustments to budget figures sometimes made by economists to allow for the level of unemployment and, more recently, the rate of inflation. The former, the so-called "high-employment" budget adjustment, is well known. The latter, which attempts to allow for the fact that savings flows may increase to offset an inflation-induced reduction in the real value of holdings of public-sector debt, is more novel. To a first approximation such an adjustment can be made by deducting government net interest payments from the budget on the grounds that, at times of high inflation, the major part of such payments reflects an inflation premium in interest rates. They are in fact a repayment of principal.

So far as the high-employment adjustment is concerned, there is immediately a problem, in current circumstances, as to what constitutes the bench-mark level of unemployment. Put another way, it is not clear that it is altogether appropriate to make adjustments for cyclical movements in activity when the old pattern of cycles has disappeared. Present unemployment levels are not necessarily purely cyclical phenomena but may be of a longer-run nature reflecting the various constraints bearing on economies, other structural factors and, possibly, a rise in what has come to be known as the "natural" rate of unemployment.

More fundamentally, both the high-employment and the inflation adjustment calculations are attempts to measure the underlying real demand, or employment, effects of fiscal policy. The former does so by using an explicit unemployment norm as the relevant standard for policy, and the latter, the inflation adjustment, does so by in effect giving government interest expenditures a zero weight in the measurement of the budget's demand and employment impact. It is not clear, however, to what extent such adjustments are relevant when the conquest of inflation has become a primary policy goal. If it is not the short-run level of unemployment but a lower rate of inflation at which policy is directed, then policies should presumably be calibrated against the degree of success on the latter front and not against employment. Indeed, in the case of the inflation adjustment the fact that a correction can be made at all is a reflection of the failure of policy, so far, to eliminate inflation. In addition, the inflation adjustment calculation assumes that wealth-holders do in fact react by saving the implicit repayments of principal in their interest income. This reaction is clearly not a certainty in the same way that, say, a rise in activity tends automatically to close the budget deficit via the tax and unemployment relief systems.

To sum up, the simple fact is that, with inflation control the main aim of policy via firm monetary policies, the appropriate rôle of budgetary policy is

automatically to lend support to these efforts rather than to attempt to achieve other, and possibly conflicting, policy goals.

The size of the public sector.

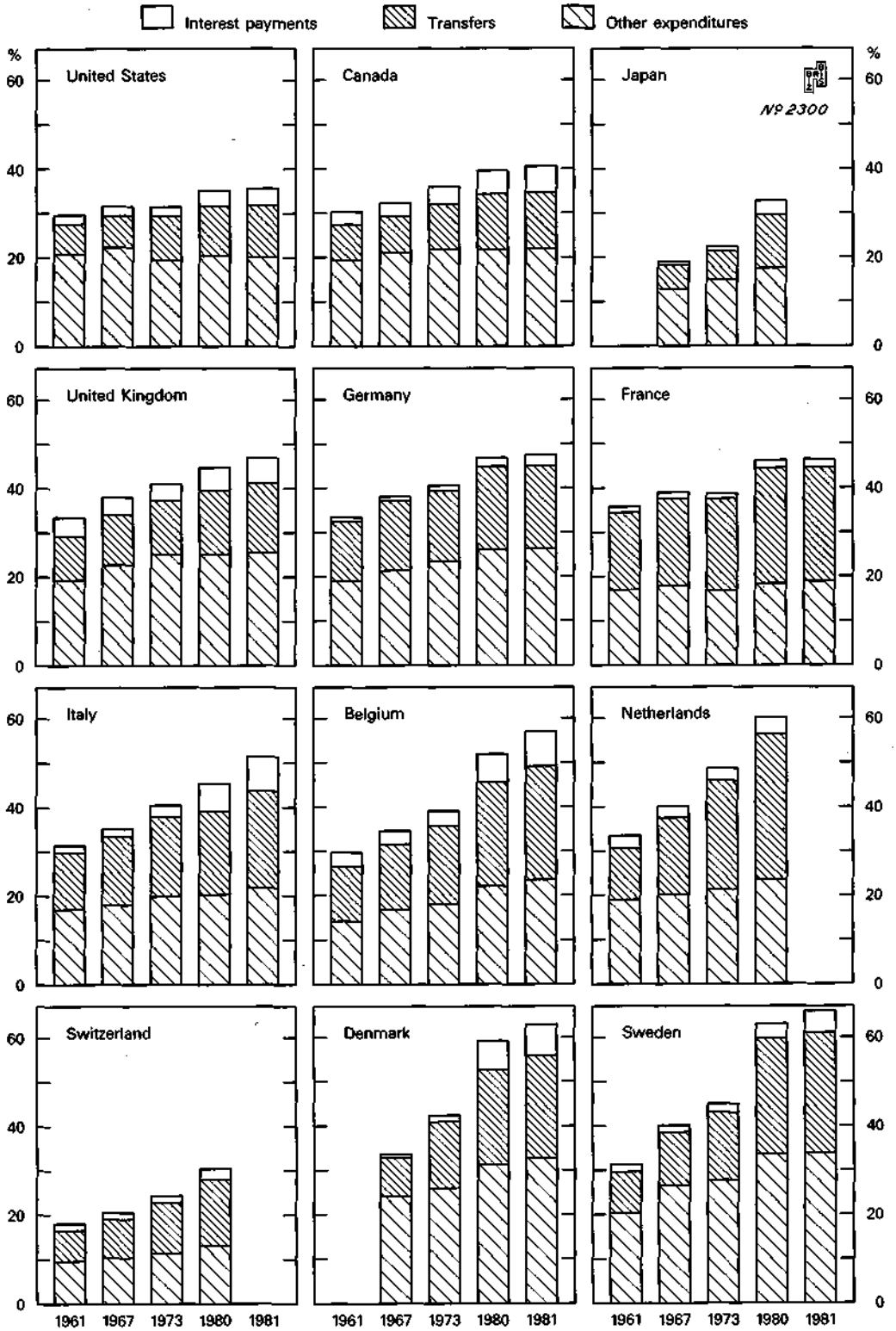
The final aspect of the growth constraint thrown up by the public sector concerns the longer-run problem of the size of the sector itself. As was noted in last year's Report, although the proportion of GNP passing through the general-government sector had been increasing strongly and fairly generally before the first oil crisis, the relative growth of public spending has accelerated noticeably since 1973. A further year's data reveal no alleviation of the situation. Indeed in a literal sense it has become worse, as the share of GNP accounted for by general-government expenditure rose further in nearly all cases last year. In most countries much of the rise was due to increases in transfers and net interest payments. General-government expenditure now ranges from around a third of GNP in Switzerland, Japan and the United States to roughly twice that proportion in Denmark, Sweden, the Netherlands and Belgium.

One of the major difficulties posed by this situation, of course, concerns the required level of taxation. Although it is true that deficit financing accounts for a much greater proportion of public spending than in earlier periods, it is also true that explicit taxation is at record levels. One result of this high "tax pressure" may be an intensification of inflation, either directly if expenditure taxes have to be increased, or indirectly via tax-push wage pressures if income taxes bear the brunt of the required adjustment. In addition, high marginal rates of taxation are widely thought to have adverse effects on supply incentives, investment and productivity. One of the more important justifications for reducing public expenditure is thus to achieve a significant cut in taxation, preferably with special emphasis on investment incentives.

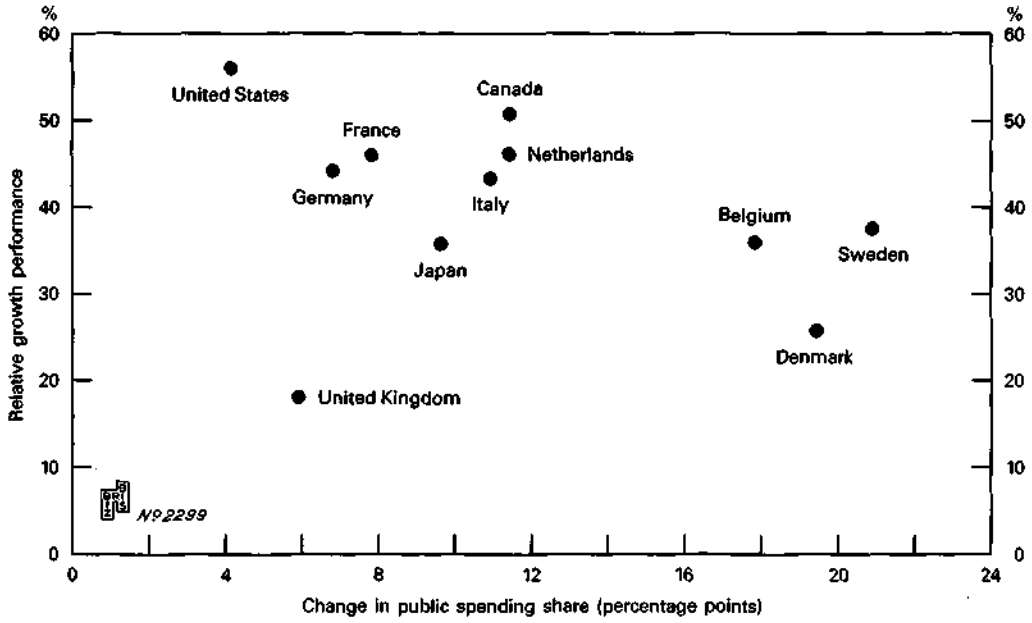
It is often pointed out that it may be quite reasonable for the share of public spending to rise in a growing economy. Societies' need for public goods may well grow more than proportionately with income, while their ability and willingness to pay for redistributory programmes may increase with growing affluence. Even so, there would naturally be some limit to this process. Indeed, after the increases in public spending shares seen in the period up to the early 1970s, it might well have been reasonable to expect some stabilisation of these shares. It is thus particularly disturbing that the relative size of the public sector has grown more rapidly than ever in the post-1973 period.

It seems likely that the underlying slowdown in economic growth during the 1970s, together with the failure of governments to take sufficient account of its implications, may have been a major part of the problem. Most government programmes are not sensitive to the kind of market signals which govern private spending, and some programmes are, of course, deliberately contrived to increase as growth slows and unemployment rises. The graph on page 24 suggests that there is some evidence that the scale of the difficulties governments have experienced is related to the extent of the slowdown in their respective economies. The graph

General-government expenditure in relation to GNP.



Growth performance and the share of public spending in GNP.*



* Annual average rate of growth 1973–81 relative to 1960–73 plotted against change in public expenditure share between 1973 and 1981.

shows the change in the share of general-government spending in GNP between 1973 and 1981 plotted against the economies' own growth rates over the same period relative to the earlier — 1960–73 — trend. The upper section of the graph does indeed exhibit some downward sloping relationship from left to right. Thus, the United States, which registered a growth rate of little over half that achieved earlier, saw a relatively small rise in its public expenditure share. Denmark, Belgium and Sweden, on the other hand, which achieved only 25–40 per cent. of their previous growth, saw truly massive increases in public expenditure. One striking exception at the other end of the spectrum is the United Kingdom, where the rise in public spending was relatively limited while economic growth was particularly severely reduced. This is a reflection of the obvious truth that, regardless of the upward pressure put on the relative size of the public sector by slow growth, determined effort on the part of government can strongly influence, if not entirely counter, its effects.

Were the world economy merely in some normal — albeit prolonged — cyclical downturn, then part of the problem of public-sector deficits might reverse itself automatically in the recovery phase. As it is, the likelihood is that any such recovery will be relatively mild, with growth slow and unemployment relatively high over some more prolonged period. This chapter goes on to discuss some of the other, medium-term, reasons — in addition to inflation itself — which lead to such a conclusion. Hence any reduction in tax pressure and in public-sector credit demand will have to come from renewed efforts to change the trend growth of public expenditure. A consequent lowering of interest rates might then help to stimulate demand for business fixed investment, inventories, housing and consumer durable

goods. It would also feed back into further relief on budget outlays for debt interest, in contrast to the reverse kind of spiral which has seemed to threaten in several cases recently.

The energy situation.

The past year has seen greater progress in reducing oil dependence among the industrial countries than seemed likely earlier. Indeed, developments in 1980 also turn out to have been somewhat more favourable than was apparent at the time of last year's Report. However, given that the recession has simultaneously deepened, it is not clear to what extent the energy constraint on a fuller use of resources has been alleviated. In the meantime, though, the international oil market has weakened quite spectacularly — a development which brings some short-term relief to the world economy so far as inflation, demand, and payments imbalances are concerned. At the same time, it weakens in some degree the necessary incentives to longer-term adjustment.

Despite some slight growth in the industrial West's GNP in 1981, total primary energy use probably fell by around 2½ per cent. With oil being the marginal fuel, total oil use fell by about 6 per cent., and net oil imports (which are in turn the marginal oil source) fell even more steeply — by about 13 per cent. By the second half of the year net oil imports into the OECD area were running at an average of 19½ million barrels per day, a rate not seen since 1969, and which may be compared with peak rates of 26–27 mb/d registered first in 1973 and again in the years 1976–79. At the same time, last year saw a further small rise in indigenous oil production (including Mexico), bringing the total increase since the first half of the 1970s to some 4 mb/d.

Energy and oil use in the OECD countries.

Items	1960	1965	1973	1980	1981
	indices: 1973 = 100				
Total energy use	53.0	66.3	100	106.0	103.5
Energy use in relation to GDP	101.0	96.9	100	89.1	86.0
	in percentages				
Oil use in relation to total energy use	36.7	44.7	54.8	49.7	48.0
Net oil imports in relation to total oil use	48.9	58.5	67.6	61.8	56.9
Net oil imports in relation to total energy use	17.9	26.2	37.1	30.7	27.3
	in millions of barrels per day				
Net oil imports	6.8	12.4	26.5	23.3	20.2
OPEC oil production	6.0	14.0	31.0	26.8	22.5

A significant contribution to these recent developments came from considerably improved energy and oil saving in the United States and Japan during the 1978–81 period. Following the first oil shock, oil usage in the United States, relative to GNP, actually increased slightly. But between 1978 and 1981 it is estimated to have fallen by 25 per cent., bringing the United States more into line

with the average performance. Thus, for the seven major countries, the OECD now estimates that the total energy and oil intensities of production had by last year fallen by 14 and 27–28 per cent. respectively since 1973. This implies, as the table shows, that the proportion of total energy consumption accounted for by oil was below one-half last year.

The significance of these figures can perhaps best be judged in the light of the situation as seen only a year ago by the Parliamentary Symposium on Energy and the Economy organised by the OECD and the International Energy Agency. In an attempt to assess the world supply and demand position for oil over the next ten years, certain so-called scenario calculations were made. In these it was considered reasonable to assume that the total amount of energy required to produce one unit of GDP might fall by 8½ per cent. by 1985. Similarly, the proportion of oil in total primary energy usage was assumed to fall to 44½ per cent. over the same period. It now seems likely that both these figures will be attained — and possibly before 1985. And in contrast to an assumed need for OPEC oil production of around 30 mb/d throughout the 1980s, early this year production was at times down to something under 18 mb/d.

These figures seem to suggest fairly strongly that the core of the energy constraint — namely, excessive dependence on imported oil — has been significantly eased. However, it is not yet clear to what extent this is the case. In the first place, the recession in the western industrial world has continued and intensified. Thus, whereas the OECD/IEA energy scenario assumed an average rate of GDP growth of 2¾ per cent. per annum from 1979 to 1985, the achievement so far has been well under half this rate. Any GDP shortfall is also likely to be magnified so far as its effect on oil import needs are concerned. Nearly all marginal energy requirements themselves fall on imported oil. Therefore, not just the absolute level of oil imports but also the oil import requirement per unit of GDP may be quite markedly affected by slower-than-expected growth.

Part of the weakening of the international oil market has also been the result of a turn-round from stockbuilding to destocking on the part of the consuming countries — clearly a situation which cannot continue indefinitely. In addition, the fact that energy conservation has up to now gone further than expected does not necessarily imply that the ultimate gains will also be greater than previously hoped. It could be merely that the time-scale of consumer reaction has shortened, with the end result being not much better than originally foreseen.

Of much greater long-run significance, however, is the required support from domestic oil production and, more importantly, the development of alternative forms of energy production. And here one cannot expect rapid short-run results. However, the recent weakening of the oil price has led to reports of some curtailment of oil exploration activity outside the OPEC area. This suggests a need for the consuming countries to keep up — possibly by taxation — the price of energy to domestic producers as well as to consumers. In turn, this might bring some relief to budget situations and, although it might slow down progress on the inflation front, it need not actually increase any prices in absolute terms.

Nevertheless, it is in the areas of coal and nuclear energy that enormous expansion still has to come if the required transition away from oil is to be effected. And it is in these areas that both environmental and safety fears are understandably strong.

Finally, even if greater and permanent oil economies are indicated by the most recent figures, it remains to be seen whether sufficient energy independence is yet in prospect. The OECD/IEA Symposium concluded that it was conceivable, with great efforts, that the oil-importing world could live with a maximum OPEC oil production of around 30 mb/d. But this was already very close to previous peak levels. Even if that figure can now be reduced, the core of the problem may not have disappeared entirely. This is that, at a more desirable rate of growth and utilisation of labour capacity in the industrial world, there might be a need for some major OPEC producers to make oil available significantly in excess of their current revenue requirements. When to this are added strategic considerations and the possibility of further unforeseen shock events it is obviously not inconceivable that a major upturn in the industrial world's economy could run into the same problems that were seen in the 1970s. The energy constraint may have been loosened — and could be further if Iranian and Iraqi production levels were restored — but it could also tighten again with any significant upturn and reduction of unemployment in the industrial countries.

Fixed investment and slow growth.

The final element in the web of constraints facing the industrial countries is the behaviour of investment. Since 1973 investment growth has everywhere been appreciably slower than in the earlier post-war decades, a development which is simultaneously an effect as well as a cause of the poor overall performance of the advanced economies since the first oil shock. As time passes, however, emphasis is likely to shift increasingly towards poor investment performance as purely a cause — and possibly a major cause — of prolonged slow growth. Both the quantity and the quality of the capital stock may become increasingly and adversely affected by a long period of slack investment activity. Ultimately there is some risk of economies becoming more or less stuck in a slow growth "trap". Better investment performance is the way back to faster overall growth, but the necessary stimulus to private investment incentives becomes more difficult to provide in a depressed environment. Indeed, with other constraints also pressing on economies' output possibilities, the provision of one important stimulus, namely expanding markets, is, by definition, nearly impossible.

Investment and saving.

As the following table shows, the growth of investment in industry has slowed down markedly in virtually all countries since 1973. The slowdown, though from an exceptionally high level, has been most dramatic in Japan, and the least so in Canada. It is thus not surprising that recent academic estimates suggest that the rate of growth of the gross stock of business fixed capital has also declined, in most cases

by between 1/2 and 2 per cent. per annum. It follows that, by now, industrial capacity may on average be 10–15 per cent. below what it would have been had earlier trends continued. To the extent that the speed of obsolescence has increased — assisted, possibly, by the change in the relative price of energy — the effective stock of capital may be lower still.

Real non-residential business investment.

Countries	1960–73	1973–79	1980	1981[1]
	average annual growth rate			
United States	5.7	2.8	– 3.0	2.5
Canada	5.8	5.0	8.6	6.9
Japan	14.0	1.7	6.5	1.6
Germany	4.7	2.4	3.3	– 2.1
France	7.2	1.4	5.2	– 2.3
United Kingdom	4.2	3.2	3.8	– 1.8
Italy	4.7	– 1.3	9.8	– 2.5
Belgium	5.1	0.2	8.2	– 4.5
Netherlands	5.1	2.0	– 6.5	–14.0
Sweden	4.3	– 0.5	1.3	– 7.1
Switzerland[2]	5.5	– 2.0	6.9	1.7

[1] Partly estimated. [2] Including public sector.

When one examines recent investment performance in terms of the share of total fixed investment in GNP there is also evidence of decline, but here it is mostly relatively mild and there are even one or two exceptions. At first sight this is something of a surprise. For one thing, many of the factors usually thought to be important determinants of investment, such as profitability and interest rates, have been adverse. More fundamentally, the elementary theory of economic growth suggests fairly strongly that marginal capital needs will be related to output in such a way that a switch to a period of slower overall growth should, ceteris paribus, see a noticeable decline in investment/output ratios. For the industrial countries as a whole the change in growth trends has not been minor: between 1973 and 1981 GDP growth has averaged only 2.4 per cent. per annum, compared with a rate of 5 per cent. between 1960 and 1973.

Part of the explanation of this apparent paradox no doubt lies in the new investment requirements both necessitated and stimulated by the change in energy prices. In addition, investment needs have been raised in many countries by government regulations concerned with protecting the environment and the health and safety of workers. Finally, the high cost of labour — while tending simultaneously to prejudice the flow of business profits and saving — may nevertheless have stimulated some investment in labour-saving equipment, i.e. capital deepening. This explanation is, however, at some a priori variance with the observed major deceleration in the growth of output per employed person since 1973.

The relatively well-maintained total investment ratios are thus not perhaps as comforting as they may appear. They may well be reasonably appropriate in the short run given the recent and prospective constraints on overall economic activity.

Gross domestic fixed investment.

Countries	1960–73	1973–79	1980	1981
	as percentages of GNP/GDP			
United States	18.2	18.1	17.7	17.0
Canada	22.1	23.2	23.6	24.5
Japan	33.8	32.2	31.8	31.0
Germany	25.0	21.7	23.5	22.8
France	23.2	22.6	21.6	21.2
United Kingdom	18.3	18.6	17.8	16.2
Italy	20.9	19.8	19.8	20.3
Belgium	21.7	21.7	21.0	20.1
Netherlands	24.9	21.1	21.0	19.9
Sweden	23.2	20.7	20.1	19.1
Switzerland	28.1	23.5	23.8	24.2

The point, however, is that in terms of the absolute volume of capital formation, they imply an inadequate performance when set against the employment and productivity growth goals (albeit less ambitious than the pre-1973 performance) which should become appropriate once the period of medium-term adjustment is over. There is a danger, in other words, of much more unemployment becoming structural in character. At the same time, as current investment is often the means by which advances in technology are put to the service of more efficient production, slow investment growth is likely to mean that the productivity of existing capital is not as high as it might be. In addition, it must necessarily be ageing relative to what would otherwise have been the case.

It is also worth noting that, with low investment growth, the required structural adjustments to capital have probably not been occurring as fast as they might. In particular, slower renewal of the capital stock may have slowed down the full introduction of more energy-efficient technologies. It may also be slowing the adjustments required in the face of competition from the newly industrialising countries. For all these reasons it would seem appropriate that an important part of the thrust of policy should concentrate on stimulating investment. The problem, however, is how, in the existing unfavourable environment, this could be brought about.

It is unfortunate, to say the least, that most studies of capital investment behaviour have concluded that it is the prospects for sales, i.e. demand, that are one of the most important determinants of investment spending, for it is just these prospects which are necessarily constrained for the time being. Consequently, to initiate major schemes of capital widening would be to risk investing in (albeit temporarily) idle capacity, a sure recipe for corporate financial failure. One way of attempting to get round this fundamental point is through incentive measures with pre-announced time-limits. Both the German and French Governments, for example, have recently announced investment tax relief schemes, with the relief applying only to projects begun or expenditures incurred over a limited period of time.

While it may be difficult to get major results from such schemes on their own, their effectiveness could well be enhanced by making other — non-demand —

factors as favourable as possible. Probably most important would be a significant restoration of profitability. The figures for factor income shares suggest that, while profitability may not have slumped so seriously during the second oil shock, it is in most cases still below the levels prevailing even in the early 1970s. A redistribution of factor incomes — a restrained growth of real wages — could provide both more incentive to invest as well as some of the cash flow with which to do it. It could, in other words, contribute to a simultaneous raising of both saving and investment. However, it has to be admitted that the already slow rate of rise of real incomes probably makes the necessary degree of restraint difficult to achieve.

Labour's share in total domestic factor income.

Countries	1965–69	1970–73	1974	1975	1976	1977	1978	1979	1980	1981
	in percentages									
United States	72.7	76.5	78.2	77.6	77.4	76.9	77.2	77.5	78.5	78.7
Japan	53.3	57.2	62.8	66.1	66.4	67.9	66.6	67.5	68.3	.
Germany	65.5	69.3	72.4	72.3	71.4	71.4	71.2	71.1	72.2	73.3
France	62.3	63.9	67.5	70.1	71.5	71.3	71.5	71.3	73.0	75.5
United Kingdom	75.7	75.8	79.5	82.6	80.5	77.9	77.4	78.8	81.4	.
Italy	56.8	61.3	64.1	68.2	67.2	68.5	68.0	66.2	65.6	68.7
Canada	70.7	72.4	70.6	72.1	72.7	73.5	71.9	69.5	69.9	71.5
Belgium	62.3	64.9	68.0	70.2	71.0	71.9	72.1	72.3	73.5	.
Netherlands	65.1	68.6	70.1	72.5	69.9	70.6	71.1	72.0	72.8	.
Sweden	75.4	76.9	76.3	77.5	81.0	85.5	84.0	81.3	80.3	.
Switzerland	65.6	68.4	70.7	72.5	71.7	72.0	72.8	73.0	73.3	.

A related point, which has been covered earlier in this chapter, concerns the policy-mix question and the unnecessarily high rates of interest stemming from over-lax budgets in the face of anti-inflationary monetary policies. Such "crowding-out" seems a gratuitous obstacle to put in the way of potential investors in capital goods. High rates of interest also carry the risk that any increase in profits will be saved in the form of bank deposits, government paper or debt repayment rather than being used for productive investment.

Current policy is of course already on much firmer ground so far as reducing inflation is concerned. It has now become widely recognised that inflation, especially in the strongly cost-push form experienced over the last decade, is likely to inhibit capital investment. High inflation rates tend to be variable, thus contributing — both domestically and through overshooting in the exchange markets — to the uncertainty surrounding the projection of future profits. In addition, by raising nominal interest rates, inflation substantially increases the risks associated with long-term borrowing. Nevertheless, a part — or all — of the beneficial investment effect of reduced inflation could be lost if the cost of disinflation in terms of unemployment became too high. Not only would demand itself be further depressed, possibly below the level which could otherwise be allowed, but, in

addition, high and prolonged unemployment could also adversely affect entrepreneurial expectations about the political, as well as economic, environment in which any new investment projects might come on stream. For both these reasons, and in the presence of strong labour-market rigidities, incomes policies are in some cases thought to be potentially helpful, at least where they are not unacceptable on other grounds. They may help cut the unemployment cost of disinflation and also possibly assist the required shift of income towards profits.

The implication of the foregoing is that the level of investment should ideally be higher than it currently is. For some countries, given an underlying decline in the share of investment, it may also follow, on the assumption of a fuller use of resources, that the investment share needs to rise. By the same token, the share of national income devoted to saving would then almost certainly need to rise too.

The next table shows domestic saving performance in both the pre- and post-oil-crisis periods. There appears to be little common pattern so far as total (household plus enterprise) private saving is concerned. In some cases, such as the United Kingdom, Sweden and Canada, and possibly Italy, the private saving ratio has risen in recent years, while elsewhere it has tended to decline, especially in France, Belgium and the Netherlands. For the saving of the general-government sector, there is, however, a universal pattern of declining performance — a major component of the well-known worsening in overall budget positions. This suggests that the government sector itself could well be an important contributor to any required increase in total domestic saving. (It is worth bearing in mind that although at the world level there has in recent years been a large pool of international saving — the OPEC surplus — the intention of policy is of course that this should be much reduced.) It is true that in some countries, most notably the United States, attempts are being made (or are planned) to increase private saving by reducing taxation. However, the private sector's reaction to such reductions is necessarily uncertain, while, unless sufficient current public expenditure cuts can be made simultaneously, there is the danger of at least a partial offset in the form of a further decline in government saving. A more certain method of increasing private saving would be to achieve an appreciable shift of income towards corporate profits, as discussed earlier.

To the extent that any of the required increase in investment is the responsibility of the public sector, a rise in government saving (reduction in current spending) could find an automatic investment offset. The risk with cutting back public current spending alone is of course that, in the event, the incentives to private investment (including any induced fall in interest rates) might prove insufficient — in current circumstances — to provide a one-for-one rise in capital spending. In that case, total spending and activity would be reduced even further. Governments have thus a rather narrow path to tread. In most cases some major reduction in budget deficits will be necessary for success; but too early and too large a reduction runs the risk of making the immediate demand situation even worse (and thus, incidentally, putting further pressure on budgets themselves). On the other hand, too relaxed an attitude is likely both to keep interest rates too high and to affect expectations adversely. Given the importance of expectational effects, what seems to be needed in most cases is a persuasive programme of budget retrenchment over the medium

Gross domestic saving ratios.

Countries	Years	Total economy	General government	Domestic private sectors
		as percentages of GDP		
United States	1960–73	19.4	2.3	17.1
	1974–79	18.9	1.1	17.8
	1980	18.3	0.6	17.7
	1981	18.3	0.8	17.5
Canada	1960–73	21.8	4.1	17.7
	1974–79	21.4	1.7	19.6
	1980	21.5	0.9	20.6
	1981	22.2	2.4	19.8
Japan	1965–73	37.4	6.6	30.8
	1974–79	32.6	3.2	29.3
	1980	30.7	3.3	27.3
	1981	31.8	3.6	28.2
Germany	1960–73	27.1	6.0	21.1
	1974–79	23.3	2.4	20.9
	1980	23.0	2.3	20.7
	1981	21.8	0.9	20.9
France	1961–73	29.0	4.9	24.1
	1974–79	23.0	2.7	20.3
	1980	21.7	3.7	18.0
	1981	19.1	1.6	17.5
United Kingdom	1960–73	19.3	4.5	14.8
	1974–79	17.9	0.5	17.4
	1980	19.1	0.8	18.3
	1981	17.6	0.5	17.1
Italy	1961–73	23.4	−2.1	25.5
	1974–79	22.2	−5.1	27.3
	1980	22.6	−3.7	26.3
	1981	18.9	−7.1	26.0
Belgium	1960–73	25.9	1.5	24.4
	1974–79	20.6	−1.3	21.9
	1980	16.3	−4.6	20.9
	1981	.	−8.2	.
Netherlands	1960–73	27.4	5.1	22.3
	1974–79	22.9	2.6	20.3
	1980	20.1	1.5	18.6
	1981	20.0	1.0	19.0
Sweden	1960–73	24.2	9.8	14.4
	1974–79	19.7	5.4	14.2
	1980	17.3	0.1	17.2
	1981	16.0	−0.9	16.9
Switzerland	1960–73	31.2	.	.
	1974–79	27.7	.	.
	1980	26.7	.	.
	1981	28.0	.	.

term, with deficits seen to be falling within a context of realistic estimates of growth and interest rates.

The implications of slow growth.

The investment problem is only one example — albeit an important one — of the rather intractable nature of the policy problem currently facing governments. The heart of this problem is the fact that secularly slow growth and a degree of

resource under-utilisation cannot necessarily always be relied upon to encourage the self-correcting adjustments required. Indeed, there can be self-reinforcing, perverse reactions.

For example, as is discussed in the following chapter, although slack markets work unambiguously to reduce inflation, some other effects of slow growth, ranging from unit cost pressures through to attitudes to incomes policy, may not always be favourable.

Similarly, in the case of resource allocation, economic slack may encourage greater labour mobility and exert financial pressure on entrepreneurs to press for improvements in efficiency leading to a "leaner and fitter" operation. At the same time, however, pressures for protection and for the subsidisation of uneconomic jobs are likely to increase.

Governments have, of course, been attempting to deal with some of the more unfavourable effects of slow growth, especially in the case of unemployment. For example, noting the way in which the young bear a disproportionate share of joblessness, various forms of training and work experience programmes have been initiated or reinforced. There has also been pressure to reduce working hours and to introduce work-sharing schemes. Such schemes can be seen as a partial adaptation to a world of slower growth. However, if they are not accompanied by appropriate nominal wage adjustments there is a danger that further upward pressure will be placed on unit costs. As the French experience has recently demonstrated, it may be difficult, when reducing the length of the working week, to achieve the required degree of realism in the pricing of labour. In addition, changes in social and working patterns which may be appropriate for the time being may be both inappropriate and difficult to reverse at a later date.

This chapter has painted a rather sombre picture of the limited opportunities available for an early improvement in the medium-term growth and employment performance of the industrial economies. Despite the present glut of oil and the more recent, and long-awaited, improvement in inflation, the situation does not hold as much room for manoeuvre as might appear when judged by the level of unemployment alone. Somewhat paradoxically, if the recession has become deeper than is strictly necessary, one important short-run stimulus might come more from an announcement of a *future tightening* of budgetary policy, particularly in the United States, rather than from a more conventional relaxation now.

In the industrial countries, at least, it is perhaps the return of high levels of unemployment which is the most serious aspect of the situation. Not only is the road back to faster growth likely to be long, but the required means of transport — namely, a successful boost to investment and saving — cannot be expected to be immediately or significantly beneficial for employment. The scope for capital-widening expenditures must be somewhat limited, while any capital-deepening expenditures are by definition labour-saving, though the incentive to purely labour-saving outlays could be reduced by any success in restraining real wage costs.

For the rest, the various constraints described above largely rule out the traditional type of Keynesian demand stimulus which assumes that the idle resources

themselves can be readily mobilised to provide the needed investment goods and finance more easily the underlying levels of public expenditure. Indeed, the recognition of this fact on the part of the private sector, together with more particular fears about large public-sector deficits and inflation, may have rendered the old-fashioned demand management tools relatively ineffective.

In these circumstances it would be idle to pretend that there is any miracle cure, or, indeed, that a continuation of relatively slow growth is without risks of its own. Nevertheless, governments have little choice but to continue to encourage adjustment and investment as actively as they can, while making such adaptation to the situation as is possible and standing ready to make the necessary resources available by reducing both the size of the public sector itself and its deficit.

III. INFLATION AND UNEMPLOYMENT.

Highlights.

With the weakening of demand and output, unemployment continued to rise throughout the Group of Ten area in 1981, reaching post-war peak levels in several countries during the early months of this year. The annual average unemployment rate for the area in 1981 was 6½ per cent., compared with 5½ per cent. in 1980 and a roughly similar figure in 1975–76. Increases in unemployment were particularly sharp in Europe, and by the end of last year unemployment rates in Belgium, the Netherlands and the United Kingdom were over 10 per cent. In Japan, Sweden and Switzerland unemployment rates were lower than in the rest of the Group of Ten area, ranging from 0.3 per cent. in Switzerland to about 3 per cent. in Sweden.

At the same time, by the early months of 1982 it was evident that price inflation in the major industrial countries had come down substantially from the levels reached two years earlier. Measured by the increase in consumer prices over the preceding twelve months, the weighted average inflation rate in the Group of Ten countries and Switzerland had, by end-1981, receded from its 1980 peak of nearly 13 per cent. to just over 9 per cent. Evidence of a further deceleration in early 1982 suggested that average inflation in the Group of Ten area was approaching its end-1978 level of 7 per cent.

This more satisfactory price performance resulted mainly from the slowdown of economic activity in the industrialised world that began in 1980 under the influence of the sharp rises in external prices during 1979–80 and was accentuated by the restrictive stance of industrial countries' economic policies. This slowdown led, among other things, to a marked decline in commodity prices, which was a powerful factor in bringing inflation rates down last year. Between late 1980 and the end of 1981 prices of non-oil products (expressed in SDRs) fell by 17 per cent., while the dollar price of fuel oil in the spot market came down from its 1980 peak of over $35 a barrel to below $25 at one stage early this year.

There were few countries where nominal earnings contributed significantly to the easing of price inflation in 1981. Nevertheless, comparing the periods that followed the two oil shocks, the relative success of the more determined anti-inflationary policies that have been pursued in the second period can be seen from the evolution of both nominal and real earnings. In late 1974 the average of nominal wage increases in the Group of Ten countries and Switzerland reached 15 per cent., while after the second oil shock it did not go above 10 per cent., thus limiting the secondary effects of the external price shocks. And in recent months, with the further decline in price inflation, wages have been rising more slowly than before in a number of countries. In the case of real earnings and total labour costs the contrast with the earlier period is quite marked. During 1979–81 increases were less widespread than in 1974–76 and, where they occurred, were much smaller. Moreover, in virtually all cases they were within the margin afforded by productivity growth and shifts in terms of trade. Hence, factor shares have been

better maintained than in the wake of the first oil shock, and in some countries there seems to be a growing awareness that this is an important condition for more favourable future employment prospects.

Within the average reduction of inflation rates last year there were pronounced differences as between individual countries. The greatest declines were in non-European member countries of the Group of Ten, with the United States and Japan both recording very marked improvements; inflation also fell significantly in the United Kingdom, Italy and Sweden. On the other hand, in those European countries with relatively low inflation rates, the rate of price increase accelerated somewhat in 1981. These differences were the result partly of variations in the timing and effectiveness of domestic anti-inflationary policies and partly of the sharp rise of the exchange value of the dollar against European currencies during the first seven months of 1981. The subsequent partial reversal, between August and December 1981, of the dollar's earlier rise was thus a factor, in conjunction with the continuing weakness of commodity prices, in the recent general decline of price inflation in European countries.

In addition to describing these recent developments, this chapter discusses the relationship between unemployment and inflation in the Group of Ten countries since 1972. Except in the case of Switzerland, this relationship has, in varying degrees, deteriorated over the past decade, with higher unemployment having been accompanied by higher inflation. In the light of this longer-term deterioration and of the economic costs and benefits of the anti-inflationary policies adopted in the face of the 1979–80 oil price increases, the chapter concludes by considering the scope for alternative or supplementary policies.

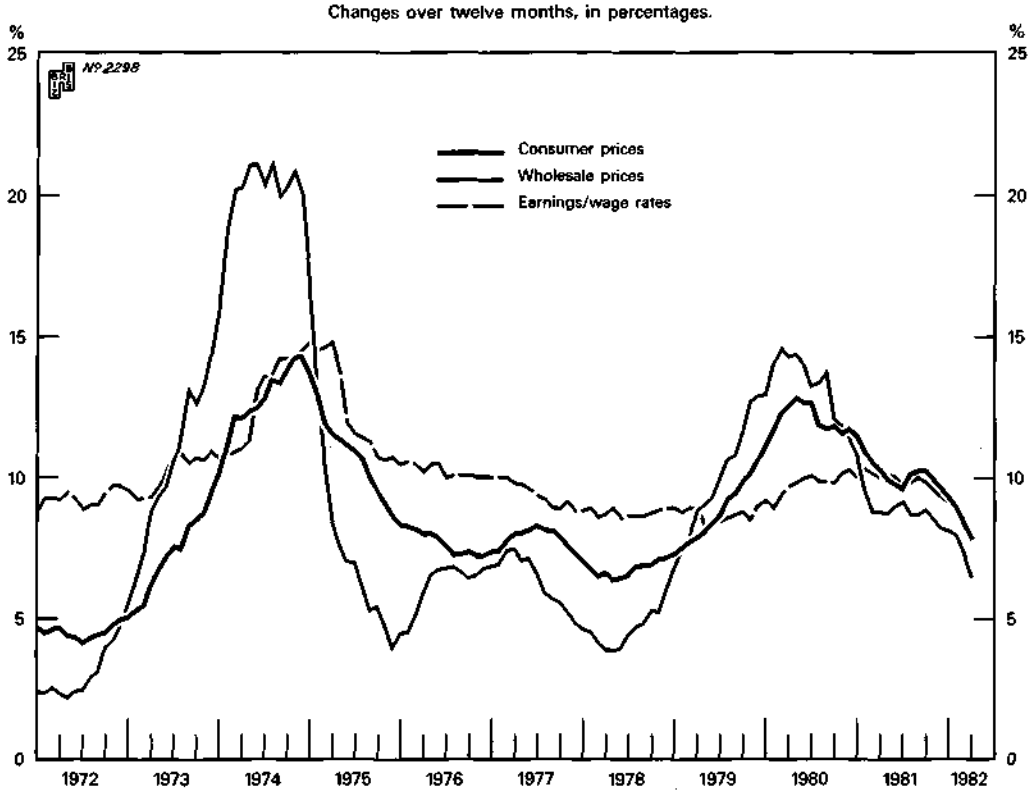
Recent price developments.

Since the spring of 1980 inflation rates in the major industrial countries have been significantly reduced. As the graph on the next page shows, the weighted average of the increase in consumer prices over the previous twelve months in the Group of Ten countries and Switzerland declined from a peak rate of nearly 13 per cent. in 1980 to around 8 per cent. in early 1982. This decline reversed most of the sharp increase in average consumer price inflation triggered by the second oil shock of 1979. The moderation of inflationary pressures over the past two years coincided with a general slowdown in economic activity and a rise in unemployment, as most industrial countries maintained firmly restrictive monetary policies in an attempt to hold down the secondary inflationary repercussions of the rise in oil prices. With the decline in economic activity, international commodity prices, including oil prices, dropped sharply in 1981, reducing overall inflationary pressures. This drop in commodity prices was a major factor behind the sharp deceleration in wholesale price inflation, with the weighted average rate of wholesale price increases falling to 8 per cent. at the end of 1981 from a peak of nearly 15 per cent. in early 1980. These lower rates of wholesale price increase should contribute to a further lowering of consumer price inflation as 1982 progresses.

The easing of inflationary pressures in 1981 was not uniform, but rather was concentrated in a few countries, with inflation rates increasing slightly in others. As

Inflation in the Group of Ten countries and Switzerland.*

Changes over twelve months, in percentages.



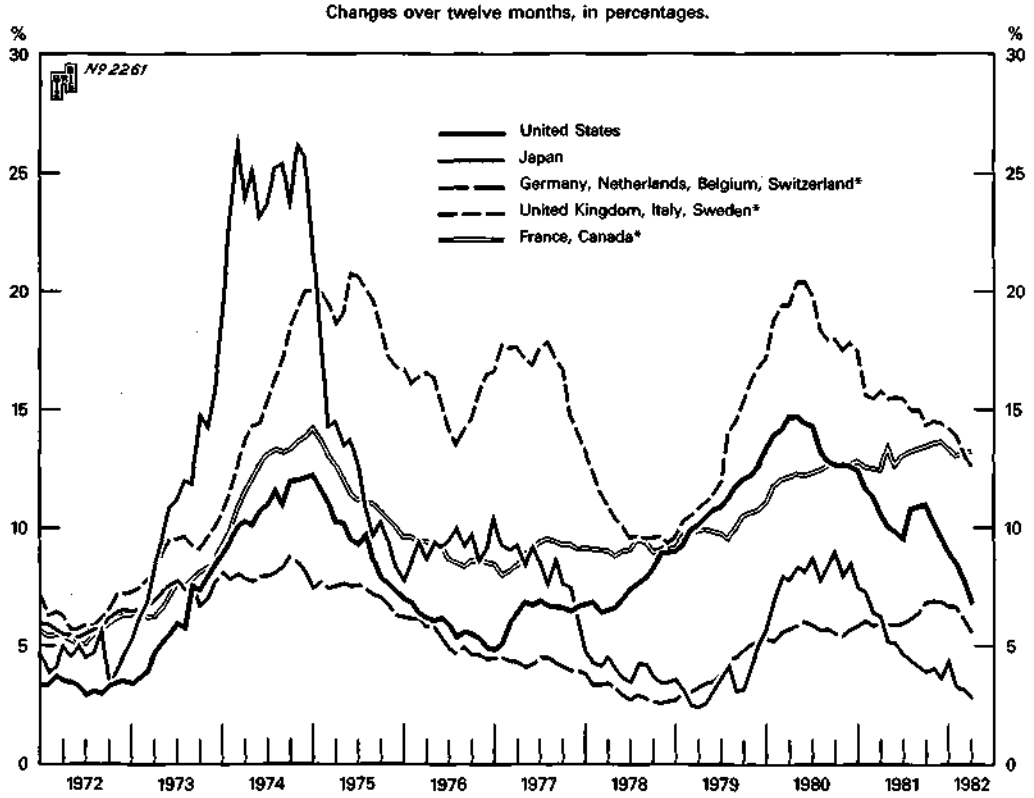
* Averages with weights proportional to gross national products for the year 1977.

shown in the graph on page 38, the drop in inflation was most pronounced in the United States and Japan, with significant reductions also recorded in the United Kingdom, Italy and Sweden. In contrast, inflation rates increased somewhat in 1981 in Germany, the Netherlands, Belgium, Switzerland, France and Canada.

One important factor accounting for the divergent movement of inflation rates in 1981 was the wide swings in exchange rates. In particular, as is discussed more fully below, the sharp appreciation of the dollar in the first seven months of 1981 reinforced the impact of weaker international commodity prices in the United States, while offsetting, or in some cases even temporarily reversing, their impact in other countries. Another important factor was the differences in the timing, intensity and success of anti-inflationary policies. Japan was particularly successful in rapidly assimilating and adjusting to the second oil shock, and during 1981 the rate of increase of Japanese consumer prices was nearly halved to 4 per cent., the lowest in any major industrial country. US consumer price inflation also fell sharply, moving down to 9 per cent. in 1981 from a peak rate of 14½ per cent. in early 1980. In addition, Italy and the United Kingdom registered substantial declines in inflation last year.

Consumer price inflation.

Changes over twelve months, in percentages.



* Averages with weights proportional to gross national products for the year 1977.

In both Canada and France inflationary pressures grew stronger in 1981. In Canada a policy of steadily reducing the growth of the monetary aggregates, in place for six years, has been accompanied by disappointingly slow progress in reducing inflation. Moreover, the initial step towards raising domestic Canadian oil prices closer to world levels added to the upward pressure on Canadian prices. In France the new Government initiated a clear shift of economic priorities in mid-year towards a greater emphasis on reducing unemployment. However, concern about a possible acceleration of inflation in the wake of the October 1981 realignment of currencies in the European Monetary System led to the introduction of a prices and incomes restraint programme, which was subsequently extended to 1982. In the low-inflation countries of Europe — Germany, the Netherlands, Belgium and Switzerland — inflation also rose slightly in 1981. These countries were particularly hard hit by the inflationary impact of the sharp depreciation of their currencies against the dollar in the first seven months of 1981.

The later months of 1981 and early 1982 saw a widespread further easing of inflationary pressures, under the combined influence of sharply falling oil prices, a continuation of generally restrictive demand management policies and, towards the end of 1981, a partial reversal of the dollar's earlier rise against other major

Changes in consumer prices.

Countries	Changes over twelve months ending								Three months[1] ending	
	1972 Dec.	1974 Dec.	1976 Dec.	1978 Dec.	1979 Dec.	1980 Dec.	1981 Dec.	1982 March	1981 March	1982 March
	in percentages									
United States	3.4	12.2	4.8	9.0	13.3	12.4	8.9	6.8	2.6	0.6
Japan	5.3	21.9	10.4	3.5	5.8	7.1	4.3	2.8	1.4	−0.1
Germany	6.4	5.8	3.7	2.4	5.4	5.4	6.3	5.0[2]	2.1[2]	0.9[2]
Netherlands	7.9	10.9	8.5	3.9	4.8	6.7	7.2	6.6[2]	2.4[2]	2.1[2]
Belgium	6.4	15.7	7.6	3.9	5.1	7.5	8.1	8.4[2]	1.4[2]	1.6[2]
Switzerland	6.9	7.6	1.3	0.7	5.1	4.4	6.6	5.6[2]	1.4[2]	0.9[2]
United Kingdom	7.7	19.2	15.1	8.4	17.2	15.1	12.0	10.4	3.0	1.4
Italy	7.4	25.3	21.8	11.9	19.8	21.1	17.9	15.5[2]	4.7[2]	3.2[2]
Sweden	6.3	11.6	9.6	7.4	9.8	14.1	9.2	8.7[2]	3.1[2]	2.3[2]
France	6.9	15.2	9.9	9.7	11.8	13.6	14.0	14.1	3.1	3.3
Canada	5.1	12.4	5.8	8.4	9.8	11.2	12.1	11.6	3.7	3.2
Austria	7.6	9.7	7.2	3.7	4.7	6.7	6.4	5.9	2.9	2.4
Denmark	7.1	15.4	13.1	7.1	11.8	10.9	12.2	10.6	3.7	2.2
Finland	7.1	16.9	12.3	6.4	8.6	13.8	9.9	9.7	3.1	2.9
Greece	6.6	13.4	11.7	11.5	24.8	26.2	22.5	20.6	5.9	4.2
Ireland	8.2	20.0	20.6	7.9	16.0	18.2	23.3	18.9	6.2	2.3
Norway	7.8	10.4	7.9	8.1	4.7	13.7	11.9	11.5	5.8	5.4
Spain	7.3	17.9	19.8	16.6	15.5	15.2	14.4	14.0	4.6	4.1
Weighted average of G-10 countries plus Switzerland[3]	5.0	13.7	7.4	7.2	11.1	11.4	9.3	7.8	2.7	1.3

[1] Actual change; not seasonally adjusted. [2] April. [3] Averages with weights proportional to gross national products for the year 1977.

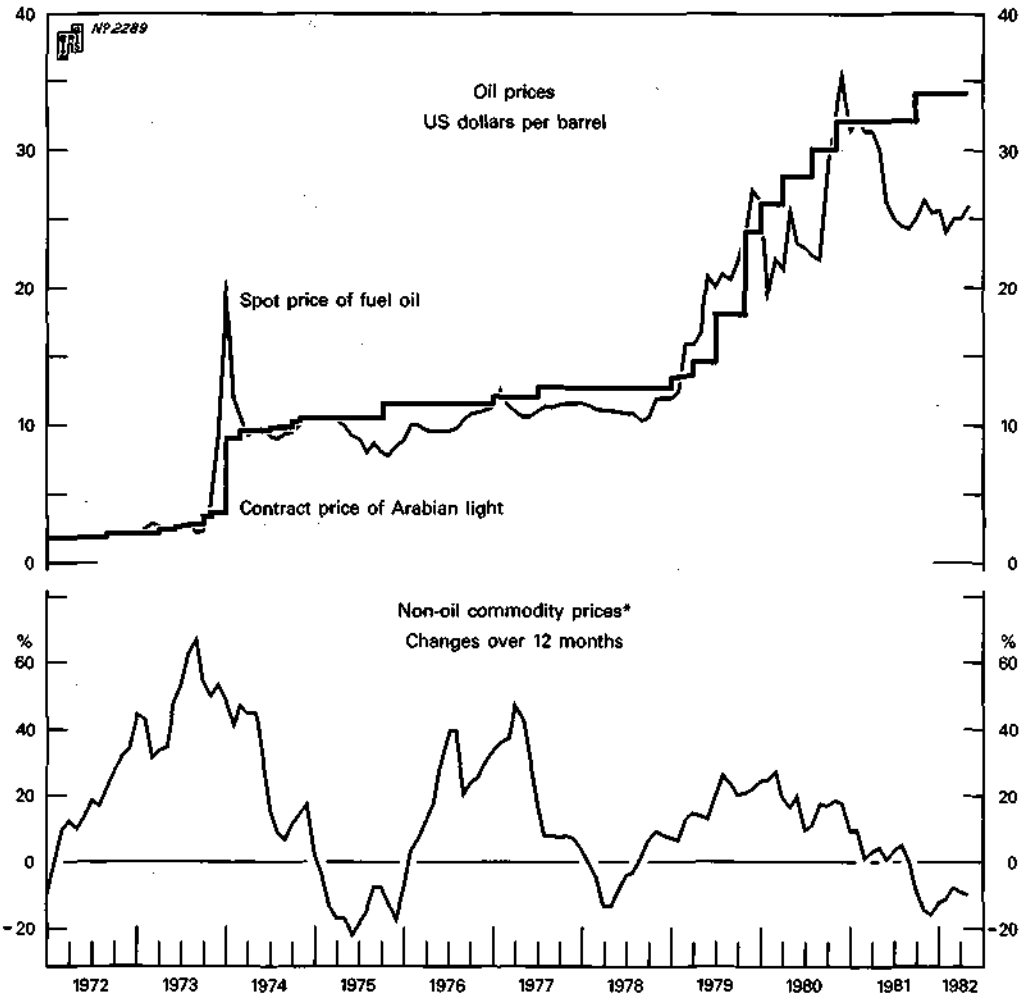
currencies. In nearly all of the Group of Ten countries and in Switzerland the increase of consumer prices in the first three months of 1982 was lower than in the same period a year earlier. Japan and the United States in particular continued to show the most rapid deceleration in inflation, with Japanese prices being virtually unchanged in the first three months of 1982.

Commodity price shocks, exchange rates and domestic prices.

Developments on world commodity markets have played a key rôle in determining recent inflationary patterns. The upsurge in overall inflation rates between 1978 and 1980 was due in large measure to the rapid rise in commodity prices over this period. While the tripling of oil prices tended to overshadow other developments, virtually all commodity prices rose sharply. Between July 1978 and November 1980 the prices of non-oil industrial commodities and foodstuffs (as measured by the "Economist" indicator, expressed in SDRs) rose by 54 per cent. This movement, occurring at a time of generally buoyant demand, was reversed with the subsequent downturn in economic activity. Between November 1980 and December 1981 non-oil commodity prices fell by 17 per cent., offsetting in relative terms nearly one-third of the earlier rise.

The fluctuations in oil prices were even more spectacular. The spot price of fuel oil, after leaping from around $11 per barrel in 1978 to a peak of over $35 per

World-market commodity prices: Oil and non-oil.



* The "Economist" indicator, expressed in SDRs.

barrel in 1980, fell back to below $25 per barrel in early 1982 before firming again to $32 per barrel in early May. On the basis of planned reductions in output, the official price of a barrel of Saudi Arabian marker crude, traditionally the basis for OPEC pricing comparisons, has been maintained at $34 in early 1982. However, despite the recent strengthening of spot prices, it remains unclear whether such cutbacks would suffice to prevent the official OPEC price from being adjusted downwards in view of the substantially lower charges by non-OPEC producers such as the United Kingdom.

The decline in the dollar price of oil in 1981 was not uniformly reflected in lower domestic currency import prices for oil. This was because the dollar appreciated sharply against most currencies in late 1980 and the first seven months of 1981. Over this period a number of countries found the dollar appreciating faster than the dollar price of oil was falling, resulting in a rising domestic currency price of oil.

Looking at a longer period, since 1972 the timing and the extent of the transmission of external price influences to individual countries have been heavily influenced not only by the major swings that have occurred in world commodity prices but also by the movements of exchange rates. The course of these external price influences is shown, for eight major industrial countries, in the graph on page 42. For each country the thick solid line in the graph shows the rate of change of the overall domestic price level, as proxied by the GNP/GDP deflator, while the thin solid line indicates the rate of change in the domestic price of traded goods, as measured by the average of each country's export and import unit values. When the thin line is above the thick line, and the prices of traded goods are rising faster than those of non-traded goods, this reflects the presence of externally-generated inflationary pressure, with the exact impact depending on the share of traded goods in total output and — particularly for the period considered — on the degree of import dependence on oil and other commodities. Conversely, when the thin line is below the thick line traded goods prices are increasing less rapidly than those of non-traded goods and the external sector is exerting downward pressure on domestic price developments. Since the domestic prices of traded goods depend on both the foreign currency prices of these goods and the exchange rate, upward or downward pressure on the domestic price level from the external sector of an economy may originate from either of these sources or from both simultaneously. A measure of the domestic price impact of exchange rate changes is provided by the broken line, which shows the change in the domestic price of foreign currency.

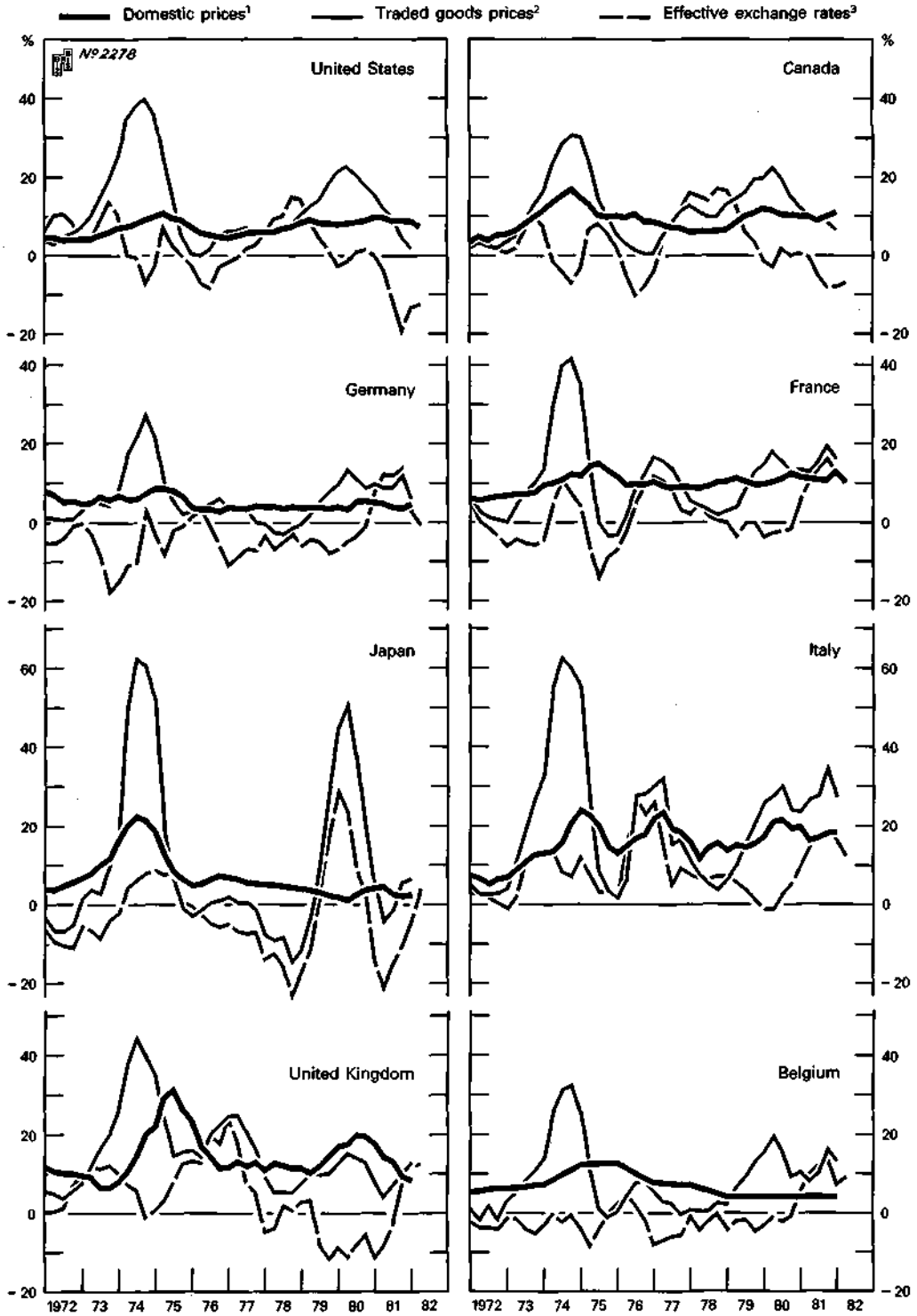
During 1973–74 all the countries shown in the graph experienced external inflationary pressures as a result of the sharp increase in oil and other commodity prices. However, the extent of these pressures varied considerably from country to country, reflecting in part differing degrees of dependence on imported oil and other commodities but primarily movements of exchange rates. Inflationary pressures were aggravated by downward movements of exchange rates in Japan, the United Kingdom, France and Italy, while in the United States, Germany, Belgium and Canada such pressures were eased by upward movements of exchange rates.

Looking at developments in 1978–79, in all the countries except Japan the apparent external inflationary pressure was less than it had been in 1973–74. The principal reason for this was that the rise in oil and other commodity prices was less sharp than it had been in the earlier period. On the other hand, the actual impact on domestic inflation rates was probably of broadly the same magnitude, as, despite energy conservation efforts, the shares of oil in imports and total demand in value terms had increased considerably between the two periods. As in the earlier period, exchange rate movements modified the domestic impact of the international price increases. The sharp fall in the yen in 1979 explained why the external inflationary pressure on Japan in that year was of the same order of magnitude as it had been in 1973–74, while the subsequent sharp recovery of the yen in 1980 dramatically reversed the situation. The renewed weakening of the yen in 1981 caused yet another reversal, with the rate of increase of traded goods prices again rising above that of domestic consumer prices.

A striking contrast to the experience of Japan, and to its own experience in the 1973–74 period, was that of the United Kingdom. The strength of the pound in

Traded goods prices, domestic prices and effective exchange rates.

Changes over four quarters, in percentages.



[1] GNP/GDP deflator. [2] Average of export and import unit values, in domestic currency. [3] Effective exchange rate index (inverted).

1979–80 kept the rate of increase of traded goods prices below the domestic inflation rate. In the United States, exchange rate changes since 1978 have tended to reinforce fluctuations arising from movements in international commodity prices. The dollar was relatively weak at the time of the second oil shock, whereas it appreciated sharply between late 1980 and mid-1981 when international commodity prices were falling. In 1981 the dollar price of traded goods in the United States increased by only 7 per cent., slightly aiding the moderation of overall consumer price inflation. The relatively narrow fluctuations of the Canadian dollar/US dollar exchange rate gave Canada a similar pattern of international inflationary pressures.

The experiences of Germany, Belgium, France and Italy following the second oil shock were broadly similar. In each of these countries exchange rate movements tended to dampen external price pressures as the currencies were relatively strong throughout 1980, only to depreciate sharply against the dollar in the first half of 1981. As a result, each of them experienced a moderate upsurge of inflationary pressure from rising international commodity prices in 1979 and early 1980 which, after some reduction later in 1980, was followed by a renewed upsurge due to exchange rate pressures in 1981. This sharp appreciation of the dollar in 1981 had an inflationary impact comparable in magnitude to that of the second oil shock for these countries. That is, the percentage increase in the exchange cost of the dollar was comparable to the previous percentage increase in the dollar price of oil.

Wages, productivity and unemployment.

The easing of inflationary pressures in the industrial world in 1981 was more a reflection of the slowdown in economic activity and the consequent downward pressure on goods prices, particularly commodity prices, than of any widespread slower growth of nominal wages. Indeed, in the Group of Ten countries and Switzerland the average rate of increase of nominal wages in 1981 was not markedly below the previous year's level. Only in the United Kingdom, Sweden and, to a lesser extent, Germany did the rate of wage increases drop significantly in 1981.

A continued decline in price inflation in the remainder of 1982 and beyond will require a sustained reduction in nominal wage growth. Although this was not evident from the figures for last year as a whole, the overall rate of growth of wages started to moderate in the later months of 1981 and settlements in several countries in early 1982 appeared to be reflecting the moderating influence of high unemployment and the prospect of further job losses. Particularly notable were the agreements by the automobile workers and several other major unions in the United States to accept reductions in scheduled wage increases in return for greater job security and the acceptance by the German metal workers' union of a 4.2 per cent. wage rise, slightly below the current German price inflation rate.

A further factor giving hope of a reduction in price pressures in 1982 has been the behaviour of real wages in 1981. In the Group of Ten area real wage increases of over 2 per cent. occurred last year only in Italy, France and Belgium, while in a number of other European countries real wages declined. The sharpest falls were recorded in the Netherlands, Sweden and the United Kingdom. In the Netherlands

Changes in nominal wages.[1]

Countries	Changes over twelve months ending								Six months[2] ending	
	1972 Dec.	1974 Dec.	1976 Dec.	1978 Dec.	1979 Dec.	1980 Dec.	1981 Dec.	1982 Feb.	1981 Feb.	1982 Feb.
	in percentages									
United States	7.0	8.6	7.7	9.2	8.0	8.6	7.5	6.0[3]	4.1[3]	1.9[3]
Japan	16.9	25.6	11.2	5.0	6.1	6.0	6.2	5.8	2.4	2.3
Germany	8.3	13.6	6.6	5.6	4.8	7.6	5.1	4.4	2.8	1.9
Netherlands	12.0	17.1	8.4	5.0	4.3	4.1	4.4	6.8[4]	1.0[4]	3.3[4]
Belgium	15.0	25.5	9.5	6.6	8.4	10.2	10.3	.	6.8[5]	6.4[5]
Switzerland	8.5	13.2	1.1	3.7	2.6	6.4	5.9	.	1.7[5]	2.1[5]
United Kingdom	14.4	29.5	11.8	18.1	17.7	15.0	8.3	7.8[4]	5.7[4]	4.0[4]
Italy	12.1	24.0	28.9	16.1	22.6	21.6	22.9	20.5	11.0	7.8
Sweden	11.3	13.7	11.0	6.1	8.4	11.9	6.8	7.8	7.3	4.6
France	12.2	20.4	15.1	12.6	13.8	15.4	16.4	.	6.6[5]	8.3[5]
Canada	8.2	16.6	12.7	6.7	9.4	11.6	12.9	13.4[6]	6.2[6]	8.4[6]
Weighted average of G-10 countries plus Switzerland[7]	9.5	14.8	10.0	8.9	9.1	10.0	9.2	.	4.4[5]	4.0[5]

[1] Wage rates for Germany, the Netherlands, the United Kingdom, Italy and France; earnings for all other countries. [2] Actual increase; not seasonally adjusted. [3] April. [4] March. [5] December of previous year. [6] January. [7] Average with weights proportional to gross national products for the year 1977.

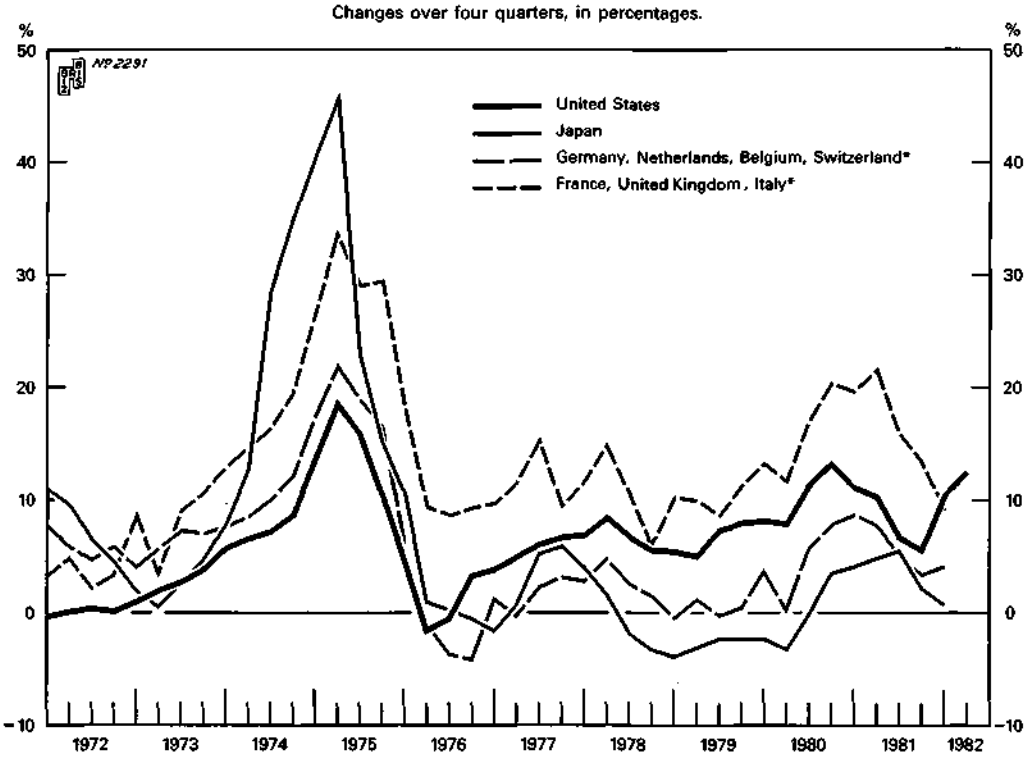
the rise in nominal wages was held to just over 4 per cent. last year in the face of an inflation rate above 7 per cent., while in Sweden the sharp drop in consumer price inflation was fully matched by a similar drop in the rate of increase of nominal wages, inducing a 2 per cent. fall in real wages for the second consecutive year. There were also declines in real wages last year in Germany, Switzerland and the United States.

Comparing the periods following the first and second oil shocks, the more determined anti-inflationary stance of industrial countries' policies on the second occasion is clearly reflected in the evolution of both nominal and real wages relative to productivity growth. As a result of the 1973 oil price increases the weighted average of nominal wage increases in the Group of Ten area went up from less than 10 per cent. to about 15 per cent., while since 1978 increases have not exceeded 10 per cent. This relatively more favourable pattern of wage movements is also evident from changes in unit labour costs calculated by adjusting nominal wage increases for changes in productivity. As shown in the graph opposite, unit labour costs jumped sharply following the first oil shock, hitting peak rates of increase of between 20 and 50 per cent. The increase in unit labour costs following the 1979 oil price rise was much smaller, and by 1981 unit labour costs were generally declining. A notable exception to this recent pattern was the United States, where unit labour costs increased in the last quarter of 1981 as output dropped more sharply than employment.

Much the same picture emerges from a comparison of the behaviour of real wages and productivity. As regards real wages, the contrast in their evolution between 1974–76 and 1979–81 is quite marked, as is shown in the first table on page 46. In the second of these periods increases were less common than in 1974–76, with

Unit labour costs.

Changes over four quarters, in percentages.



* Averages with weights proportional to gross national products for the year 1977.

some countries showing average declines during 1979–81. Moreover, in those countries where real wages went up on average during 1979–81, the increases were in all cases smaller than in 1974–76, and in some cases substantially so. The United States showed a similar decline in both periods.

Each country on average recorded increases in productivity in the three years following each oil shock, although their magnitude differed between the two periods as well as between countries. Comparing real wages and productivity changes, the last column of the table points to a better performance following the second oil shock, as in each country except the United Kingdom real wages either declined or increased by less than productivity gains. Since the decline in real national incomes induced by the fall in the terms of trade was broadly the same following each oil price shock, this development suggests a more favourable evolution of profit shares during the 1979–81 period.

While wage movements have been more moderate following the second oil shock, the experience in terms of unemployment has been uniformly worse than that following the first. Unemployment rose in both periods, but started, and has remained, at higher levels since the 1979 oil price increase. In 1981 the increases in unemployment recorded in Europe were particularly sharp, notably in the United Kingdom and the Netherlands where the average rates for the year were more than 50 per cent. higher than in 1980. Significant increases also occurred in Belgium,

Wages and productivity in manufacturing industry, 1974–76 and 1979–81.

Countries	Nominal wages[1] 1974–76 *1979–81*	Real wages[2] 1974–76 *1979–81*	Productivity[3] 1974–76 *1979–81*	Real wages less productivity 1974–76 *1979–81*
	average annual rate of change, in percentages			
United States	7.3	−0.7	1.6	−2.3
	8.4	*−0.7*	*1.2*	*−1.9*
Canada	14.3	4.2	2.8	1.4
	10.3	*0.0*	*0.2*	*−0.2*
Japan	18.2	3.6	2.6	1.0
	6.0	*1.2*	*8.3*	*−7.1*
Germany	9.4	3.3	4.4	−1.1
	5.8	*0.7*	*2.4*	*−1.7*
France	17.0	5.0	4.4	0.6
	14.6	*2.3*	*3.2*	*−0.9*
United Kingdom	23.0	3.5	1.3	2.2
	15.5	*2.4*	*1.7*	*0.7*
Italy	23.3	3.7	2.7	1.0
	21.7	*3.1*	*5.1*	*−2.0*
Netherlands	13.1	2.9	5.1	−2.2
	4.0	*−2.2*	*3.0*	*−5.2*
Sweden	14.6	3.8	1.4	2.4
	9.0	*−2.1*	*4.7*	*−6.8*
Belgium	17.4	5.7	6.2	−0.5
	9.0	*2.8*	*4.4*	*−1.6*
Switzerland	7.6	1.2	2.0	−0.8
	4.8	*−0.4*	*2.7*	*−3.1*

[1] Wage rates for Germany, France, the United Kingdom, Italy and the Netherlands; earnings for all other countries. [2] Nominal wage rates/earnings deflated by prices of personal consumption. [3] Adjusted for working time.

France, Germany and Italy. The only exception to this trend in Europe was Switzerland, where unemployment has remained at a very low level. In the other Group of Ten countries, too, the unemployment situation worsened on balance last

Unemployment.

Countries	1972	1974	1976	1978	1979	1980	1981	1981 Dec.	1982 March
	annual averages, in percentages of labour force								
United States	5.6	5.6	7.7	6.1	5.8	7.2	7.6	8.8	9.0
Canada	6.3	5.4	7.1	8.4	7.5	7.5	7.6	8.5	9.0
Japan	1.4	1.4	2.0	2.2	2.1	2.0	2.2	2.2	2.3
Germany	1.1	2.7	4.6	4.3	3.8	3.8	5.5	6.7	7.1
France	1.8	2.3	4.3	5.3	6.0	6.4	7.8	8.8	11.8
United Kingdom	3.7	2.6	5.3	5.7	5.4	6.8	10.5	11.5	9.0
Italy	6.4	5.4	6.7	7.2	7.7	7.6	8.4	9.1[1]	9.3[1,2]
Netherlands	2.8	3.3	5.5	5.0	5.1	5.8	8.9	10.5	11.0
Sweden	2.7	2.0	1.6	2.2	2.1	2.0	2.5	3.2	3.0
Belgium	2.2	2.7	5.7	7.0	7.2	7.9	9.4	10.2[1]	10.9[1]
Switzerland	0.0	0.0	0.7	0.3	0.3	0.2	0.2	0.3	0.3
Total G-10 countries plus Switzerland	3.5	3.5	5.2	5.1	5.0	5.7	6.6	7.3	7.5

[1] Not seasonally adjusted. [2] First week in January.

year, but by less than in Europe. Specifically, Japanese unemployment continued at a low level, while in Canada and the United States the average level of unemployment last year was only slightly higher than that recorded in 1980. The rise in unemployment during 1981 is reflected by the higher rates recorded at the end of the year for all countries in comparison to averages for 1980 and 1981. This upward trend in unemployment continued in the early months of 1982.

The inflation/unemployment trade-off.

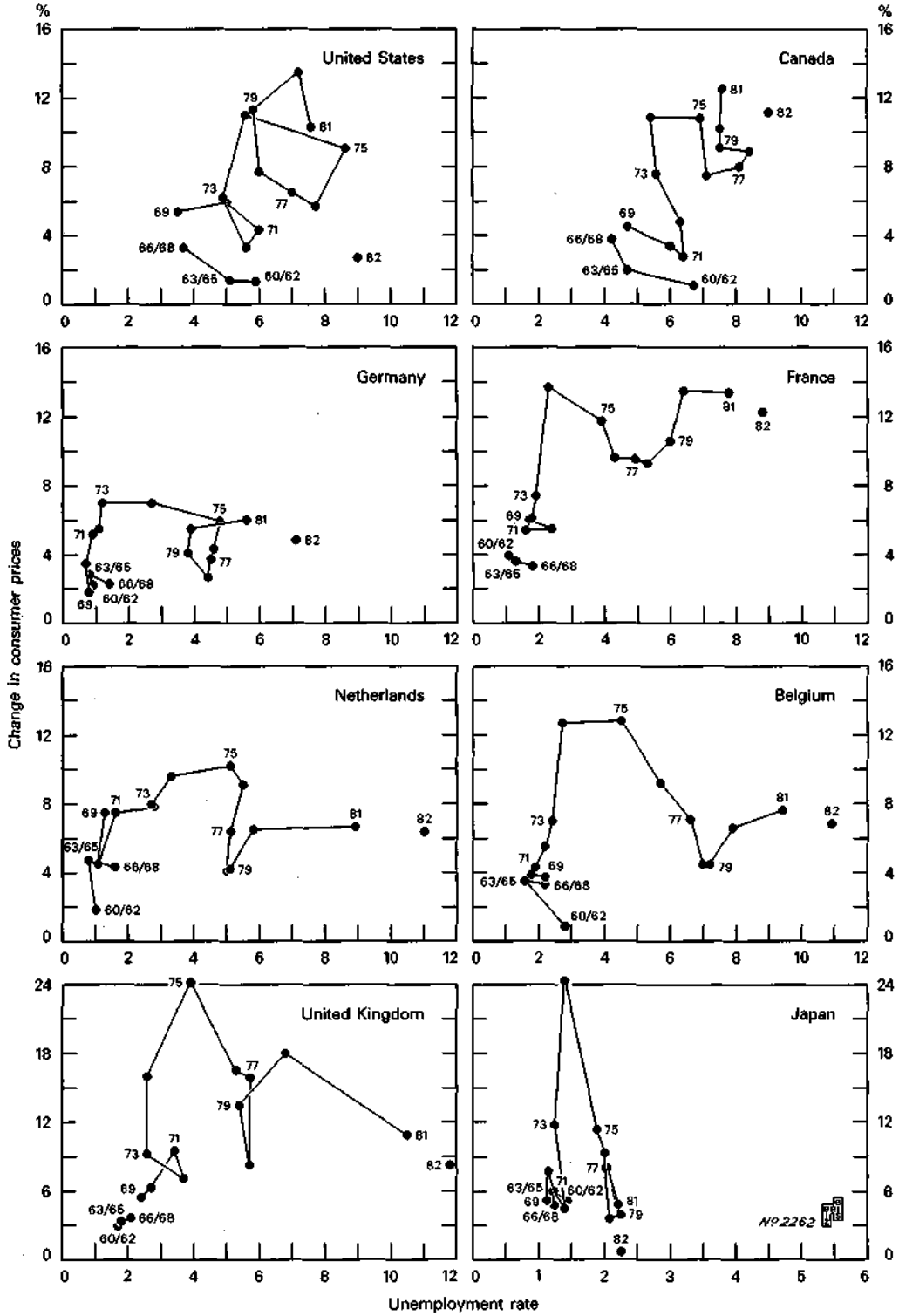
In the last decade almost all industrial countries have seen inflation and unemployment rise together. So it would appear that the inflation/unemployment trade-off observed up to the end of the 1960s has deteriorated, if not ceased to exist. As a result there has been considerable discussion as to the permanence of this situation and as to the possibility of identifying a new relationship between inflation and unemployment. The belief is now widely held that, under present conditions, attempts to reduce unemployment by recourse to policies of demand reflation would produce only temporary results and that in the long run such policies might increase both inflation and unemployment. Indeed, current policies are based on the belief that vigorous measures to reduce inflation, albeit leading initially to further increases in unemployment, are necessary in order to secure sustainable economic growth in the long term and, hence, higher levels of employment. In other words, while there is recognition of a negative trade-off during the initial transitional period, in the longer run lower inflation is seen as a precondition for lower unemployment.

In 1972 the weighted average for consumer price inflation in the Group of Ten countries and Switzerland was 4.5 per cent., with unemployment at 9.4 million or 3.5 per cent. of the labour force. Since then the inflation/unemployment relationship has been substantially influenced by "supply shocks" whose impact may be considered over three sub-periods during which rates of inflation and unemployment moved in parallel: first rising, then declining and finally increasing again. How individual countries fared in these periods is illustrated in the graph on page 48.

From 1972 to 1975 the oil price increases, coming on top of existing inflationary pressures, led to a world recession and a dramatic deterioration in the inflation/unemployment configuration. Inflation rose in all countries except Switzerland during this period, with the average rate reaching 13 per cent. in 1974 before falling to 10.5 per cent. a year later. Unemployment also increased significantly, except in Italy and Sweden, to stand at 14 million or 5.3 per cent. of the labour force in 1975.

In the following three years the overall inflation and unemployment averages improved with the gradual adjustment to the increased price of oil and as the external surpluses of the oil-exporting countries diminished. Taking the Group of Ten countries as a whole, inflation fell to an average rate of 6.7 per cent. in 1978 while unemployment, although remaining at the 1975 level in absolute terms, fell to 5.1 per cent. of the labour force. The improvement in the overall unemployment rate was, however, wholly due to a sharp fall in the United States and a smaller

Inflation and unemployment, 1960–82.*



* Averages for the periods indicated, except 1982 for which unemployment is the March figure and inflation is an annualised rate for the six months to March.

reduction in Germany. Other countries — excluding the Netherlands where unemployment was unchanged and Sweden where inflation rose slightly — traded off reductions in inflation for higher unemployment.

Finally, after 1978 the second oil shock led to a further general worsening of the configuration of inflation and unemployment. In all countries inflation was higher in 1981 than three years earlier, with the weighted average rate for the Group of Ten countries standing at 10 per cent. compared with 12 per cent. in 1980. In addition, unemployment increased to an average of 18.8 million in 1981 (corresponding to 6.6 per cent. of the labour force) and even further to 21 million at the end of the year. However, during the course of 1981 and in early 1982 the cumulative effect of recession and staunchly anti-inflationary policies once again led to higher unemployment but now accompanied by a decline in inflation rates.

Taking 1972 to 1981 as a whole, the inflation/unemployment relationship has deteriorated markedly in all countries except Switzerland. In the Netherlands inflation was lower in 1981 than in 1972 but at the cost of much higher unemployment, whereas the opposite was true in Sweden, where inflation has doubled while unemployment has been kept consistently low. In all other Group of Ten countries both inflation and unemployment worsened to a greater or lesser degree over this period.

The explanation for this long-term deterioration in economic performance lies in a combination of three factors. Firstly, external shocks in the form of "exogenous" increases in oil and other commodity prices helped through adverse changes in the terms of trade to bring about more or less concurrent rises in inflation and unemployment. Secondly, buoyant labour-force growth, mainly resulting from specific demographic trends, coupled with a decline in the rate of increase of employment, has led to a virtually permanent excess supply of labour since 1973. In themselves, however, these developments would not have produced such large increases in unemployment had labour markets responded more flexibly. It follows that a third reason for the less favourable inflation/unemployment relationship is to be seen in the existence of rigidities in the wage and price formation process and in the operation of labour markets. These have contributed both to the resilience of inflation in a period of rising unemployment and, by impeding adjustment to the losses in real national income implied by the external shocks, to the increase in unemployment itself. These various features of labour-market developments in the Group of Ten countries are discussed in the following two sections; the policy implications are considered in the remainder of the chapter.

Employment and labour-force growth.

The steady and substantial growth of the labour force in recent years has resulted from a combination of demographic trends that have led to an increase in the population of working age and higher participation rates. The size of the population of working age has been boosted by the chance impact of two independent factors. While the outflow from the labour force in terms of workers reaching retirement age has been unusually low, the flow of new entrants in the

youngest age group has been considérable owing to the high birth rate in the early 1960s.

Much of the long-term rise in participation rates (defined as the labour force as a proportion of the total population for each age group) is the result of the increased proportion of women in employment. The latter may be traced to the growing social acceptability of female employment, more equal remuneration and, with the relative rise of the service sector, more employment opportunities. By contrast, participation rates have fallen sharply for workers in the oldest and youngest age groups. Early retirement schemes, high social benefits combined with low financial commitments plus the low probability of obtaining new employment are key factors in the decline of participation rates amongst the age group nearest to retirement. Although these lower rates go some way to offset the higher population of working age in this age group, the combined effect is still that of a higher net supply of labour in this group. Lower participation rates for young people partly reflect a long-term trend towards more education, but they have probably also been influenced by unemployment, which has increased rapidly among young people since 1978. This, in turn, may be due to the high cost of employing young people. It follows that the demand for labour of this age group may be raised by cuts in the cost of employing young people through adjustments in employer subsidies or in wages, including alterations in minimum wage agreements.

Labour force and employment.

Countries		1957–73	1974–77	1978–81	1978	1979	1980	1981
		annualised changes, in percentages						
United States	Labour force	1.8	2.4	2.3	3.1	2.5	1.8	1.6
	Employment	1.7	1.8	2.1	4.2	2.7	0.3	1.1
Canada	Labour force	2.8	3.1	3.1	3.7	3.0	2.8	2.7
	Employment	2.7	2.4	3.2	3.4	4.0	2.8	2.6
Japan	Labour force	1.3	0.6	1.1	1.5	1.2	1.0	1.0
	Employment	1.3	0.4	1.1	1.2	1.3	1.0	0.8
Germany	Labour force	0.1	−0.9	0.8	0.6	0.9	0.9	0.6
	Employment	0.2	−1.7	0.6	0.8	1.4	0.9	−0.9
France	Labour force	0.7	0.8	0.6	0.9	0.7	0.6	0.3
	Employment	0.6	0.3	−0.2	0.4	−0.1	0.2	−1.2
United Kingdom	Labour force	0.3	0.8	−0.2	0.5	0.1	−0.4	−1.1
	Employment	0.2	−0.1	−1.5	0.5	0.6	−1.7	−5.4
Italy	Labour force	−0.3	1.4	1.3	0.6	1.7	1.3	1.4
	Employment	−0.3	1.1	0.9	0.5	1.2	1.4	0.5
Netherlands	Labour force	1.0	0.4	0.9	0.4	0.9	1.2	1.0
	Employment	0.9	−0.1	−0.1	0.5	0.9	0.4	−1.9
Sweden	Labour force	0.8	1.2	0.9	0.8	1.4	1.2	0.3
	Employment	0.8	1.4	0.8	0.4	1.6	1.2	−0.2
Belgium	Labour force	0.4	0.9	0.6	0.6	1.4	0.4	0.3
	Employment	0.4	−0.2	−0.2	0.0	1.2	−0.4	−1.6
Switzerland	Labour force	1.7	−2.2	1.4	0.5	0.7	1.6	2.6
	Employment	1.7	−2.3	1.5	0.6	0.8	1.7	2.7
Total G-10 countries and Switzerland	Labour force	1.2	1.3	1.5	2.0	1.7	1.3	1.1
	Employment	1.2	0.8	1.2	2.3	1.8	0.5	0.2

Prior to 1973 employment growth kept pace with the rise in the labour force both in aggregate terms and in individual countries. However, the sharp decline in the rate of increase of employment in the aftermath of the two oil shocks was widespread and has contributed to a virtually continuous state of excess supply in the labour markets of the Group of Ten countries since 1973. Cross-country differences are apparent, with the most rapid rates of increase between 1973 and 1977 being recorded in the United States and Canada, while both employment and the labour force declined during this period in Germany and Switzerland. Only in Sweden did employment grow faster than the labour force, as the authorities introduced a number of job-supporting measures.

Since 1977 movements in the labour force and employment have differed significantly from the preceding period. Following very high rates of growth of employment in 1978–79 — mainly due to substantial increases in the demand for labour in the United States and Canada — the rate of increase dropped sharply until 1981, when virtually no growth at all was recorded. In addition, influenced by the steady rise in unemployment, the growth of the labour force has slowed considerably during the last two years, as many potential workers — particularly among women and the oldest age groups — have withdrawn from the labour market. The significantly lower rates of increase in the labour force in some countries — and an absolute reduction in the United Kingdom — in 1980–81 testify to the strength of these developments. With such increases in "hidden" unemployment, the effect is therefore to underestimate the true level of unemployment.

Within this overall picture, moreover, the course of developments in the European members of the Group of Ten was different from that in the United States, Canada and Japan. In Canada and Japan, in particular, broad consistency between increases in employment and the labour force is evident, while in the United States the growth rate of the labour force only began to outstrip that of employment after 1979. By contrast, the imbalance in Europe has cumulated since 1979 and became considerable during 1981. Employment actually fell last year in all European countries except Italy and Switzerland, although for Germany this was the first year in the recent period in which labour-force growth exceeded the rise in employment. Switzerland was the only country where a broad balance between the two sides of the labour market was maintained last year, with both the labour force and employment growing rapidly, while in Belgium, France and the United Kingdom the average level of employment in 1981 was actually below that recorded in 1977. In particular, employment in the United Kingdom was 6 per cent. lower in 1981 than four years previously and as much as 7 per cent. below the level of 1979.

Labour-market rigidities.

The other principal factors behind the simultaneous rise in inflation and unemployment since the early 1970s have been rigidities in the wage and price formation process and in the operation of labour markets. The most important of these rigidities stems from the difficulty of securing adequate adjustment of nominal

and real incomes in the aftermath of the 1973 and, to a lesser extent, the 1979–80 oil shocks. Action to protect, or even in some cases to improve, living standards in these circumstances has inevitably led to a reduction in the total number of persons in employment. In some countries this rigidity of wages and salaries has taken the form of official indexation arrangements, while in others effective indexation has resulted from the ability of trade unions to secure increases in wages and salaries that have hampered adjustment to the external price shocks. These tendencies have been reinforced by deeply embedded inflationary expectations and, until recently, by expectations that the authorities would generally accommodate wage and salary increases by expansionary fiscal and monetary policies.

An additional element exerting upward pressure on the cost of labour and adversely affecting firms' profit position has been the development of non-wage labour costs. In some European countries these costs now constitute around 50 per cent. of total labour costs and in virtually all countries in recent years non-wage labour costs have increased relative to pay for time worked. This trend in part reflects negotiated fringe benefits (North America) but is also the result of higher employers' social security contributions, which, in turn, are related to the sharp rise in unemployment. Apart from adding to inflation and reducing profit shares, the rise in non-wage labour costs also seems to have affected the distribution of employment and unemployment, as their very size combined with ceilings on social security contributions tends to discriminate against low-wage workers and to encourage "moonlighting" or "grey market" work arrangements. As a result, the degree of wage moderation associated with a given rate of unemployment may have declined, and, recognising these possible adverse effects, several countries (most recently the United Kingdom) have taken steps to reduce the level of non-wage labour costs through lower employers' taxes. In addition, recently concluded settlements in the United States have included cuts in fringe benefits.

Other factors in the operation of labour markets have tended to raise the level of unemployment for any given level of demand pressure or inflation. Firstly, improved unemployment benefits in many countries have effectively lengthened the period over which unemployed workers may search for a job. This increases the frictional element in unemployment, though in the longer run it may also have the effect of helping to achieve a better matching of skills and job requirements. Secondly, high unemployment benefits together with minimum wages tend to increase the "reservation price" of labour, which may add to the downward rigidity of real wages and reduce employment prospects, particularly for younger workers. While reforms in this area are difficult and would have to be co-ordinated with other social policies, steps have recently been taken by some countries to alleviate some of the disemployment effects; for instance, the ratio of unemployment benefits to average wages has been reduced in the United Kingdom and in some countries a lower minimum wage now applies to young people. Thirdly, labour-market flexibility has been lessened by a gradual reduction in labour mobility — both occupationally, as a result of the increasingly sophisticated training that is now required for many jobs, and geographically, owing to the increase in the number of households where both husband and wife are in employment. Finally, the combined effect of the taxation/subsidy system in distorting relative factor prices and of the

restrictions on real wage adjustment may have generated a bias in favour of labour-saving investment, despite the existence of considerable excess supplies of labour.

Most of these rigidities probably developed during the 1960s and early 1970s, reflecting institutional factors, policy changes and a gradual build-up of real income aspirations. In these earlier periods the rapid growth of output combined with favourable external price developments made it possible to "absorb" growing rigidities with relative ease. However, in conditions of large and unfavourable external price shifts, such rigidities, while no more pronounced than in the past, take on a different rôle and seriously strain countries' adjustment potential.

Eradicating inflation: Does the end justify the costs?

In the immediate aftermath of the second oil shock, the assumption that the control of inflation represented the fundamental macro-economic priority of the industrial countries was rarely challenged. In acting on this assumption, national authorities were persuaded that there was no long-term conflict between reducing inflation and increasing employment. Indeed, just as the inflation/unemployment relationship had deteriorated since the late 1960s, so it should be possible — they thought — by taking a determined, credible stand against inflation, to move this relationship back towards its starting point. Some countries, particularly those of continental western Europe, saw this as requiring a judicious mix of monetary, fiscal and incomes policies. Others, notably the United Kingdom and the United States, were ready to rely more on monetary restraint and market forces, though this was tempered by the hope that market participants would adapt their own expectations accordingly, thus speeding up the adjustment of prices and wages.

Over the past year or so, however, the unanimity of purpose with respect to inflation control has seemed to waver, as several governments have become increasingly concerned over the alarming rise in unemployment. It is appropriate at this juncture, therefore, to reconsider whether the benefits of low inflation outweigh the costs of achieving this goal. There is also the question of whether, and to what extent, reduction of unemployment has supplemented, or even replaced, control of inflation as the principal aim of macro-economic policy in individual countries.

The essence of the dilemma facing governments is simple. Any costs suffered during the process of domestic adjustment are of a short-term and immediately perceptible nature. By contrast, the benefits of inflation control — or alternatively the costs of allowing inflation to continue — are spread out into the long term and may appear to be more uncertain.

During 1981 it became clear in a number of countries that the costs of fighting inflation, particularly where undue reliance is placed on monetary restraint, are both greater and set to continue for longer than had been anticipated. They are greater in the sense that, to date, much of the required reduction in the growth of nominal incomes has occurred in real terms and as a result unemployment has risen rapidly.

It is likely that the political costs of a downturn in economic activity will increase commensurate with the length of time that the economy is in recession. For this reason, and given the close interdependence of national economies, acceptance

that the adjustment process is likely to be a protracted one is very important. The experience of 1981, in particular, compels one to reject the view that, provided the restrictive aims of the monetary authorities are expressly declared and consistently adhered to, reduction of inflation may be achieved rapidly and at low cost. Thus, a central prediction of the rational expectations theory — that a long-run and stable reduction in inflation may be achieved quickly and without a significant decline in economic activity — as yet appears to be inconsistent with real world experience.

In the adjustment period after the second oil shock, unemployment has been made more intractable by two major factors. Firstly, as was described earlier in the chapter, it initially proved difficult — despite slack demand — to achieve generalised adaptations in real wages, as groups of workers continued to press for nominal wage settlements equal to, or in excess of, the rate of inflation. But, given that inflationary expectations had been built up over some fifteen years of more or less accommodating monetary/fiscal policies, any hope of a quick reversal in attitudes was no doubt unduly optimistic. At the same time, one should not underestimate the many recent signs of change. In many industries, particularly those hard hit by demand weakness and growing foreign competition, trade unions have shown an increasing concern for job security and a willingness to make concessions with respect to wage claims.

Secondly, as was discussed in Chapter II, a mismatching of monetary and fiscal policy, particularly in the United States, has contributed to the maintenance of high real interest rates. In turn, this has both worsened the recession in private-sector activity and nurtured the market expectation that the fight against inflation may be abandoned by governments in the not too distant future. Such high rates of interest, which add to inflationary pressure in the short run from the costs side, will only be reduced significantly when inflationary expectations begin to be squeezed out of the economy. This outcome, given the long record of "stop-go" policies in a context of accelerating inflation, may not be achieved very rapidly.

One major exception to this general picture of incomplete domestic adjustment following the second oil shock is Japan. After rising to 7.1 per cent. in 1980, Japanese inflation subsequently fell to 4.3 per cent. in 1981. This performance was influenced to a large extent by the effect on wage bargaining of memories of the severity of the 1974–75 recession. The consequent co-operation between social partners, given the necessity of a restrictive policy stance, placed the emphasis on "real" rather than on nominal wage and profit outcomes, thus permitting continued growth in employment, real income and exports. As a result there was little upward impetus to inflation from the domestic side and the low rate of unemployment increased only marginally, despite a sharp deceleration in real disposable income and domestic demand.

Some European countries, too, have a good record in terms of the adaptation of wage behaviour to the broader needs of the economy. In particular, Germany, Austria and Switzerland, thanks to moderation in the bargaining attitudes of the two sides of industry, have over the years achieved results which have allowed a smooth adjustment of real incomes. The fact that in Germany, especially, unemployment has risen sharply over the past year may be due more to other factors, such as weak

demand and high interest rates caused by external influences and a large public-sector deficit, than to wage behaviour as such.

Nonetheless, given that most industrialised countries have incurred substantial costs in the fight against inflation, it is appropriate once again to ask why the disease itself is so serious as to persuade governments to inflict these adjustment costs on their economies. The costs of inflation may be listed in three groups. Firstly, economic efficiency is impaired during inflation by the difficulty of interpreting price signals in the market. Movements in relative prices that call for a reallocation of resources may not be easily distinguished from absolute increases in the overall price level as inflation proceeds. The consequent misallocation of resources is harmful. Moreover, this will also operate at the international level by affecting decisions on commodity trading and overseas investment.

A second set of arguments against inflation applies at the micro-economic level. Inflation arbitrarily penalises persons on fixed incomes and, if not fully anticipated, creditors, to the benefit of those whose earnings are indexed to the rate of inflation and those who hold debts denominated in nominal terms, particularly if interest payments on debt may be offset against tax payments. In a broader social context, inflation has still further deleterious effects at the micro-economic level. In a world in which relative income status has come to have virtually as much importance as absolute income, high and variable inflation rates tend to pit individuals, trade unions, sectors, even countries against each other in the struggle to maintain or improve "relativities". Much time and effort is therefore expended in an essentially non-productive chase after improvements in nominal incomes. Thus, inflation has become a matter not only of the wage/price spiral but also of the "wage/wage" spiral and of the "tax/wage" spiral.

Finally, high rates of inflation tend to be accompanied by more variable and widely dispersed wage and price increases. Within individual countries large fluctuations in year-to-year rates of inflation breed uncertainty which will harm investment and future growth prospects, particularly if it is believed that such inflationary trends are unsustainable in the longer run. At the international level, a wider dispersion of inflation rates creates pressures on exchange rates and interest rates, which, again, will adversely affect investment incentives and real growth. By contrast, the achievement of lower average inflation amongst the Group of Ten countries and Switzerland would be likely to reduce the dispersion of inflation rates between countries. This would encourage the development over a long period of time of more stable exchange rates, which in turn would aid the growth of world trade and employment.

Therefore, despite the severe transitional costs of fighting inflation, the case for governments maintaining the control of inflation as a first priority may be made in three ways. Firstly, the costs of inflation as set out above are themselves high, albeit difficult to measure, while the main benefit of inflation control is that it is seen to be a precondition for sustained growth in real output and employment. Secondly, considerable reductions in inflation have been achieved particularly in recent months and the sacrifices made during this period would have been in vain if the goal of inflation control were now to be abandoned. Thirdly, any significant reflation of

demand would be likely to cause a recurrence of external payments deficits in many industrial countries, as the OPEC surplus would reappear with the tightening of the oil market.

Some policy considerations.

The deterioration of the trade-off between inflation and unemployment in the Group of Ten countries since 1972 to a large extent may be seen as the result of external factors combined with a wage and price formation process that is characterised by a high degree of inertia. In addition, higher energy costs and low investment have contributed to declining profitability and therefore to reductions in the demand for labour in many countries. Hence a significant part of the rise in unemployment in the last decade has resulted from structural factors and appears to have been largely independent of the stance of macro-economic policy in individual countries. For the future, therefore, a twofold policy prescription seems appropriate: firstly, the continuation of anti-inflationary macro-economic policies aimed at consolidating and furthering adjustments to the second oil shock; secondly, the pursuit of policies aimed directly at lessening the structural obstacles and at promoting greater labour-market flexibility.

As regards the second part of this two-pronged approach, removal of existing rigidities is important, but consideration of incomes policies would also seem appropriate. Past experience with such policies suggests that they only provide a temporary solution, but there are countries (Germany, Austria and Norway) where incomes policies or their equivalent have been achieved on a more permanent basis. In these cases, incomes policies, while expressed in terms of wage and price increases, have typically been directed at broader macro-economic targets, such as real growth, the balance of payments and factor-income shares. Moreover, incomes policy measures have been closely co-ordinated with fiscal and monetary policies.

Successful use of more permanent incomes policies requires a degree of social consensus which may not be present or easy to achieve in all countries. Nevertheless, such policies contain elements which deserve wider consideration as a means of reducing or eliminating the stagflation problem. It has long been recognised that attempts to maintain or improve income shares constitute an important source of inflation, since aggregate claims may exceed the total amount of output available. Therefore, broader-based incomes policies, including a consensus with respect to factor share developments, would remove an important source of inflation and stand a better chance of permanently reducing the rate of price and wage increases.

More recent evidence also suggests that changes in aggregate factor shares may directly affect firms' demand for labour. In other words, an excessively rapid increase in nominal wages not only creates inflation but may also price labour out of the market as firms' profitability declines. In such conditions, and particularly in periods following large external price shifts, policies which aim directly at maintaining a real wage development consistent with productivity gains might, therefore, serve both to remove potential inflationary pressures and as a means of reducing unemployment.

There are encouraging signs that this "double rôle" of real wages is increasingly recognised by the two sides of industry and in more recently proposed or introduced policy measures, as witness the changes that have been made to wage indexation arrangements in certain countries. For example, in the Netherlands the restriction on cost-of-living increases in wages imposed in 1981 was followed by new measures for this year announced last December. These provided for full price compensation for incomes up to a given absolute level only and it was expected that this would lead therefore to a significant fall in the real earnings of the highest-paid workers. Likewise, the Luxembourg Government introduced measures in July last year to slow down the automatic indexation of wages. The French Government has endeavoured to replace virtually automatic indexation by the practice of tying nominal wage increases to the target inflation rate in the immediate future. A price freeze was introduced in Norway in August 1981 to last until the end of the year. It was designed, in part, to prevent the triggering of indexed wage increases. Similarly, in Sweden the devaluation in September was accompanied by a price freeze and a reduction in the value-added tax to prevent an acceleration of wages and consumer prices.

However, the most dramatic moves to curb indexation were taken in early 1982 in Belgium in the face of a sharply deteriorating external position. To accompany the 8.5 per cent. devaluation of the franc in February, the Government introduced a package of measures which included a three-month freeze on wages for all except the lowest-paid workers, for whom indexation would continue, and the imposition of a flat-rate wage increase of less than the rate of inflation for the remainder of 1982. These measures, which seek to reduce real wages in 1982, represented a remarkable change of strategy in Belgian economic policy. Previously, despite the need to restore the competitiveness of industry, devaluation of the franc had been resisted on the grounds that the interaction of higher import prices and automatic indexation would have nullified its intended beneficial effects.

In Germany agreements reached so far in the current wage round have been significantly influenced by trade unions' concern about job security, and real wage increases this year are likely to be exceeded by productivity gains. Yet, the pursuit of inflation control as the major objective has been tempered by last year's sharp increase in the level of unemployment. In early February 1982 the Government proposed a DM 12.5 billion package of measures to boost employment in the short term. It did not see this package as in any way compromising the fight against inflation. Subsequently, the plan to finance these measures by an increase in value-added tax had to be abandoned.

In various other countries the battle against inflation continues to be waged unremittingly and with increasing success. These include the United States, the United Kingdom, Japan and Switzerland. In Japan, as noted above, the reduction of inflation has been facilitated by deliberate moderation of wage demands. Moreover, recent settlements in the United States have included a temporary suspension of escalator clauses as well as the introduction of profit-sharing schemes.

Despite the sharp increase in unemployment in 1981, only France, in the Group of Ten area, has strongly shifted its emphasis in the fight against inflation, the

aim being to promote employment, though, as has already been noted, the French Government has introduced price controls and proposed wage restraint measures as well. In order to achieve the planned long-term reduction of unemployment, the new Government has combined less restrictive monetary and fiscal policies with a number of labour-market measures. These include a 10 per cent. increase in the minimum wage (announced in June 1981) and recent proposals to reduce the length of the average working week, restrict overtime and step up voluntary early retirement.

In sum, it seems clear that in general the control of inflation remains the main priority of governments. Nevertheless, it is appropriate that an increasing number of governments should consider complementary measures and structural reforms designed to achieve a reduction of inflation without causing a further rise in unemployment. Moreover, should inflation, in time, fall to a low level on a widespread basis, the problem of dealing with a large pool of unemployed labour would probably remain.

To some extent a reduction of inflation will automatically increase aggregate demand in that nominal money-supply and public-expenditure targets will effectively rise in real terms and the reduction of uncertainty is likely to strengthen household and business confidence. Moreover, the removal of rigidities and other structural obstacles may have automatic, favourable effects on aggregate demand and output. In some countries, however, a deceleration of inflation may mainly have the effect of widening the scope for expansionary policy measures, as the automatic rise in real output might not be sufficiently strong to reduce the rate of unemployment to earlier and more acceptable levels. In such circumstances, the need for a two-pronged policy approach remains, as more expansionary fiscal and monetary policies would have to be supplemented by measures designed to prevent a rekindling of inflationary pressures.

IV. MONETARY POLICY AND THE FINANCIAL MARKETS.

Highlights.

Interest rates reached new peaks in 1981 in all the main North American and European markets. By the spring of 1982 they had come down a little in some countries but were still very high by previous standards. As rates of inflation had come down even more, interest rates appear to have risen steeply in real terms. In Japan interest rates moved down gradually last year but there, too, they remained very high in relation to the current rate of inflation.

In the past two or three years US interest rates, both short and long-term, have displayed wide and frequent cyclical swings and large day-to-day fluctuations. As other countries chose to keep their domestic interest rates relatively stable, changes in interest rate differentials contributed to large swings in exchange rates.

These developments reflect a combination of different forces. A range of indicators suggest that monetary policy has remained quite strict in most of the industrial countries, though a cautious relaxation may have taken place in some of them. Actual and, particularly, prospective budget deficits, very large in relation to countries' financial markets and to the supply of financial savings, have been a major influence on current interest rate levels. Moreover, private credit demand seems to have been less interest-elastic than might have been expected. Especially in the United States, deregulation of interest rates and the resultant absence of traditional credit-rationing effects also help to explain why interest rates have moved higher than in the past. Finally, in most countries a full explanation of high interest rates has also to take into account the deep-rooted inflationary sentiment that has built up gradually since the mid-1960s. This chapter considers the influence of these forces and draws attention to some of the problems that high and variable interest rates cause for real growth and financial-market developments.

In a number of countries policies oriented towards control of the monetary aggregates have continued to play a key rôle in efforts to counter inflationary expectations. But, against a rapidly changing economic and financial background, they have not proved easy to apply recently. The short-term instability of the aggregates has been a matter of controversy in the United States, in particular, while in other countries the appropriateness of a somewhat longer time horizon in meeting monetary objectives is generally well established. Financial innovation, in response both to regulatory changes and to high interest rates interacting with long-standing regulations, has also been more disruptive in the United States than elsewhere.

In most countries efforts to stabilise monetary expansion will no doubt continue to focus on certain aggregates despite these uncertainties. Nonetheless, a growing tendency to take other financial indicators more into account has recently been apparent. Indeed, as discussed in the last section of this chapter, there may be a case for adopting a more flexible approach without compromising the anti-inflationary thrust of monetary policies.

Salient features of recent interest rate developments.

The behaviour of interest rates over the past twelve to eighteen months has not only been characterised by very high and variable nominal rates, but interest rates have come to seem unusually high in real terms, especially considering the weakness of business activity. In addition, there appears to have been a normalisation of the yield structure and a high degree of interaction across countries between movements in interest rates and exchange rates. These developments may be explained by a number of both independent and interdependent forces, varying in strength between countries, but frequently originating in the United States and subsequently spreading to other countries. The main features of the recent behaviour of interest rates and the extent to which there were differences between countries are described below. The following section then turns to some of the factors underlying this behaviour.

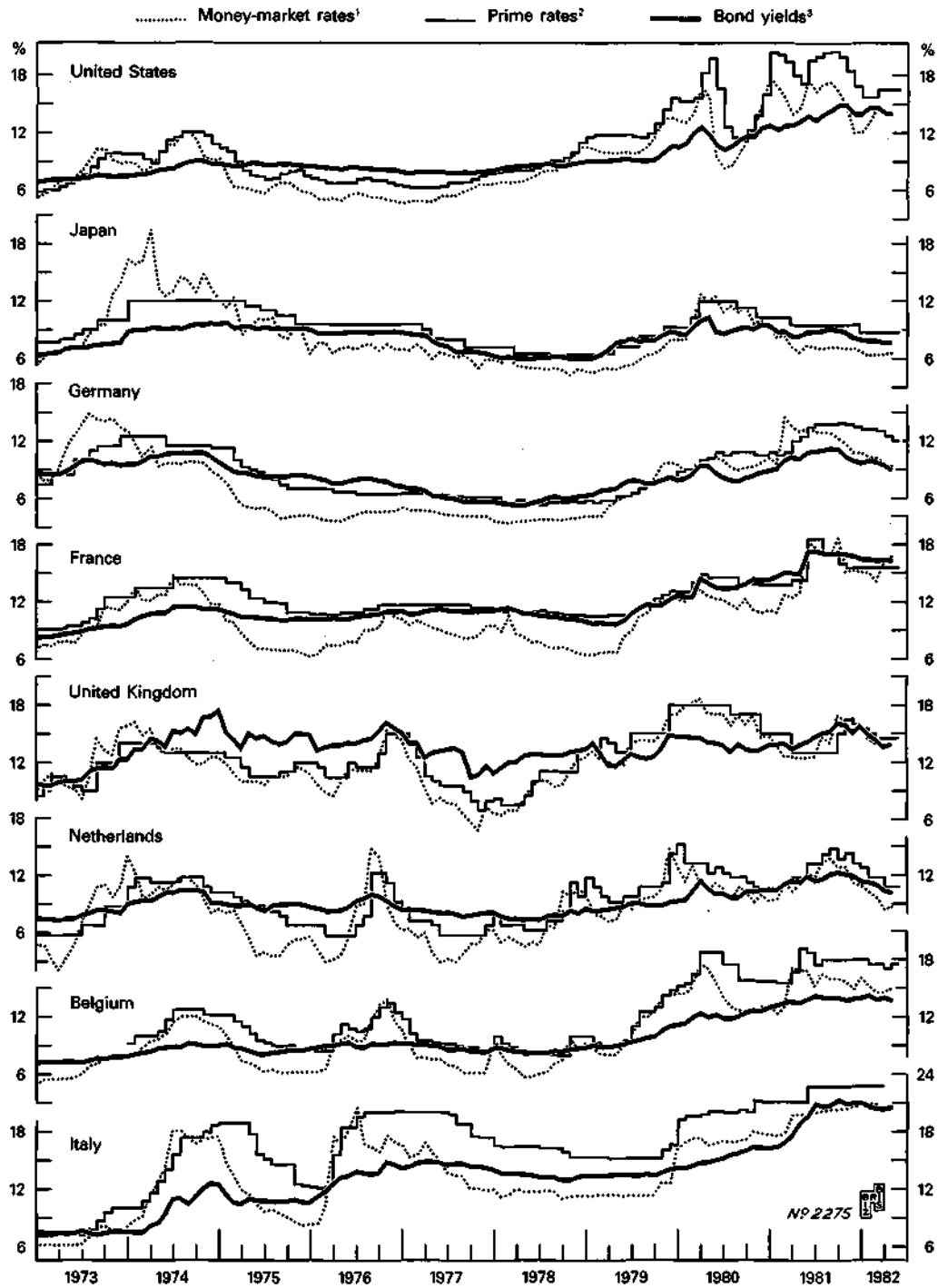
Nominal interest rates. When interest rates in the industrial countries peaked and began to decline in early 1980 it was widely believed that, as in 1973–74, the end of a brief phase of high rates was in sight. Instead, interest rates in North America were entering a period of wider swings and in Europe further rises were to come. In the spring of 1982, over two years later, hopes of a substantial and lasting decline had still not been fulfilled.

In the United States short-term rates have gone through at least four pronounced swings since October 1979, when the Federal Reserve changed over to reserve base targeting. The rate on three-month prime bankers' acceptances, for instance, which in 1980 had recorded a low of 8.0 per cent. in June and peaks of 18.6 per cent. in March and 20.1 per cent. in December, fell to 12.5 per cent. in March 1981, then moved irregularly from 18.3 down to 15.5 and up to 17.7 per cent. between May and July, before falling to 11 per cent. in December. By March 1982 it was back to 15 per cent. Banks' prime lending rates also fluctuated over a wide range, following movements in rates on money-market paper with a delay, so that the margin between these rates was at times very wide. This encouraged large shifts in borrowing between the instruments concerned and provided an incentive for the use of Euro-currency related rates in loan contracts. In the process prime lending rates may have become somewhat less indicative of the cost of short-term credit to major business borrowers. Bond yields moved to higher peaks in almost every successive upswing, though in the spring of 1982 they came down a little. The yield on US industrial bonds, for example, moved up on an irregular course from 11½ per cent. in January 1980 to 16½ per cent. in February 1982, but in mid-May it stood at 15½ per cent.

Interest rates also rose considerably in 1981 in most European markets. However, they were shielded to a degree insofar as monetary authorities proved willing to accept substantial movements in their dollar exchange rates. In Germany a significant step was taken in February 1981 when the Bundesbank altered its money-market intervention arrangements and permitted a substantial rise in short-term interest rates. The day-to-day rate settled close to the cost to banks of accommodation under the Bundesbank's special lombard facility and remained fairly stable until October. Thereafter a gradual decline was cautiously encouraged and it

Short and long-term interest rates.

Monthly data.



[1] Representative rates. (For Italy, interbank sight deposits; for France, one-month interbank deposits; for Belgium, four-month certificates; for other countries, three-month money-market instruments.) [2] Minimum rates charged by commercial banks for cash credits to first-class borrowers. (For Germany, lower end of range for large current-account credits.) [3] Representative rates. (For the United States, industrial bonds; for the United Kingdom and the Netherlands, government bonds; for other countries, various other public-sector bonds.)

continued in early 1982 even as dollar rates surged up again. As from May the Bundesbank again granted loans under ordinary lombard facilities at an interest rate of 9 per cent. In the longer-term markets yields fluctuated closely in line with US ones, though the differential in favour of dollar yields widened gradually.

Elsewhere, in France, against a background of economic policy uncertainties interest rates rose steeply in the spring of 1981. Short-term interest rates could be brought down after the currency realignments within the European Monetary System in October but a new upsurge occurred in the spring of this year. In Italy interest rates moved higher in the spring of 1981 when monetary policy was tightened mainly with a view to protecting the lira. Developments in interest rates in Belgium and the Netherlands, though partly related via EMS arrangements, reflected sharply differing balance-of-payments positions. The realignment of the Belgian franc vis-à-vis other European currencies in early 1982 gave some scope for a decline in interest rates in Belgium. In some European markets, with banks attempting to restore their profitability, the margin by which interest rates on bank lending exceed money-market rates has recently increased.

In the United Kingdom some decline in interest rates in the spring of 1981 was accepted by the authorities in view of the weak economy, though they encouraged an increase in money-market rates in September with a view to limiting the fall in sterling. Subsequently both long and short-term interest rates came down a little.

In striking contrast to developments elsewhere, short-term interest rates in Japan declined progressively in 1980 and early 1981. They then remained fairly

Month-to-month variability of interest rates.

Countries	January 1972 to March 1975				January 1979 to March 1982			
	maximum	minimum	mean	standard deviation[1]	maximum	minimum	mean	standard deviation[1]
	in percentages per annum							
Money-market rates[2]								
United States	12.1	3.5	7.4	2.5	18.0	8.3	13.1	2.9
Japan	19.3	4.9	9.7	4.3	12.7	4.6	8.0	2.3
Germany	14.8	4.5	9.0	3.2	14.5	4.2	9.6	2.5
France	14.8	4.0	9.2	3.3	18.6	6.4	12.6	3.1
United Kingdom	16.3	4.5	10.7	3.3	18.6	11.7	14.9	1.9
Italy	18.0	4.7	9.3	4.7	21.0	11.3	16.4	3.5
Belgium	12.0	3.7	7.3	2.8	17.5	8.1	13.7	2.7
Netherlands	14.0	2.0	8.2	3.3	14.8	7.2	10.6	1.8
Switzerland	6.0	0.5	4.0	1.8	9.8	0.1	5.1	3.0
Bond yields[3]								
United States	9.1	6.9	7.6	0.7	15.0	9.0	11.7	2.0
Japan	9.7	6.4	7.9	1.2	10.3	6.1	8.5	0.9
Germany	10.7	7.3	9.2	1.1	11.2	6.4	8.8	1.3
France	11.5	7.8	9.4	1.3	17.3	9.6	13.9	2.4
United Kingdom	17.4	7.7	11.8	2.8	16.1	11.6	13.9	1.1
Italy	12.7	7.1	8.6	1.8	21.3	13.4	16.5	2.9
Belgium	9.3	6.8	7.9	0.8	14.3	8.8	12.1	1.8
Netherlands	10.5	7.1	8.4	1.1	12.3	8.3	10.2	1.2
Switzerland	7.9	5.0	6.2	1.0	6.0	3.3	4.9	0.7

[1] Calculated as $\sqrt{d^2/(n-1)}$ where d denotes deviations of individual observations from the mean and n the number of observations. [2] Based on monthly measures of domestic money-market rates on three-month instruments, except for France (one-month) and Belgium (four-month). [3] Representative rates (see graph on page 61).

stable until late in the year, when they edged down further following a cut in the Bank of Japan's discount rate in December.

The variability of interest rates. The wider movements of interest rates in the United States can be seen by comparing the period since the beginning of 1979 with a broadly similar period starting in January 1972. In the recent period interest rates not only reached peaks and averages well above those recorded earlier, but a marked increase in the variability is indicated by the standard deviation measure. The monthly changes in bond yields in the second period were three times as large as in the first and so was the range over which they varied. A large increase in the instability of bond yields is also indicated in other countries (Belgium, France and Italy). However, for the United Kingdom and, in the case of short-term rates, for a number of continental European countries the variability of interest rates decreased, which, as discussed below, may be related to exchange rate policies.

Day-to-day fluctuations in interest rates in the United States have also been very large since the October 1979 change to reserve base targeting. This can be illustrated by a comparison, based on three-month instruments, between three fifteen-month periods, one ending just prior to the change and two others embracing subsequent developments. Interest rate variability may have tended to decline since early 1981 but it is still quite high by pre-1979 standards.

Day-to-day variability of short-term interest rates.*

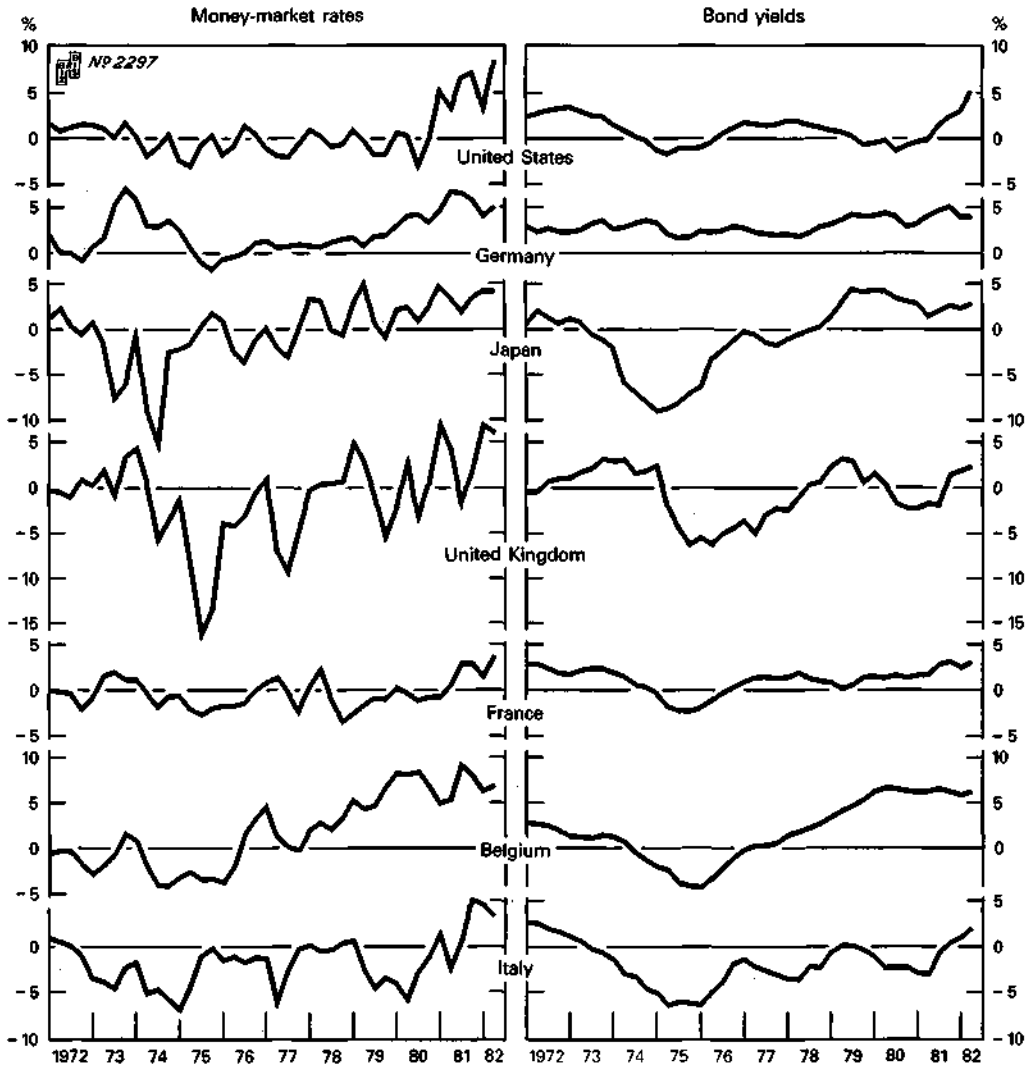
Countries	15-month periods ending								
	28th September 1979			31st December 1980			31st March 1982		
	range	mean	standard deviation	range	mean	standard deviation	range	mean	standard deviation
	in percentages per annum								
United States	8.2–12.9	10.5	1.2	8.8–22.0	14.1	3.2	11.8–19.9	16.5	2.0
Germany	3.1– 7.6	4.6	1.4	7.4–10.4	8.9	0.5	8.9–14.5	11.3	1.3
France	6.4–11.6	7.8	1.5	10.5–13.5	12.0	0.6	10.9–20.0	15.3	2.6
United Kingdom .	9.2–14.3	12.0	1.6	13.0–19.0	16.4	1.1	12.2–17.0	14.0	1.3
Belgium	5.8–13.0	9.0	1.8	11.8–17.6	14.1	1.6	12.0–17.4	15.0	1.3
Netherlands	4.6–13.0	7.9	1.7	9.1–15.5	10.6	1.2	7.5–13.8	11.1	1.4
Switzerland	−0.4– 2.3	0.9	0.7	1.4– 7.4	5.3	1.1	5.3–12.5	8.7	1.6

* Based on daily measures of rates on three-month instruments, except for France (one-month). Domestic money-market rates for France and the United Kingdom; Euro-currency rates for other countries.

Real interest rates. Nominal interest rates now seem quite high in relation to the rates of inflation recorded recently. In March 1982 bond yields exceeded rates of increase in consumer prices over the previous twelve months by amounts ranging from ½ per cent. in Switzerland and 2½ per cent. in France to 8 per cent. in the United States. The graph on page 64 shows comparisons of real ex post interest rates over a longer period, calculated using averages of consumer price changes in the latest and the preceding quarter in the case of short-term rates and in the latest and the preceding year in the case of bond yields.

These comparisons suggest that real interest rates have risen very strongly in the United States over the past two years and are higher even than those recorded in 1973 when the economy was booming. In Japan, the United Kingdom and Italy real

Real short and long-term interest rates.*



* Based on quarterly averages. Representative rates (see graph on page 61). Money-market rates are deflated by the annualised average change in consumer prices in the current and preceding quarter and bond yields are deflated by the average change in consumer prices in the current and preceding year.

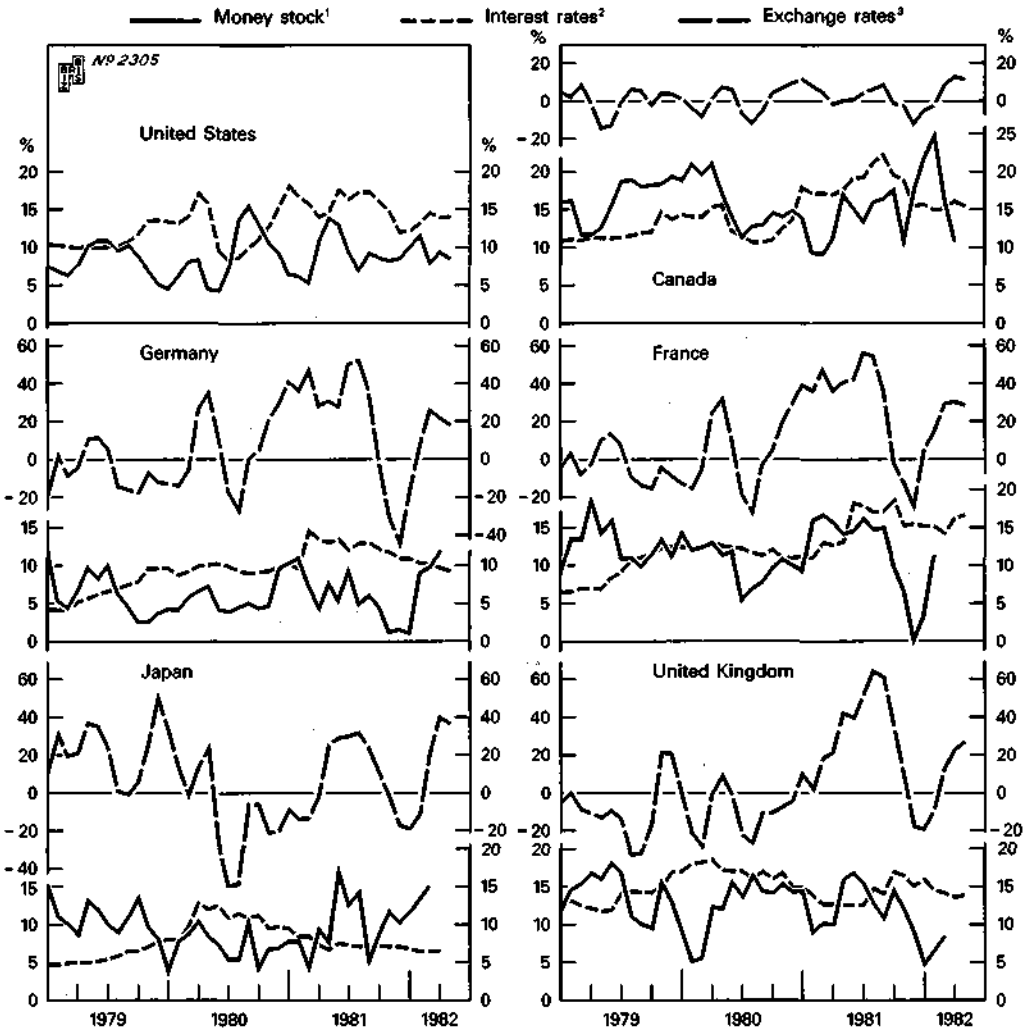
rates recorded a steep plunge in 1974–75, when prices surged up in the wake of the first oil crisis, and, as in the United States, were low or negative on average throughout the 1970s. In 1980–82, however, both short and long-term real rates moved up to peaks higher than those previously recorded. In some smaller European countries, of which Belgium is a notable example, the rise in real rates since the mid-1970s has been particularly large and protracted. In Germany real bond yields, which seem to have remained consistently positive over the years, moved to quite a high level in early 1981 but then began to edge down gradually.

Term structure of interest rates. As in the past, bond yields have generally fluctuated less than short-term rates. By the spring of 1982 bond yields in most

markets had come down a little from their 1981 peaks. However, even in Japan, Germany, the Netherlands, Switzerland and the United Kingdom, where the decline was largest, it was less than the fall in money-market rates. As a result term yield curves, which had been steeply inverse in early 1981, had generally become fairly flat at a high level. This may indicate that liquidity pressures in the money markets had eased but it seems also to imply that rates were expected to remain very high. A possible interpretation is that inflationary expectations in the financial markets have been unusually slow to respond to the anti-inflationary stance of monetary policies and to signs of a slowdown in wage and price increases.

Interest rates and exchange rates. As will be discussed further below, efforts to stabilise rates of monetary expansion, combined with financial innovations, have

The money stock, interest rates and exchange rates.



[1] Based on annualised percentage changes over three months for the money stock (for the United States, Canada and France, M_2; for Germany, M_3; for Japan, M_2+CDs; for the United Kingdom, private-sector liquidity (PSL_2)). [2] Rates on three-month instruments (for France, one-month). [3] Based on annualised percentage changes over three months for spot quotations of other currencies against the dollar.

helped to bring about large swings in interest rates in the United States. Over periods of three to six months swings in short-term interest rates seem to have been closely, and inversely, related to cycles in M_1 growth rates. However, fluctuations in interest rates in certain other markets appear to have remained roughly the same or decreased in the last two or three years as the authorities chose to keep short-term interest rates relatively stable. Hence, cycles in US interest rates and in interest rate differentials contributed to unusually large swings in exchange rates. In the case of the key DM/dollar exchange rate this can clearly be seen in the graph, and, in general, a decisive influence for the EMS currencies must have been the option chosen by the German authorities to respond to US interest rate variations partly by letting the DM/dollar exchange rate move.

The combination of relatively stable – or even falling – short-term interest rates and highly variable exchange rates is also observed for the United Kingdom and Japan. Canada, on the other hand, seems to occupy a middle position, as Canadian short-term interest rates partly followed US rates while the exchange rate vis-à-vis the US dollar has been more stable than in other countries. From the graphs it also appears that the development in broad monetary aggregates under the exchange and interest rate option chosen has differed between countries (see also table on page 82). Thus, in Canada and the United Kingdom the variability of money supply growth has been considerable, while in the major EMS countries and Japan it has been possible to combine stable short-term interest rates with a comparatively smooth trend for monetary aggregates.

Forces underlying interest rate behaviour.

At a time of world recession the emergence of high real interest rate levels could put a major obstacle in the way of economic recovery. Yet the current and prospective financial scene is such that the persistence of high real rates can scarcely be ruled out. Indeed, the prevailing high levels of interest rates may be taken as an indication that several countries have been placed in a very complex financial situation by several interacting forces and the timing of their impact. Thus, rates of inflation have generally not responded quickly to the announcement and execution of tighter monetary policies. Instead, efforts to counter inflation by relying mainly on monetary restraint have so far chiefly affected real growth and firms' ability to pass higher costs on to output prices. Combined with large actual and prospective government borrowing requirements, financial innovations and an apparent high degree of uncertainty, inflationary expectations have contributed to the continuation of high interest rates, which have further weakened enterprises' cyclically depressed financial positions and increased government deficits. This, in turn, has kept private-sector credit demands and public-sector borrowing requirements comparatively strong and reinforced the upward pressure on interest rates. By contrast, had actual and expected rates of inflation responded more quickly to the restrictive monetary policies pursued, aggregate credit demands could have been lower and the prospects for reducing nominal interest rates more promising, so that in time real interest rates would have come to reflect mainly underlying profitability conditions and saving behaviour in the various economies.

The following sub-sections attempt to "disentangle" these interacting forces by considering each in turn and discussing the extent to which their impacts have differed between countries.

The stance of monetary policy. Policies designed to check the growth of the monetary aggregates have helped in recent years to avoid a monetary explosion comparable to that of the early 1970s. At the same time, monetary restraint has in the short run clearly also contributed to the high level of nominal interest rates. In fact, the behaviour of interest rates may in many countries serve as the best indicator of monetary conditions. Additional indicators include developments in monetary aggregates in real and nominal terms, and in income velocities. Changes in bank credit can also help in identifying the influence of policy, though, like interest rates, it responds to endogenous economic and financial forces as well as to policy changes. In recent years the expansion of the broad aggregates in particular has been much more moderate and stable than before in Japan, Germany and France, and somewhat more so in the United Kingdom and Italy. In the United States monetary expansion continued to display a pronounced cyclical pattern with little change in its phasing and amplitude until 1979.

At the present juncture, one implication of monetary targeting is that the authorities, by resisting the usual build-up of money balances during recession and early recovery, have contributed to the upward pressure on yields. In 1980 rates of expansion of broad and narrow aggregates in most of the larger countries were low by previous standards, though this was partly due to special causes – external deficits, financial innovation and even high interest rates. In 1981 the growth of the broad aggregates slowed down further in Germany, but it quickened in Japan and France where restraint policies were deliberately eased so as to accommodate

Rates of monetary expansion.[1]

Money stock	Years	United States		Japan	Germany	France	United Kingdom		Italy	Canada
		A	B				A	B		
		changes over four quarters, in percentages								
Broad[2]	1970–73 average	9.9	12.4	20.9	11.2	16.0	18.9	15.9	17.3	12.1
	1974–77 average	10.8	10.5	12.7	9.2	15.4	9.3	10.5	20.2	14.6
	1978–81 average	8.8	10.6	10.2	7.1	12.3	15.1	13.4	16.3	15.5
	1980 IV	9.2	10.0	7.8	5.9	10.3	19.1	13.5	11.5	16.5
	1981 II	11.0	12.3	8.6	7.0	12.7	16.6	13.5	11.4	13.8
	IV	9.5	11.4	10.4	5.3	12.3	13.4	11.3	9.1	15.4
	1982 I	10.1	10.7	11.7	6.0	.	.	.	.	17.6
Narrow[3]	1970–73 average	6.5	6.5	22.3	8.6	11.2	10.6		21.4	11.7
	1974–77 average	6.0	6.0	10.7	10.7	11.7	16.0		15.9	10.1
	1978–81 average	7.0	6.3	6.4	5.1	11.8	9.7		17.7	5.2
	1980 IV	7.3	7.3	−1.7	4.5	8.9	4.0		12.0	9.7
	1981 II	10.1	7.4	3.0	1.7	11.3	10.2		12.1	8.8
	IV	5.0	2.2	9.2	−1.7	15.4	9.1		8.7[4]	−4.1
	1982 I	6.5	.	9.4	0.4	.	.		.	−0.4

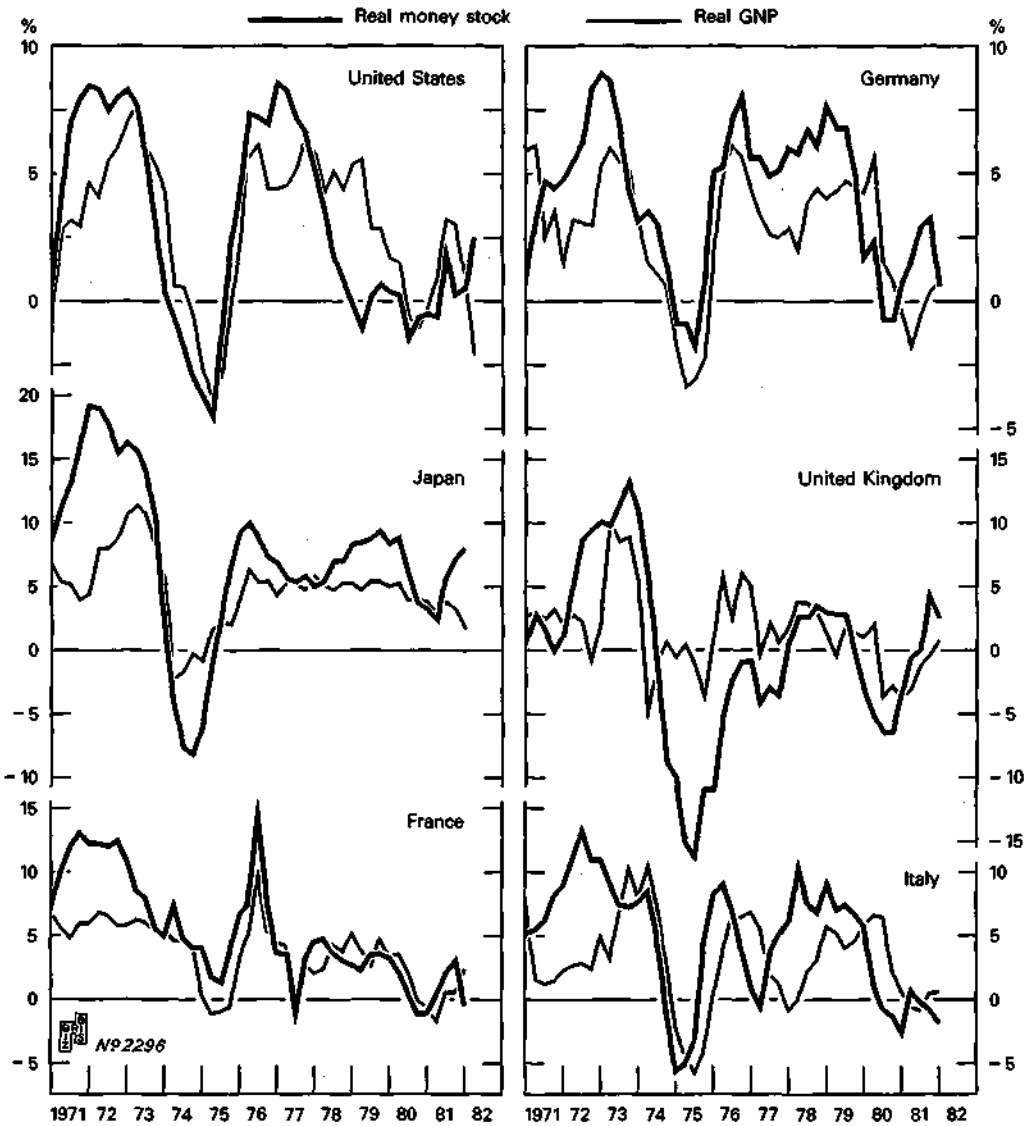
[1] Based on end-quarter data for the United Kingdom and Italy and quarterly averages for other countries. [2] For the United States, M_2 (column A) and M_3 (column B); for Japan, M_2+CDs; for Germany, M_3; for France, Italy and Canada, M_2; for the United Kingdom, sterling M_3 (column A) and private-sector liquidity — PSL_2 (column B). [3] For the United States, M_1 (column A) and M_1 shift-adjusted (column B); for other countries, M_1. The shift adjustment for M_1 in the United States reflects estimates for shifts of funds out of time and savings deposits (not included in M_1) into the newly authorised interest-bearing negotiable order of withdrawal (NOW) accounts (included in M_1). [4] Including Treasury bills (M_3), 16.3 per cent.

economic recovery. The significance of the irregular and often striking advance of sterling M_3 in the United Kingdom is more difficult to assess, mainly because of the distorting effect of the civil service dispute.

In the United States rates of increase of all the aggregates varied over a wide range in 1981. M_2 and M_3 rose strongly over the year as a whole and M_1 slowed down, particularly when allowance is made for the estimated shifts of funds into negotiable order of withdrawal (NOW) accounts which had been authorised

The real money stock and real GNP.

Changes over four quarters, in percentages.*



* Based on quarterly averages (end-quarter for the United Kingdom) for the money stock (for the United States and France, M_2; for Japan, M_2+CDs; for Germany and Italy, M_3; for the United Kingdom, PSL_2) deflated by GNP/GDP deflators. Double scale for the United States and Germany.

nationwide in 1981. The differences were attributable mainly to a marked rise in large-denomination time deposit balances, which are included only in M_3, and an increase from $76 to 185 billion in placements with money-market funds which are included in M_2 and M_3 but not in M_1. The slowdown in M_1, which followed earlier action by the Federal Reserve to moderate the growth of non-borrowed bank reserves, presumably implied a restrictive policy stance. By the turn of the year, however, bank reserves were in more plentiful supply and the pace of M_1 growth quickened in the first quarter of 1982.

Because part of any increase in the nominal money stock may be "absorbed" by increases in the price level, changes in the *real money stock* are indicative of the margin available for financing increases in output. Thus, movements in the real money stock often serve as a good indicator both of the existing degree of monetary restraint and of near-term developments in real output. Moreover, in periods of large changes in the terms of trade, measures of the real money stock, calculated by deflating with aggregate demand and output deflators, may serve as an indicator of the extent to which relative price changes are being accommodated.

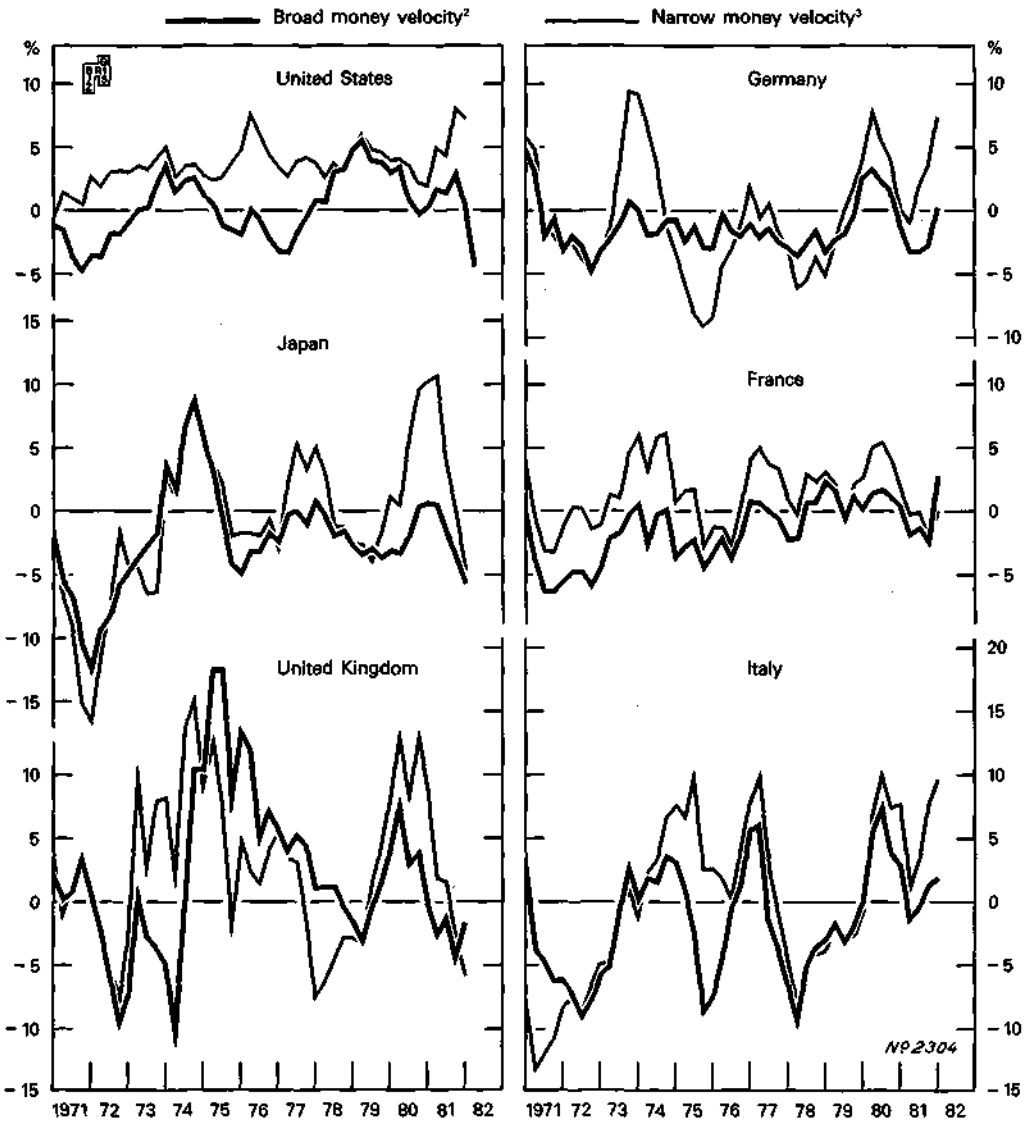
As inflation accelerated between 1978 and 1980 rates of expansion of both broad and narrow aggregates declined in real terms in advance of the slowdown in output. However, there were differences compared with the previous cycle. First, the steepness of the decline was generally less (particularly in the case of Japan and the United Kingdom), which partly reflects the more moderate secondary inflationary effects compared with those following the first oil crisis. Secondly, in sharp contrast to the increase recorded in 1976, the comparable year following the earlier crisis, real money growth since 1980 has continued to remain low or negative, though again Japan and the United Kingdom depart somewhat from the general pattern. Thus, even allowing for the terms-of-trade improvement recently experienced in most countries, real money growth has been under severe restraint for three consecutive years or more.

The fairly high real money growth rates in 1981 in Japan can be contrasted with the low or negative ones recorded in various other countries. Indeed, when changes in the real money stock are assessed on the basis of general demand deflators, the difference is even more pronounced (owing to the very sharp terms-of-trade deterioration in 1979–80 in Japan — see Chapter III). The kinds of policy divergences which this suggests are not too far out of line with what can be inferred from other evidence.

Movements in the *income velocity* of the money stock can also throw light on changes in the supply of and demand for money. In Japan and the United Kingdom the income velocity of the broad aggregates has in recent years become more stable than before. Otherwise, the regular cyclical pattern in income velocity of both broad and narrow aggregates appears to have changed very little when policies designed to stabilise the aggregates were introduced.

In some countries changes in income velocity during 1979 and 1980 reached high rates broadly similar to earlier peaks, which may point to a tightening of policy. This was the case in the United States, Germany and France for both broad and narrow aggregates and in Japan and the United Kingdom for the narrow ones.

Changes in the income velocity of the broad and narrow money stock.[1]



[1] Based on percentage changes over four quarters. Data for the money stock are end-quarter figures for the United Kingdom and quarterly averages for other countries. [2] For the United States and France, M_2; for Japan, M_2+CDs; for Germany and Italy, M_3; for the United Kingdom, PSL2. [3] For the United States, M_1 shift-adjusted; for other countries, M_1.

Subsequently, as output growth slackened, rates of increase in velocity came down closer to their long-term average values and remained there last year in most cases.

In the United States, against a background of very high interest rates, the velocity of M_1 (shift-adjusted) was rising by the fourth quarter of 1981 at a rate which was quite substantial in the light of previous experience. As increases of this magnitude may well not recur, any effort to keep the monetary aggregates on

approximately their present growth path during the expected economic upswing presupposes good progress in bringing inflation down.

In many industrial countries total *bank credit* to the domestic economy slowed down markedly in 1980 and expanded at only a modest rate last year. The pace of bank lending to the private sector speeded up a little in the United States and Japan, but slackened further in Belgium, Germany, the Netherlands, Italy and Sweden. In the United Kingdom, where the earlier slowdown was quite pronounced, a marked quickening which began in the spring of 1981 was partly attributable to an increase in the share won by banks in mortgage lending to the private sector. In Japan, France and the United Kingdom the increase in 1981 was ahead of the rise in the general price level, but in the other countries it barely kept pace with the rate of inflation, or fell behind it.

Monetary system — credit to enterprises and individuals and total domestic credit.[1]

Countries	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
	percentage changes over twelve months ending in December									
Credit to enterprises and individuals										
United States	17.3	19.5	11.6	−0.2	7.0	13.3	15.1	13.7	6.7	9.8
Japan	25.7	18.4	12.5	12.0	11.5	8.8	10.1	7.9	8.3	9.3
Germany	16.0	10.9	6.5	5.2	8.9	9.0	10.7	12.1	9.7	7.2
France	25.1	19.6	18.1	11.9	15.4	13.7	10.7	15.5	16.2	15.2
United Kingdom	49.5	34.7	18.7	−0.4	13.4	12.1	14.0	19.4	18.2	17.5
Italy	17.7	17.6	20.4	15.0	22.4	16.4	16.4	21.6	18.0	12.0
Belgium	22.1	20.4	10.4	18.2	15.3	18.0	12.2	17.3	8.2	7.7
Netherlands	17.9	27.8	20.5	12.2	27.6	21.1	22.1	15.8	10.2	5.4
Sweden	10.6	12.1	11.8	12.4	11.9	13.3	11.9	13.4	11.6	10.5
Total domestic credit[2]										
United States	12.0	13.8	9.3	5.5	9.0	9.5	10.8	12.3	8.6	8.3
Japan	25.2	17.1	15.1	16.7	13.7	10.6	13.7	8.4	8.4	10.0
Germany	14.6	11.1	7.7	10.5	10.2	9.5	11.6	11.5	9.3	9.0
France	21.0	15.7	18.3	15.7	15.4	12.2	9.9	14.9	14.2	16.2
United Kingdom	23.7	29.1	14.9	9.4	11.7	12.1	9.2	14.5	15.3	14.7
Italy	21.2	22.6	22.6	22.6	22.4	18.5	21.7	20.6	21.4	18.3
Belgium	18.5	17.1	10.1	13.6	15.4	13.6	11.5	15.8	12.2	10.4
Netherlands	11.2	18.7	15.3	14.2	25.1	18.2	20.4	16.7	10.6	6.0
Sweden	11.5	10.8	13.5	13.3	8.9	14.8	18.5	19.2	19.7	18.4

[1] Based on flow of funds (outstanding assets and liabilities) for the United States and balance sheets of the monetary system for other countries. Partly estimated. [2] Credit to domestic private and public sectors from the monetary system (including the central bank).

However, changes in bank credit, either considered in isolation or compared with developments in monetary aggregates, are frequently influenced by movements in the external balance rather than by policies. Similarly, bank credit to individual sectors often reflects changes in demand more than the availability of credit. Thus, private-sector borrowing normally moves closely in line with business activity — though with a less regular development where direct controls are applied — and with firms' fixed investment and inventory decisions. Nonetheless, by comparing bank credit to different sectors and over corresponding cyclical phases it is possible to get some impression of whether high interest rates are affecting credit demand or

whether weak financial conditions in certain sectors are reinforcing aggregate credit demand and the pressure on interest rates. On this basis it appears that private-sector credit demand in 1981 was unusually strong in the United States and the United Kingdom, as the rate of growth exceeded that of total domestic credit and was well above that recorded in 1975–76. By contrast, private-sector credit demand appears to have been low in the case of Germany, Italy, Belgium, the Netherlands and Sweden, while Japan and France seem to occupy intermediate positions, with the growth of bank credit to the private sector being broadly similar to that of total credit as well as to the rates recorded in 1975–76. The following section analyses these trends in greater detail.

Private-sector financial positions and credit markets.

In the United States neither the decline in business activity in early 1980 nor the recession last year was accompanied by the usual consolidation of corporate balance sheets. Instead of declining substantially, the corporate sector's financial deficit actually rose in 1981 as investment in the high technology and energy sectors, in particular, proved fairly insensitive to interest rates. Hence, with profits generally coming under pressure as rates of inflation declined, distress borrowing by enterprises seems to have been large in some cases. However, while the sensitivity to the level of interest rates was less than might have been expected, the demand for bank credit apparently responded to the structure of interest rates. A widely used measure of total short-term business credit, which includes the main types of market paper, expanded by a robust 15 per cent. Furthermore, each sign of a rally in the long-term bond markets was marked by a rise in the volume of new corporate issues and the sector built up its financial assets. These amounts were small, however, in relation to business investment and new short-term borrowing, and most measures of business financial positions showed a further deterioration. Reliance on short-term debt has been increasing for many years under the influence of tax incentives to borrowing and, presumably, a failure on the part of enterprises to foresee the rise in long-term interest rates. So distorted are balance sheets now that many corporations are obliged at the first sign of an interest rate decline to take steps to lengthen the maturity of their debt.

In the United Kingdom the financial situation of industrial and commercial companies appears to have improved last year as firms cut back on their inventories and work-force. Companies issued shares on a scale much larger than has been seen for many years and business fixed investment was better maintained in 1980 and 1981 than it had been in 1975. The rate of investment in part explains why recourse by companies to bank credit has remained quite strong, but, in addition, despite the apparent improvement, firms' financial positions remained basically weak. Increases in productivity notwithstanding, profits have fallen to very low levels and the cost of plant closures and redundancy programmes must have eroded stockholders' equity. Furthermore, the overall improvement in balance-sheet positions probably reflected mainly North Sea oil developments, while most manufacturing industries experienced a severe profit squeeze. Finally, while many companies were able to increase their liquidity by making retrenchments, much of this was related to the

inventory cycle and when the destocking process came to a halt during the second half of 1981 the company sector moved back into financial deficit.

In Japan, where the profitability of corporate business has improved in recent years, there was a sizable reduction in the sector's financial deficit last year. Business continued to accumulate financial assets and went on taking up funds from financial institutions. It also had substantial recourse to bond and equity capital. In Germany, although the enterprise sector's internal financing capacity weakened last year, its financial position improved as enterprises cut back their investment outlays and accumulated financial assets.

Outside the business sector, new household borrowing levelled off last year in the United States at fairly high rates largely owing to the weakness in housing credit. In the United Kingdom mortgage lending by banks increased strongly, but this occurred partly at the expense of other lenders. As housing activity remained very depressed, it would appear that householders were borrowing to sustain consumption. In Germany and Japan new borrowing activity by the household sector (including credit for housing) seems to have been fairly subdued.

Government borrowing requirements and the financial markets.

Another feature of developments in bank credit was that lending to the public authorities, which had surged strongly upwards in 1975 when private credit demand weakened, did not provide nearly as much thrust last year to the expansion of total bank credit, Sweden being a major exception. In many cases this reflects mainly the strong efforts made in recent years to finance government borrowing requirements insofar as possible outside the monetary system. By implication, therefore, it is not difficult to see why actual and prospective government borrowing requirements are so often cited in explanation of high levels of real interest rates, though in some countries the influence on interest rates was smaller — and that on money supply growth correspondingly larger — owing to public-sector borrowing abroad. The table on page 74 gives some measures which indicate how large government financing operations have become in recent years in many countries in relation to output, the credit markets and total debt. In addition, the table on page 19 shows general-government financial deficits relative to gross private saving. What the tables do not show, however, are the further large rises which may be in prospect in some countries. This may well be the most important influence of public-sector deficits, particularly in the United States, some of the implications of which are discussed in Chapter II. Care is needed, of course, in making comparisons between countries with different institutional arrangements.

Financing requirements arise from the deficit on government income and expenditure account and from loans made for policy purposes. They generally correspond to total gross borrowing, adjusted for movements in cash balances. These measures reflect the weakening in budgetary situations which took place in all the major industrial countries in the mid-1970s and the comparatively modest improvement subsequently recorded before a new deterioration set in recently. They show a different course of development in Belgium and the Netherlands, where the

Public-authority borrowing and indebtedness.[1]

Countries	Central government					General government				
	1973	1975	1979	1980	1981	1973	1975	1979	1980	1981
Financing requirement[2]	as a percentage of GNP									
United States	0.8	5.3	1.5	3.1	2.9	1.2	6.2	2.1	3.7	3.2
Japan	1.5	2.7	5.3	5.8	5.6	3.6	5.1	7.7	8.0	7.7
Germany	0.3	3.3	1.9	1.9	2.6	0.1	6.6	3.4	3.8	4.8
France	− 0.6	3.0	1.2	1.4	2.0	−0.9	2.2	0.6	−0.4	1.6
United Kingdom	3.2	8.0	5.4	4.9	4.1	5.0	9.5	6.3	5.7	4.5
Italy	8.4	11.6	11.2	10.6	12.5	10.3	14.2	11.8	10.9	13.2
Belgium	4.0	5.8	8.0	9.8	13.9	5.2	6.5	9.1	12.1	16.3
Netherlands	− 0.3	3.1	4.2	4.6	6.0	1.4	4.8	4.8	6.5	7.4
Credit-market borrowing[3]	as a percentage of credit-market borrowing by all domestic non-financial sectors									
United States	4.2	42.6	10.2	23.1	24.1	11.4	49.1	14.4	26.9	26.8
Japan	5.1	11.2	25.8	27.2	25.2	12.8	21.1	38.0	37.4	34.6
Germany	5.5	31.3	14.0	16.1	21.6	17.2	57.6	23.9	29.6	40.6
France	− 9.3	17.3	6.4	7.1	12.1	1.1	26.8	14.2	11.6	18.2
United Kingdom	20.6	54.2	38.9	36.1	25.4	28.3	63.3	44.2	42.5	28.8
Italy	33.3	45.5	52.5	51.9	56.9	41.1	55.7	55.5	53.3	60.1
Belgium	31.0	41.2	41.6	48.2	52.3	40.0	46.4	48.3	63.9	68.4
Credit-market debt[4]	as a percentage of credit-market debt owed by all domestic non-financial sectors									
United States	18.2	19.5	18.5	19.0	19.4	26.9	28.3	25.6	25.8	25.8
Japan	4.4	5.7	13.2	15.1	16.2	10.5	13.0	22.2	24.2	25.4
Germany	4.5	7.7	11.2	11.7	12.6	18.0	22.7	25.3	25.7	27.1
United Kingdom	34.6	38.0	38.5	41.0	.	46.1	49.5	47.6	49.6	.
Italy	33.6	37.0	47.5	48.3	.	42.2	44.7	51.9	52.1	.
Memorandum items:	*All domestic non-financial sectors*									
	credit-market borrowing					*credit-market debt*				
	as a percentage of GNP									
United States	*14.8*	*12.9*	*15.2*	*13.0*	*12.4*	*159.7*	*163.3*	*167.9*	*169.2*	*167.2*
Japan	*28.2*	*24.0*	*20.3*	*21.4*	*22.2*	*155.4*	*160.3*	*180.7*	*189.5*	*201.3*
Germany	*10.1*	*10.9*	*12.9*	*12.5*	*12.1*	*102.2*	*109.2*	*120.8*	*125.0*	*132.4*
France	*11.6*	*15.7*	*13.3*	*11.9*	*15.8*	.	.	.	.	.
United Kingdom	*18.2*	*13.5*	*16.5*	*14.5*	*13.9*	*132.0*	*115.6*	*105.7*	*104.3*	.
Italy	*24.8*	*25.6*	*20.9*	*20.0*	*20.9*	*137.4*	*144.4*	*130.3*	*124.0*	.
Belgium	*13.7*	*14.2*	*16.1*	*14.8*	*15.1*	.	.	.	.	.

[1] BIS estimates based on national data which differ conceptually from country to country. [2] Net change in borrowing and cash balances, including borrowing for on-lending. For general government in France, net lending (−). Based on public finance and flow-of-funds data. [3] In principle, domestic currency borrowing from other sectors in the form of security issues and credit from financial institutions. Based mainly on flow-of-funds data. [4] Excludes equities. For the United States, Germany and Japan, outstanding *liabilities* otherwise corresponding to the credit flows. For other countries, based partly on different data sources.

financing requirement has continued to rise year by year, and in the United Kingdom, where it declined in relation to GNP in each of the last two years. In Italy and France there was a fairly large rise last year. In France further rises are in prospect, but in relation to GNP the requirement may remain comparatively small. For the US Federal Government the ratio could rise significantly in coming years, depending on the behaviour of output, prices and interest rates and on whether further corrective action is taken.

The ratio of gross government borrowing to total credit-market funds raised by domestic non-financial sectors (excluding most funds raised abroad) confirms the

preponderance of governments in their own markets, though some of the funds they raise are on-lent to the private economy. For many countries the peaks in 1975 stand out, but as this was a year in which private credit demands collapsed the total call on the markets was quite modest. In 1975 there was also a rise in personal savings ratios which bolstered asset accumulation in the private sector, so that in relation to gross private-sector financial saving the rise in government borrowing was somewhat less marked. On the assumption that world economic recovery now goes ahead, albeit slowly, nothing comparable with either of these developments will have occurred during the present recession.

A further disquieting fact is that, after its rise in 1975, government presence in the credit markets remained quite substantial. Governments were slow to take steps to prevent large borrowing requirements from becoming structural — the retrenchment efforts in the United Kingdom being a notable exception. In 1979, a comparatively prosperous year though one of renewed oil price increases, government borrowing was everywhere much higher in relation to total borrowing and to private saving than in 1973. In some countries, too, the relatively fast growth of public debt (from low levels in the case of Germany and Japan) has called for substantial changes in the composition of private portfolios.

In the United States, taking into account credit agency borrowing, the net general-government share of credit-market borrowing by domestic financial and non-financial sectors in 1981 came to over 30 per cent. In various European countries publicly owned financial institutions also play a large rôle in credit markets, and in Japan borrowing by the non-financial public sector, together with security issues by public financial institutions, accounted for nearly half of the funds raised domestically in 1980.

There are also differences in the structure of saving and investment. Net financial saving in the personal (or household) sector has traditionally been relatively much lower in the United States than elsewhere. This reflects a relatively low level of asset accumulation as well as a high level of borrowing. Thus, short of a major increase in personal-sector saving, the resources available domestically to finance the combined deficits of the government and business sectors must remain quite limited.

Net financial saving.[1]

Countries	Government and business sectors[2]						Household sector[3]					
	1973	1975	1978	1979	1980	1981	1973	1975	1978	1979	1980	1981
	as a percentage of GNP											
United States	– 3.9	– 3.7	– 2.0	– 1.5	– 2.3	– 2.3	3.1	4.1	0.6	0.8	2.1	2.3
Japan	–10.5	–11.4	–10.1	–11.1	–10.4	–10.7	8.8	10.5	11.1	9.2	8.3	13.1
Germany	– 2.6	– 6.9	– 2.7	– 4.9	– 6.4	– 6.6	3.4	7.0	3.2	3.1	3.5	3.6
France	– 4.2	– 5.9	– 5.3	– 4.3	– 4.8	– 6.1	3.5	5.7	5.2	3.6	2.8	3.7
United Kingdom	– 5.8	– 7.2	– 4.4	– 5.7	– 5.4	– 3.7	3.2	5.4	5.5	6.5	7.9	6.5
Italy	–18.0	–20.2	–13.9	–12.6	–15.1	–18.3	16.0	16.7	16.2	14.9	11.4	12.9
Netherlands	– 7.8	– 8.4	– 9.7	–10.0	–10.7	– 7.1	11.7	10.8	8.8	8.5	9.0	9.4

[1] Based on national accounts and flow-of-funds data. [2] Includes public enterprises. For Japan, France and the United Kingdom, excludes unincorporated enterprises. [3] For Japan, France and the United Kingdom, includes unincorporated enterprises.

In the hope of limiting the impact of budget deficits on monetary expansion, governments have sought to diversify the techniques by which they are financed. In some countries the public authorities have become virtually the only borrowers on the long-term market. High yields there have not only driven enterprises into short-term markets — thus in part explaining the existence of inverse yield curves — but may also have come to reflect more what governments are prepared to pay than the profit and inflation expectations of business enterprises. In the United Kingdom central-government borrowing outside the banking sector, much of it at long term, far exceeded the borrowing requirement last year, while private credit demands remained heavily concentrated in the short-term markets. In this unusual situation, the Bank of England acquired very large amounts of bills issued by the private sector. In a number of countries, including the United Kingdom and Italy, steps were also taken to reduce the pressure of government borrowing on long-term markets, including a shortening of average maturities, the issue of variable rate securities and the introduction of indexed bonds. In some countries, including Belgium, Sweden and Denmark, governments have borrowed abroad extensively.

All of these techniques are in the nature of expedients which give rise to problems of their own. Budget deficits which are too large seem bound to place upward pressures on interest rates — either directly, if there is no question of excessive monetary financing, or via their impact on inflationary expectations and risk premia if there is. In addition, public-sector borrowing abroad, while not directly affecting domestic interest rates, may strengthen the exchange rate and thereby weaken the competitive position of the economy. Ultimately, these pressures can be relieved only by action to reduce the borrowing requirement itself.

Deregulation and financial innovation.

In seeking to account for the behaviour of interest rates, the preceding sections have pointed to the rôle of monetary policy, private credit demand and budget deficits, particularly in the United States. In the latter country an additional factor influencing the behaviour of both interest rates and, as discussed below, the monetary aggregates has been the gradual deregulation of credit markets and the process of financial innovation since the mid-1960s. Whereas ceilings had once held down interest rates on all time and savings deposits at banks and thrift institutions, those on large time deposits were removed in the early 1970s. Adjustable interest rate ceilings, adapted to changing government security yields, were introduced for various types of time deposits between June 1978 and October 1981. Many types of interest rate ceilings on loans by financial institutions were also abolished in 1980 and 1981.

Deregulation, together with the ongoing process of financial innovation, has influenced the behaviour of interest rates in a number of different ways. Firstly, whereas the banks used to respond to pressure on their reserve positions mainly by selling securities and rationing loans to customers, in recent years they have been able to go on making new credit available by engaging in aggressive interest rate competition for deposit funds (i.e. by "liability management") and by raising the interest rate charges on loans much more than before. Similarly, the ability of

savings institutions to obtain funds, at a price, together with the authorisation of variable rate mortgages, also implied that the supply of housing finance would not be interrupted abruptly as it had been in earlier credit "crunches". And, generally, competition from newer types of institutions and instruments and the increasing yield consciousness of the public may have encouraged the process of interest rate liberalisation. All in all, regulatory and other changes have no doubt improved the allocative efficiency of credit markets and helped to protect traditional deposit institutions from large-scale withdrawals of funds. However, by giving a larger rôle to the price mechanism in the determination of the volume of credit, these changes have also contributed to the unusually high levels of interest rates.

Secondly, as more and more financial assets and transaction deposits become subject to market-determined interest rates, the interest sensitivity of monetary aggregates tends to decline. In the United States this phenomenon seems to account for a large part of the difference between the growth rates of M_1 and broader aggregates in 1981, and it has the more general implication that attempts to control movements in monetary aggregates will be accompanied by higher and more variable nominal interest rates.

Thirdly, the greater reliance on the price mechanism, together with more volatile interest rates, appears to have increased risks in financial intermediation, at least during a period of transition. This may in part account for high long-term interest rates and it has probably also contributed to the widening spread between deposit and lending rates.

For institutional reasons deregulation and financial innovation have gone furthest in the United States, but greater reliance on the market mechanism has also been observed elsewhere. Owing to the interest sensitivity of international capital flows, other countries have also felt some of the repercussions of changes in the United States.

Inflationary expectations, risk premia and other factors.

A full explanation of recent high interest rate levels needs also to take cognisance of the ingrained inflationary sentiment that has built up over the years. Undoubtedly, attitudes not only of borrowers and lenders but also of participants in the goods and labour markets have altered substantially. However, changes in inflationary expectations are subject to a high degree of inertia, and in assessing their impact on nominal interest rates it is therefore useful to distinguish between two phases. At first, the acceleration of inflation in the late 1960s and early 1970s was apparently not fully anticipated, so that inflationary expectations lagged behind actual inflation rates and ex post real interest rates were negative in most countries throughout this period. In the second, more recent phase, however, inflationary expectations seem to be exceeding actual rates, reflecting widespread fears that future rates of inflation will remain high or surge up again. As noted earlier, this has resulted for the time being in very high and positive ex post real interest rates. In retrospect, it is perhaps not surprising that inflationary expectations have again proved slow to adjust. In the United States, for example, the rate of inflation has

been higher in each successive business cycle since the Second World War and until recently nominal wages in most countries have been slow to respond to monetary restraint. Moreover, while some countries have succeeded in restraining price increases with the help of appreciating exchange rates, inflation rates have generally remained variable and high. Finally, and perhaps most importantly, memories of the "stop-go" policies of the past are still fresh and sensitivity to the potential inflationary consequences of budget deficits is acute.

It is also noteworthy that interest rates have been more variable than the rate of inflation itself in recent years. Bondholders have experienced large capital losses and borrowers large gains. In such circumstances lenders are not prepared to enter into long-term commitments without compensation for perceived risks. It seems likely, therefore, that long-term interest rates now incorporate substantial risk and liquidity premia. These should become smaller if rates of inflation can be brought down but, unless memories prove very short, they might not be eliminated even then.

Finally, the impact of inflationary expectations on interest rates may have been magnified by the deductibility of interest costs from income for tax purposes. This applies very generally in the company sector but, in the United States and certain other countries, in the household sector as well. Though not new, these provisions can help to explain why gross-of-tax nominal interest rates should rise more than in proportion to the rate of inflation. Awareness of the importance for at least some borrowers and lenders of calculations based on after-tax real costs and returns has spread in recent years.

Structural implications of high and variable interest rates.

Should interest rates stay high in real terms, rates of investment and economic growth can surely be expected to remain lower than they might otherwise be. Experience suggests that high real interest rates have a particularly large impact on housebuilding and on non-residential investment projects with long gestation periods. Even temporarily high short-term interest rates are especially troublesome for trading enterprises which need to finance large holdings of stocks as well as for small industrial businesses and farmers typically heavily indebted at short term.

In some countries heavy interest costs have added to the difficulties already being experienced by non-financial enterprises in industries with structural problems. High rates have helped to bring about sharp declines in real estate, precious metals and commodity values. This has eroded wealth positions of asset holders, which must be contributing to the weakness of overall demand. Moreover, interest rate volatility has contributed to fluctuations in exchange rates, to a shortening of maturities in lending contracts and to uncertainty in the business climate generally. Finally, high nominal interest rates have increased government deficits, thus reinforcing pressures on the public authorities to reduce spending and/or raise taxes and adversely influencing inflationary expectations. All in all, and even allowing for a possible effect on current private consumption through higher disposable income for the household sector as a whole, there is, therefore, little doubt that high and variable interest rates reduce rates of growth in output.

As regards financial institutions, the liquidity and balance-sheet positions of some have been adversely affected by distorted interest rate relationships and by the need to make increased provision for loan losses. Some commercial and savings banks which traditionally engaged heavily in maturity transformation have been locked into long-term low interest rate loans and securities while having to pay high money-market related rates to retain deposit funds. The plight of the savings and loan associations in the United States, which have had to compete with money-market funds for resources, has been a particularly conspicuous example. In 1981 their net worth declined sharply, and the solvency of an increasing number of institutions began to give cause for concern. Last year Congress permitted deposit institutions to issue all-savers certificates which benefited from a privileged tax status. In addition, the regulatory agencies took steps to facilitate mergers between weak and relatively strong savings institutions and the Federal Reserve provided a special discount window facility for extended assistance to banks and thrift institutions suffering sustained liquidity difficulties. By the spring of 1982, however, it had become clear that in the absence of a very pronounced decline in interest rates the number of savings institutions getting into difficulties would continue to increase.

In early 1982 short-term interest rates in a number of European countries were lower in relation to long-term yields than they had been in 1980 and 1981 and some of the pressures on financial institutions had become less severe. However, the incidence of bankruptcies among non-financial enterprises was still high and an increasing number of banks were having to call on undisclosed reserves or to report lower earnings in order to make larger provisions to cover doubtful loans.

Financial fragility may place limits on the ability of the authorities to pursue anti-inflationary policies, especially where the main burden of restraint is borne by monetary policy. The resilience of the system may have been changing recently — to an extent which is not yet fully clear — as a result of the efforts made in the markets to adapt to high and variable interest rates. A shortening of maturities in lending and the increased use of variable interest rate clauses may have helped to protect financial institutions while increasing the uncertainties faced by borrowers. Where long-term fixed rate lending contracts are in widespread use the main effect of rises in interest rates may be to discourage new borrowing. Compared with fixed interest rates, variable rates may have less influence on the timing of expenditures but more on the income and cash flow of enterprises and of households with outstanding mortgage debt. Effects of this kind may enhance the influence of monetary policy on aggregate expenditure but they could increase the public opposition that prolonged restraint might encounter. Income or cash-flow effects bearing on the ability of bond dealers to hold inventories may help to explain why fluctuations in short-term interest rates have recently been transmitted so strongly to long-term markets. The development of interest rate futures facilities may enable some kinds of risks to be hedged but may increase others. In the United States mergers of financial institutions, by reducing the regional concentration of their lending and contributing to a diversification of their activities in other respects, might ultimately strengthen the viability of the financial system. On the other hand, with the public now more interest rate sensitive, deposit institutions in nearly all countries may have

permanently lost part of their endowment of low-yield transaction and savings balances.

The objectives and techniques of monetary policy.

Financial-market developments last year brought to the fore a wide range of issues concerning the design and conduct of monetary policy. On one plane there was the ongoing debate about the appropriateness of efforts to meet objectives for the monetary aggregates in the short run, the effectiveness of different control techniques for this purpose and the impact of different operating procedures on the stability of interest rates and exchange rates. On another came a discussion about which monetary aggregates the authorities should adopt as a target in a context of financial innovation and extremely large movements in interest rates. At yet another level came fundamental doubts about the efficacy of policies geared primarily to controlling the money stock, and questions about what other targets or indicators might be taken into account in formulating monetary policy now or in the future.

While controversy about techniques has arisen mainly in the United States and, to a degree, in the United Kingdom, issues concerning the choice of objectives have also been raised in a number of other countries.

Monetary objectives and monetary developments. The actual rates of monetary expansion achieved last year under monetary aggregate policies differed in some cases quite appreciably from the published objectives. Over the year as a whole the expansion of the specific aggregates concerned fell below the norm or target range to a varying extent in Germany, Switzerland and Canada and ended up well above it in France, the United Kingdom and Italy. In the United States the expansion of M_1 shift-adjusted and that of the broader aggregates diverged far more than had been anticipated when the targets were set.

In several cases policy objectives were modified during the year. The Bundesbank, in reformulating policy at mid-year, had confirmed that it would seek to keep the expansion of central-bank money near the lower end of the published range. In the United States, where a mid-year reassessment has also become customary, the Federal Reserve had in July envisaged a course of monetary developments which was not very different from the one that actually materialised. In France the new Government's aim of limiting unemployment led to a strong, but temporary, acceleration in monetary expansion. In the United Kingdom, with renewed concern about inflation and with the signals given by sterling M_3 increasingly difficult to interpret, the authorities had announced in August that developments in the economy and in the exchange rate were being taken more into account in the formulation of monetary policy. In Switzerland and Canada, too, exchange rate considerations were at times given priority when the achievement of different intermediate objectives seemed to come into conflict. In Italy restrictive policies kept the expansion of credit to the private sector broadly in line with the official objectives but credit to the public sector ran well ahead of the limit which had been envisaged.

Monetary and credit aggregates: Objectives and rates of expansion.

Countries	Monetary or credit aggregate	Objective[1]				Actual result[2]			
		1979	1980	1981	1982	1979	1980	1981	1982
		in percentages							
United States	M_1[3]	3.0–6.0	4.0–6.5	3.5–6.0	2.5–5.5	5.5	6.7	2.3	10.8
	M_2[3]	5.0–8.0	6.0–9.0	6.0–9.0	6.0–9.0	8.3	9.8	9.4	10.1
	M_3[3]	6.0–9.0	6.5–9.5	6.5–9.5	6.5–9.5	8.1	9.9	11.3	8.9
	Total bank credit	7.5–10.5[4]	6.0–9.0[4]	6.0–9.0[4]	6.0–9.0[4]	11.0	8.0	8.8[5]	.
Japan	M_2+CDs	11.0[6]	8.0[6]	7.0[6]	10.0[6]	11.2	7.8	10.6	10.7
Germany	Central-bank money	6.0–9.0	5.0–8.0	4.0–7.0	4.0–7.0	6.3	4.9	3.5	6.6
France	M_2	11.0	11.0	10.0	12.5–13.5	14.4	9.8	11.6	.
United Kingdom .	M_1	–	–	–	8.0–12.0[7]	14.0	8.8	8.9	6.2
	Sterling M_3	8.0–12.0[7]	7.0–11.0[7]	6.0–10.0[7]	8.0–12.0[7]	13.5	16.3[7]	14.7[7]	7.8
	Private-sector liquidity PSL_2	–	–	–	8.0–12.0[7]	15.0	13.0[7]	11.7[7]	.
Canada	M_1	6.0–10.0[7]	5.0–9.0[7]	4.0–8.0[7]	4.0–8.0[7]	8.0[7]	6.2[7]	.	.
Switzerland	Adjusted central-bank money	–	4.0	4.0	3.0	.	–0.6	–0.5	.
Italy	Total credit	18.5[8]	17.5[8]	16.0[8]	15.5[8]	18.4	18.4	18.7	.

[1] For the United States and Germany, fourth quarter to fourth quarter; for Japan, fourth quarter to fourth quarter for 1979 to 1981 and second quarter to second quarter for 1982; for France and Italy, December to December; for the United Kingdom, periods running from October 1978 to October 1979, from June 1979 to April 1981, from February 1981 to April 1982 and from February 1982 to April 1983; for Switzerland, November 1979 to November 1980 and specially calculated averages for 1981 and 1982; for Canada, periods beginning with June 1978, the second quarter of 1979 and August–October 1980. [2] For 1979, 1980 and 1981, as in footnote 1; for 1982, first quarter at an annual rate. [3] For 1979, old definitions of M_1, M_2 and M_3; for 1980 and 1981, M_1 (=M_{1B}) adjusted to take account of estimated transfers of funds into new types of cheque accounts. [4] Estimate designed to be consistent with the targets for the monetary aggregates. For 1982, adjusted to allow for shifts of assets from US banking offices to international banking facilities. [5] Adjusted for shifts to international banking facilities. [6] Projection announced two or three months before the end of the period to which it relates. [7] Annual rate. [8] Upper limit expressed in terms of amounts: Lit. 53,000 billion in 1979, Lit. 59,000 billion in 1980, Lit. 64,500 billion in 1981 and Lit. 73,000 billion in 1982.

In the prevailing circumstances the risks of pursuing further the efforts made in recent years to bring about a progressive reduction in rates of monetary expansion were reflected in the targets set for 1982. In the United States the limits of the target range set for M_1 in 1982 were again lower than those set for the previous year, but in early 1982 the Federal Reserve announced that in view of the relatively low fourth-quarter 1981 base, and the upsurge in the aggregate in early 1982, the Open Market Committee felt that a rate of growth of M_1 in the upper half of the target range would be acceptable. The Bundesbank, faced with similar considerations and a continuing weak economy, has said that under certain conditions an expansion of the targeted aggregate at a rate near the upper limit of the published band can also be envisaged in Germany. In France the guidelines set for the expansion of M_2 in 1982 were appreciably higher than those set for 1981. In Japan the norms, which are in the nature of a forecast for growth rates over four-quarter periods, have recently provided for larger rises which partly reflect the low rates of monetary expansion recorded in the reference periods. In the United Kingdom the limits of the target range for monetary expansion in the fiscal year 1982–83 are higher than those set for 1981–82 and also higher than those envisaged for 1982–83 in the Medium-term Financial Strategy published with the March 1980 Budget. The change clearly attests to the adoption of a broader approach to assessing monetary conditions. In presenting the new range for 1982 the Chancellor announced that it would apply not only to sterling M_3 but also to M_1 and to PSL_2, a broad measure of private-sector liquidity.

Monetary control in the short run. If experience last year suggests that flexibility may be called for, even over periods of a year or more, in efforts to meet objectives for particular aggregates, it clearly shows the difficulties which may be encountered in attempting to stabilise monetary expansion over shorter periods.

In the United States the adoption by the Federal Reserve in October 1979 of reserve-oriented control procedures ended a long-standing bias in policy-making towards keeping nominal interest rates too low in inflationary conditions. The prospect of greater instability in interest rates was an inevitable by-product of this decision, though it is unlikely that anyone envisaged fluctuations as large as those which were subsequently to occur. Nor could it have been expected that the volatility of M_1, which has normally been considered the principal intermediate target of monetary policy, would increase substantially. Since October 1979 percentage changes over twelve months in M_1 have fluctuated over a much wider range than in the immediately preceding period and a marked increase in variability is suggested by the standard deviation (and also the coefficient of variation). At the same time, however, the variability of changes in M_2 seems to have decreased.

Variability of changes in the monetary aggregates.*

Countries	Monetary aggregate	April 1977–September 1979			October 1979–March 1982		
		range	mean	standard deviation	range	mean	standard deviation
United States	M_1	7.0– 8.7	8.0	0.5	4.2–11.1	6.7	1.7
	M_2	7.8–13.7	9.9	2.0	6.9–11.5	9.1	1.1
Japan	M_1	3.7–17.9	9.6	3.2	– 4.3–11.9	3.3	4.8
	M_2+CDs	9.9–13.2	11.7	0.8	6.1–12.4	9.1	1.6
Germany	M_1	5.8–14.2	10.5	2.8	– 2.3– 5.7	1.9	2.1
	M_3	7.8–11.5	10.1	1.0	4.3– 7.2	5.9	0.9
	Central-bank money	7.1–11.2	8.9	1.2	2.8– 7.4	4.7	0.9
France	M_1	6.0–14.8	10.9	2.3	6.7–16.5	10.7	2.9
	M_2	10.5–14.5	12.9	0.9	9.6–14.7	12.3	1.3
United Kingdom ..	M_1	9.8–24.2	16.1	4.4	1.7–18.1	9.2	4.9
	£M_3	6.1–16.1	11.6	3.2	10.8–25.8	17.7	4.6
	PSL_2	6.9–15.7	12.5	3.0	11.3–15.0	13.1	1.3
Canada	M_1	6.7–12.1	9.1	1.4	– 7.6–10.2	4.5	4.4
	M_2	– 0.7–21.8	11.2	5.7	–10.4–19.2	6.3	9.7
Switzerland	M_1	3.1–23.8	11.7	6.7	–14.1– 1.7	– 5.9	4.1
	M_2	2.0–13.0	7.6	2.5	7.6–22.7	14.6	3.9
	Adjusted central-bank money	0.5–36.0	12.0	9.7	–23.3– 2.9	– 4.5	7.1
Italy	M_1	18.8–26.4	22.6	2.0	7.4–26.2	14.7	5.1
	M_2	19.5–23.2	21.4	1.0	8.2–21.8	13.4	3.9

* Based on percentage changes over twelve months.

The United States is not the only country in which instability in monetary expansion has increased since late 1979 and the variability of M_1 in the United States has, in fact, remained smaller than in all the other major countries. In Germany, Japan and France, however, the variable for which official norms have been published has been fairly stable. In these countries, moreover, monetary

developments are almost always assessed on the basis of changes in quarterly or annual averages, which show a very smooth development. In the United States, on the other hand, public reactions to money stock movements over much shorter periods appear to have become endemic. Annualised quarter-to-quarter or month-to-month movements in the monthly average measures of M_1 can appear very large and those of the weekly averages much larger still. Not only have the weekly data been highly erratic but, in addition, provisional data have frequently had to be revised substantially after their initial publication. Yet markets have nervously awaited the appearance of each new figure and have typically responded to apparent overshooting of the targets, even on a weekly basis, by marking up interest rates sharply. With a view to modifying this behaviour the Federal Reserve Board announced in April that in future the weekly data might be released only in the form of four-week moving averages.

Variability of changes in measures of M_1 in the United States.

Periods	Annualised changes* in								
	weekly average data over one week			monthly average data over one month			quarterly average data over one quarter		
	range	mean	standard deviation	range	mean	standard deviation	range	mean	standard deviation
April 1977–September 1979 .	−15.3 40.4	7.8	7.9	− 2.3 18.6	7.7	4.6	5.1 10.0	7.9	1.5
October 1979–March 1982 . .	−35.9 79.0	5.8	20.6	−15.8 25.2	6.2	9.7	− 3.2 14.1	6.5	5.5

* Annualised arithmetically: percentage changes over one week, one month and one quarter in seasonally adjusted data are multiplied by 52, 12 and 4 respectively.

Given their reliance on monetary-aggregate oriented inflation policies, the US authorities seem to be in a dilemma. It is now fairly generally accepted that movements in the money stock which are reversed within periods of less than about six months can have little effect on the economy even if prolonged departures from the target course can. Fluctuations cannot readily be identified as temporary when they occur, however. If an official reaction to under- or overshooting is delayed, correspondingly severe corrective action may be required later and the credibility of policy may be damaged. Yet if the authorities do regularly respond by taking action to influence bank reserves, market participants can anticipate changes in liquidity pressures.

The question of whether US monetary control techniques could be improved has been much discussed. Some simplification of the structure of reserve requirements was provided for under the Monetary Control Act of 1980 but it will be introduced only gradually. Proposals for a changeover from lagged to contemporaneous bank reserve accounting have been published by the Federal Reserve for comment; opinion about its implications for aggregate targeting and interest rates differs widely. Other suggestions include the substitution of total bank reserves for non-borrowed reserves as an operating target and the introduction of arrangements for tying Federal Reserve discount rates to market interest rates. Both of these changes would eliminate safety valves existing in the present mechanism and

could make interest rates more unstable even if they were effective in permitting better short-term monetary control.

In the United Kingdom changes in monetary control procedures which had been foreshadowed in November 1980 were introduced in the course of last summer. The authorities had earlier already concluded that there was no basis for categorical judgements about how effective a control system geared to the monetary base might be. But they accepted the view that to permit market forces to play a greater rôle in the determination of interest rates should help in overcoming any past tendency to delay in making changes. Accordingly, they ceased publishing a minimum lending rate on a continuous basis and in day-to-day operations began to rely less on direct lending to the discount houses and more on open-market transactions, outright and under repurchase agreements, conducted by reference to an undisclosed band for very short-term interest rates. Direct lending operations were not precluded, however, and were used on two occasions in the autumn to encourage an upward adjustment in interest rates. Other changes included the abolition of the reserve asset ratio and the replacement of the 1½ per cent. cash requirement for the London clearing banks by a deposit requirement set at ½ per cent. of eligible liabilities for all banks and licensed deposit takers in Great Britain. Concurrently, the list of eligible acceptors was extended and arrangements were made for the holding by acceptance houses of minimum balances with the discount houses so as to ensure the existence of a bill market capable of accommodating the authorities' operations.

Defining money: A growing problem. In certain respects, monetary aggregate control policies seem to have come into use in unusually unpropitious circumstances. After their adoption, previous relationships between the money stock, interest rates, economic activity and prices began to weaken or break down and in some countries changes in the financial system made it more difficult in practice even to identify groups of assets which corresponded to plausible theoretical concepts of money. The problem seems to have been mainly one of responses to high interest rates interacting with existing regulatory constraints, changes in regulatory arrangements and technological progress.

Difficulties in interpreting the aggregates were particularly severe in the United States last year. A new concept of transaction money including interest-bearing cheque accounts (NOW accounts) had been established in 1979 (known first as M_{1B}, now as M_1), and for last year a shift-adjusted version was estimated. Even so, M_1 growth was substantially lower than might have been expected on the basis of past experience at the levels of money income and interest rates prevailing last year. A similar discrepancy had already occurred in 1975–76; and as a result of failure to take it adequately into account monetary policy may then have been less restrictive than intended. Shifts of this kind in the demand for money balances apparently reflect a ratchet downward adjustment of low or zero yield transaction balances which comes about when market interest rates are high enough to encourage financial innovation and changes in established behaviour. The interest rates on the new NOW accounts are regulated in much the same way as those on conventional savings deposits.

The emergence of facilities for the automatic "sweeping" of balances over a certain level from transaction accounts into other types of interest-bearing placement at the end of the day seems to be a more fundamental change. Last year also saw massive transfers of funds from traditional demand and savings deposits not only into money-market mutual funds and money-market certificates but also into traditional market placements such as Treasury bills, commercial paper and large CDs. All of these instruments are included in M_2, M_3 or L. Figures for M_3 and L are available only with a considerable delay but the Federal Reserve began last year to take movements in M_2 more explicitly into account than before in formulating monetary policy.

Contribution of selected components to the growth of the broad money stock.[1]

Components	United States				Japan				Germany			
	1973	1974	1980	1981	1973	1974	1980	1981	1973	1974	1980	1981
	increases as percentages of the growth of the broad money stock											
Currency	5	7	5	3	10	14	4	5	6	13	9	0
Demand deposits[2]	9	7	3	−22	32	26	−13	24	−3	32	17	−11
Other cheque accounts[3]	0	1	6	21	.	.	.	.	.	.	.	.
M_1[2]	14	15	14	2	42	40	− 9	29	3	45	26	−11
Savings deposits[4]	40	42	41	23	58	60	103	67	3	70	11	− 7
Money-market funds	.	2	20	45	.	.	.	.	.	.	.	.
Time deposits, CDs, etc.[5]	46	41	25	30	.	.	6	4	94	−15	63	118
Broad money stock[6]	100	100	100	100	100	100	100	100	100	100	100	100

[1] Based on fourth-quarter to fourth-quarter changes. [2] For the United States, the consolidation adjustment in M_2 (i.e. currency and demand deposits held by savings institutions) has been deducted from demand deposits and from M_1. [3] For the United States, mainly ATS and NOW balances at all institutions and credit union share drafts. [4] For the United States, savings and small-denomination time deposits; for Japan, ordinary time and savings deposits; for Germany, savings deposits at statutory notice. [5] For the United States, repurchase agreements, overnight Euro-dollars and large time deposits; for Japan, CDs; for Germany, time deposits at less than four years. [6] For the United States and Germany, M_3; for Japan, M_2+CDs.

A transactions concept of money balances has intuitive appeal as a fulcrum of an aggregate-oriented policy and in some countries the demand for M_1 has traditionally been very stable. Another advantage seen in some quarters is that with a regulated (zero) yield on transaction balances the narrow money stock can in principle be influenced by the authorities even in the short run by action which brings about changes in interest rates. This attribute is no longer shared by the broader US aggregates, and the emergence of NOW accounts and money-market funds, which offer some cheque facilities yet bear money-market related interest rates, suggests that the interest elasticity of transaction money may decline and that ultimately it may also become impossible even to identify an M_1 aggregate in terms of it. Alternatively, the idea of controlling the money stock by direct controls on bank assets is not normally viewed with favour in the United States and the imposition of credit controls appears to be neither politically acceptable nor administratively feasible, except, perhaps, for a brief period in an emergency.

In the other country with an official objective for transaction money, Canada, the demand for traditional M_1 balances also fell unexpectedly last year. One influence seems to have been the introduction of cheque facilities on certain types of

non-M_1 interest-bearing accounts. M_1 is also highly interest-elastic in other countries; but the authorities in most of them clearly consider that an effort to meet a target for it would call for unacceptable movements in interest rates and exchange rates.

That shifts between different kinds of placements appear to be less of a problem in Japan and France, for example, may partly reflect the focus in these countries on broad aggregates. The asset and institutional coverage of the broad money stock varies widely from country to country: in some cases virtually all financial savings instruments except very long-term placements are included. It is not surprising that broad aggregates of this kind should display a comparatively stable relationship with nominal GNP, and little interest sensitivity. Hence — unless policy announcements have strong expectational effects — such aggregates can normally be controlled only by administrative measures or by influencing nominal GNP itself. The total level of intermediation can change, but such changes cannot be closely regulated. Broad aggregates which cover only the banking system can be distorted by shifts in the structure of financial intermediation, as could be seen last year in the case of sterling M_3 in the United Kingdom. This experience no doubt helps to explain the authorities' decision to have regard also to the much wider liquidity aggregate, PSL_2, in formulating policy in future.

The asset coverage of broad aggregates includes short-term market instruments in many countries, but in Italy Treasury bills, which were acquired on a very large scale by the non-bank public last year, are not included in M_2. In Germany central-bank money consists of currency and required bank reserve balances held in respect of all domestic deposit liabilities of up to four years (calculated at constant ratios) and can be regarded as indicative of a broad concept of money. Slow growth of this aggregate in 1981 was partly attributable to the increased issue by banks of short-term cash bonds, which are not subject to reserve requirements, and to repatriation of currency from abroad when the Deutsche Mark strengthened late in the year. Last year residents of some countries, including Germany and the United Kingdom, built up domestic currency balances abroad or foreign currency deposits which are not included in the broad aggregate.

Financial innovation. Another reason why shifts between placements have not been a major problem recently in Japan and in continental western European countries is that financial innovation seems to have proceeded at a fairly sedate pace outside the glare of publicity. Action by the authorities to discourage the development of new types of asset is one influence and in at least two countries the minimum denomination for time deposits which may be remunerated at market-related interest rates was raised with a view to limiting shifts out of low into high yield assets. The aim here, of course, was to limit pressures on the profitability of banks and to limit the rise in the interest rates charged on bank loans.

Financial innovation in the United States last year was a response not only to deregulation in a context of high interest rates but also to the retention of severe interest rate constraints for demand and savings deposits. In Germany all regulatory controls on interest rates applied by financial institutions were removed many years ago and banks typically pay market-related rates on quite small time deposits. The

table on page 85 reveals a large shift out of sight and savings deposits into time deposits in 1981, though the differential between the yields on savings deposits and money-market rates remained far smaller than it became in the United States.

That in many European countries the monetary authorities are in a position to apply uniform regulations to most financial intermediaries, old and new, or to all deposit-taking activities seems to help in keeping innovation within their purview and within the monetary statistics. Moreover, in countries with relatively small financial markets — especially in those where a few major banks have a predominant position — pressures to innovate may be less intense than in the United States. Institutions which carry out both banking and broking functions in universal banking systems may have little incentive to promote new high yield market instruments which attract funds otherwise held in savings accounts. It should be noted, however, that in the United States the high number of banking institutions is largely attributable to regulatory restrictions on interstate banking activities and on branching and that the institutional separation of deposit acceptance and security dealing is imposed by legislation.

Some of the difficulties associated with asset shifts in the United States are clearly transitional in nature. But further abrupt changes in placement practices and in payment systems may be in prospect. The Monetary Control Act of 1980 provides for the elimination by 1986 of interest rate ceilings on all types of placement other than demand deposits. Holdings of transaction balances may continue to decline in relation to GNP. While this process is going on the demand for money will be difficult to estimate. And even when the transition is completed the monetary aggregates may be less useful as indicators or intermediate targets than they have been in the past.

Monetary targeting: The rôle of operational flexibility.

In the early 1970s, with inflation having accelerated from the mid-1960s onwards, a number of countries adopted the practice of publishing monetary growth targets. They were motivated primarily by the fact that, under conditions of high and variable inflation, nominal interest rates had become a treacherous indicator of the true stance of monetary policy. The quantity of money, defined in whatever way bore the closest relationship with nominal GNP, was seen to provide a more reliable fulcrum for anti-inflationary policy. At the same time, it was hoped that the use of targets, by publicly committing the authorities to a certain course of action, would have beneficial announcement effects in helping to wind down inflationary expectations. In particular, the targets might encourage more rapid wage/price adjustment, thus reducing the costs of anti-inflationary policy in terms of loss of output and unemployment, and also lead governments themselves to adapt their fiscal policies to the needs of more stable money growth.

From the outset the stabilisation objectives of the policies were viewed in a medium to long-term context, with monetary authorities being aware that a certain amount of near-term operational flexibility would be needed in their efforts to achieve the targeted growth rates. Although adherence to a single target — and

hitting it — might maximise the expectational benefits, allowance had to be made for various contingencies and uncertainties which might warrant temporary departures from the target path or even changing targets at infrequent intervals.

There were several reasons for the perceived need for flexibility. Firstly, the use of monetary targets presupposed a stable demand for money — an assumption more valid for some countries than others but one which could not be relied upon to hold at all times in any of them. Secondly, rigid monetary targeting assumes that economic shocks, both domestic and external, originate on the demand side, are of moderate size and need not be "accommodated" by changes in existing targets. Thirdly, stringent monetary targeting alone is not a satisfactory substitute for a good policy mix, and there are limits to the extent to which it can be successfully pursued if necessary adjustments in fiscal and possibly incomes policy are not made. Finally, adherence to targets for the money stock laid down long in advance may not be feasible if price inflation fails to give way as expected so as to make room for renewed growth of real output.

On the whole, the experience of the 1970s and early 1980s seems to have demonstrated that this initial caution was justified. Large and unexpected shifts in the demand for money have occurred from time to time. While in some cases (particularly in the United States and the United Kingdom) these were of domestic origin, in others (Germany and Switzerland) they were caused by changes in international portfolio preferences related to currency expectations. With regard to shocks, most of those occurring in the 1970s were related to the supply side and there was the question, in particular, of how much the relative price changes associated with the two oil price crises should be accommodated by monetary expansion. Moreover, policy-mix problems have persisted in many countries and the time horizon envisaged in inflation control strategies has had to be changed.

In view of the difficulties which have been encountered in applying money stock control policies and of the uncertainty of the outlook for the world economy, the question arises whether in specific countries there is not an argument for more flexibility in the application of monetary policy. There can be no doubt that the overall strategy must remain geared to controlling inflation. More flexibility would merely imply placing less emphasis on the pursuit of rigid objectives for particular monetary aggregates over very short time periods and having more regard to other financial indicators — a course on which some countries have already embarked. In the United Kingdom, for instance, the Chancellor announced in his budget that the authorities were having regard to movements in a number of aggregates, as well as other factors, notably the exchange rate, and that to make this more explicit the monetary growth range for 1982–83 would apply to three aggregates, instead of one as in the past. In many other countries policies have long had elements of flexibility of this limited kind.

Published objectives for the monetary aggregates will no doubt continue to play a useful rôle in guiding the conduct of monetary policy and in signalling to the markets the earnestness of the authorities' intentions. The approach was adopted in the industrial countries after other kinds of policy had proved ineffective in preventing inflation from building up and it provides a useful framework for

stabilising expectations. Particularly in large countries such as the United States and Germany, there is clearly no other kind of monetary strategy which can be equally effective in present circumstances.

Uncertainties about the demand for money may, however, call for the use of fairly wide target ranges, for more frequent changes in the objectives or for focusing attention on developments in a wider range of monetary and credit aggregates. In one important respect these uncertainties have grown in recent years. In some countries, especially the United States, waves of financial innovation stimulated by high interest rates have made it much more difficult to predict the demand for money or even to identify appropriate aggregates for targeting purposes. Moreover, although control systems may be refined, monetary developments seem bound to remain very erratic over periods of less than about six months. In themselves such fluctuations probably have little effect on the economy but the effort to avoid them may contribute to instability in interest rates and exchange rates.

The disadvantages of relying solely on objectives for nominal interest rates in an inflationary environment are well known and real rates are difficult to measure. However, extreme volatility in interest rates can contribute to sharp fluctuations in economic activity and may lead to structural problems in the economy and in the financial system.

As an objective of monetary policy, exchange rates have been assuming increasing importance in recent years not only in smaller open economies but also in most of the larger ones. In Europe many countries now have formal or informal exchange rate commitments or goals — reflecting not only their trading interests but also the desire to limit imported inflation. Experience suggests that in nearly all countries, but particularly in economies with rigid wage-fixing arrangements, exchange rates have impacts on prices and costs which must be taken into account in formulating monetary policy. But, of course, to give greater weight to exchange rates as primary intermediate objectives presupposes a world in which at least one major country sets its monetary policy mainly with a view to stabilising domestic economic and financial conditions.

In the United States the introduction of new operating procedures for controlling the money stock implied in the introduction of bank reserve targeting in October 1979 reflected, among other things, the Federal Reserve's determination to restore credibility in its will to persist in the struggle against inflation. At the same time, the operational effect was to raise interest rates sharply to the more realistic levels needed to counter inflation, and rates of growth of the narrow money stock have since slowed down. Over time confidence in Federal Reserve policies has gradually built up. In one sense, therefore, the essential preconditions for a more flexible approach have by now been established. One of the most important issues here concerns the time horizon within which the monetary objectives are to be met. In the United States, where an effort is made to meet the targets over very short time spans, sensitive market reactions to excesses or shortfalls bring about sharp movements in interest rates. Nothing of this kind occurs in those European countries where the authorities seek to meet their monetary objectives over a longer

period and where erratic short-term monetary developments are not interpreted as reflecting on the authorities' will to counter inflation.

More operational flexibility in targeting procedures need not imply less steadiness of purpose in the conduct of monetary policy. In particular, a well-defined medium-term approach to meeting the targets, combined with efforts to avoid extreme fluctuations in interest rates and exchange rates, may be fully consistent with the achievement of effective monetary restraint and a continuing decline in price inflation. Indeed, such an approach may actually improve credibility and help the monetary authorities to continue with the resolute stance which will be needed for some time to consolidate the gains made so far.

V. INTERNATIONAL BALANCES OF PAYMENTS.

Highlights.

By the spring of 1982 international payments positions, both at the global level and in a number of major industrial countries, had changed markedly since the end of 1980, although the exact magnitude of some of these changes was not clear. The very large OPEC surplus had probably run off altogether, while in the Group of Ten countries and Switzerland the substantial aggregate deficit on current account had given way to a balanced position. However, in the developed countries outside the Group of Ten and in the non-oil developing countries, the aggregate current payments deficits appeared to have widened further.

That the erosion of the OPEC surplus and the accompanying improvement in the Group of Ten countries' current external position were more rapid than had been foreseen at the beginning of 1981 can be ascribed primarily to two factors, both arising out of the second oil shock. Firstly, there was a sharp increase in OPEC countries' import demand, which accounted for about half of the decline in their current payments surplus between 1980 and 1981. Secondly, the effects of the strong anti-inflationary policies which the industrial countries had adopted, to a large extent in response to the price effects of the second oil shock, made themselves increasingly felt. By the second half of 1981 aggregate domestic demand in the Group of Ten countries had ceased to expand, their demand for imports had slowed down sharply and world trade had begun to shrink in real terms. Moreover, the continuation of weak domestic demand and high interest rates in the major industrial countries was responsible for the increase in the aggregate current-account deficits in the other two main groups of oil-importing countries, more than offsetting the benefits of reduced oil import payments.

Within the Group of Ten the degree of adjustment varied greatly in 1981, under the influence of divergent trends in domestic demand movements and in relative trade prices and, not least, because of large changes in international competitiveness in recent years. With the exception of Belgium and Canada, all countries in the group recorded more favourable current payments balances last year. In absolute terms these improvements were largest in Japan, the United Kingdom, Germany and the Netherlands, but in some of the other countries, too, they were quite substantial in relation to the size of their economies.

In spite of the persistence of large current payments deficits in the rest of the oil-importing world, their financing did not generally present a major problem last year. International financial markets continued to provide the bulk of these countries' requirements, with Group of Ten countries re-assuming the rôle of principal net suppliers of funds. However, certain countries in the developing world and in eastern Europe faced borrowing constraints and had to adopt adjustment measures.

The prospects for further adjustments in global payments balances depend to a significant extent on the future course of economic activity in the major industrial countries. While the outlook is for some upturn in domestic demand in these countries, which would tend to reverse in part last year's changes in the world structure of current-account balances, there is little doubt that any economic recovery in the Group of Ten will be relatively modest. Outside the Group of Ten, therefore, export-led improvements in current-account positions seem likely to be limited, and certain countries with large deficits will need to pursue active adjustment policies.

The global pattern of balances of payments.

Current-account developments.

The world balance-of-payments picture for 1981 on current account is clear in its outline, but unclear as regards the exact magnitudes of the changes that occurred. The main feature was a large decline in the OPEC countries' aggregate current-account surplus and in the aggregate deficit of the rest of the world. However, available statistics show a decrease in the OPEC surplus that was nearly twice as large as the $24 billion fall in the aggregate deficit of the rest of the world. The counterpart to the decline in the OPEC surplus was entirely concentrated in the Group of Ten countries and Switzerland, where an improvement of $43 billion in the current-account balance virtually eliminated the deficit that had been recorded in 1980. In the rest of the developed world, however, and in the non-oil developing countries the aggregate current-account deficits are estimated to have increased in each group by $10 billion in 1981. Consequently, on the basis of available data, the excess of current-account payments deficits over surpluses, which is a constant feature of world balance-of-payments statistics, tripled between 1980 and 1981, from around $15 to 45 billion.

In the *OPEC countries* virtually the whole of the fall in the current-account surplus, from $114 billion to $61 billion, originated in the trade account, where declining export earnings and higher import spending contributed in equal parts to a $48 billion reduction in the trade surplus. The dominant forces behind this development were changes in the volumes of imports and exports which caused the trade balance, at constant 1980 prices, to deteriorate by $84 billion and which were only partly offset by a terms-of-trade gain of 17 per cent. On the import side, volume growth accelerated to 23 per cent., nearly twice the 1980 rate, reflecting not only oil-price-induced income effects but probably also a response to the 4 per cent. reduction in import unit values. On the export side, the $24 billion decline in earnings would have been twice as large had the unprecedented 18 per cent. drop in export volume — sales of crude oil fell by about 4½ million barrels a day to 21 mb/d — not been partly offset by a 12 per cent. average increase in export prices. Most of the decline in export volume came from a cutback of approximately 2.3 mb/d in oil consumption (including consumers' stocks) in the OECD area. In addition, oil production in non-OPEC developing countries is estimated to have expanded by 0.5 mb/d and oil stocks held by industry in the OECD area to have been drawn down by 0.2 mb/d.

International current-account balances, 1979–81.[1]

Countries and areas	Trade balance (f.o.b.)			Invisibles balance			Current balance		
	1979	1980	1981	1979	1980	1981	1979	1980	1981
	in billions of US dollars								
BLEU*	− 4.7[2]	− 5.5[2]	− 5.7[2]	1.7	0.4	0.4	− 3.0	− 5.1	− 5.3
Canada*	4.0	7.1	5.8	− 8.2	− 8.7	−11.3	− 4.2	− 1.6	− 5.5
France	− 2.3	−12.4	− 8.9	3.5	4.5	1.4	1.2	− 7.9	− 7.5
Germany	14.5	7.3	15.2	−20.5	−23.5	−22.8	− 6.0	−16.2	− 7.6
Italy*	− 1.1	−16.4	−10.9	6.4	6.7	2.2	5.3	− 9.7	− 8.7
Japan*	1.8	2.1	20.0	−10.6	−12.8	−15.2	− 8.8	−10.7	4.8
Netherlands*	− 1.4	− 1.2	4.3	− 0.6	− 1.4	− 0.9	− 2.0	− 2.6	3.4
Sweden	0.8	− 0.4	1.5	− 3.1	− 4.1	− 4.5	− 2.3	− 4.5	− 3.0
Switzerland*	− 2.5	− 5.9	− 3.5	4.9	5.4	5.8	2.4	− 0.5	2.3
United Kingdom	− 7.2	2.9	9.4	5.4	4.5	6.8	− 1.8	7.4	16.2
United States	−27.3	−25.3	−27.8	28.7	29.0	34.4	1.4	3.7	6.6
Group of Ten countries and Switzerland	*−25.4*	*−47.7*	*− 0.6*	*7.6*	*0.0*	*− 3.7*	*−17.8*	*−47.7*	*− 4.3*
Australia	2.4	1.5	− 2.4	− 5.2	− 5.5	− 5.9	− 2.8	− 4.0	− 8.3
Austria*	− 4.1	− 6.2	− 4.4	3.0	4.5	3.0	− 1.1	− 1.7	− 1.4
Denmark*	− 3.1	− 1.8	− 0.9	0.2	− 0.4	− 0.9	− 2.9	− 2.2	− 1.8
Finland	0.4	− 0.5	0.7	− 0.6	− 0.9	− 1.1	− 0.2	− 1.4	− 0.4
Greece*	− 5.0	− 5.7	− 5.5	3.1	3.5	3.1	− 1.9	− 2.2	− 2.4
Ireland*	− 2.3	− 2.1	− 2.2	0.8	0.6	0.1	− 1.5	− 1.5	− 2.1
Israel	− 3.4	− 3.4	− 3.7	2.1	2.4	2.2	− 1.3	− 1.0	− 1.5
New Zealand*	0.8	0.8	0.3	− 1.3	− 1.5	− 1.4	− 0.5	− 0.7	− 1.1
Norway	0.2	2.0	3.1	− 1.2	− 0.9	− 0.7	− 1.0	1.1	2.4
Portugal	− 2.6	− 4.0	− 4.7	2.5	2.9	2.1	− 0.1	− 1.1	− 2.6
South Africa*	6.0	7.1	− 0.7	− 2.5	− 3.6	− 3.8	3.5	3.5	− 4.5
Spain*	− 6.0	−11.6	−10.1	6.8	6.6	5.1	0.8	− 5.0	− 5.0
Turkey	− 2.2	− 4.1	− 3.1	1.0	0.9	1.0	− 1.2	− 3.2	− 2.1
Yugoslavia*	− 6.1	− 4.8	− 3.2	2.4	2.4	2.4	− 3.7	− 2.4	− 0.8
Other developed countries	*−25.0*	*−32.8*	*−36.8*	*11.1*	*11.0*	*5.2*	*−13.9*	*−21.8*	*−31.6*
Total developed countries	*−50.4*	*−80.5*	*−37.4*	*18.7*	*11.0*	*1.5*	*−31.7*	*−69.5*	*−35.9*
OPEC countries[3]	107	168	120	−46	−54	−59	61	114	61
Other developing countries	−30	−45	−53	− 7	−14	−16	−37	−59	−69
Total developing countries	*77*	*123*	*67*	*−53*	*−68*	*−75*	*24*	*55*	*− 8*
Centrally planned economies[4]	5	6	11	.	.	.	.	.	.

* Invisibles balances for these countries exclude undistributed income from direct investment.

[1] On a transactions basis. [2] Imports and exports partly c.i.f. [3] For country composition see table on page 94. [4] Bulgaria, People's Republic of China, Czechoslovakia, German Democratic Republic, Hungary, Poland, Rumania and the USSR; based on customs data; partly estimated, including estimated gold exports of the USSR.

Nearly all of the 1981 decline in the OPEC surplus took place during the second half of the year, when it is estimated to have fallen by two-thirds to a seasonally adjusted annual rate of $30 billion. The terms-of-trade gain for the year was concentrated in the first six months, when oil prices were still rising while

Changes in the components of the OPEC countries' current-account balance, 1980–81.

Items	All OPEC countries		Low absorbers[1]		High absorbers[2]	
	1980	1981	1980	1981	1980	1981
	in billions of US dollars					
Current-account balance	53	−53	50	−15	3	−38
of which: net invisibles and transfers	− 8	− 5	− 6	− 3	− 2	− 2
trade balance	61	−48	56	−12	5	−36
of which: exports	90	−24	66	1	24	−25
(volume changes)[3]	*(−30)*	*(−54)*	*(10)*	*(−21)*	*(−20)*	*(−33)*
(price changes)	*(120)*	*(30)*	*(76)*	*(22)*	*(44)*	*(8)*
imports[4]	−29	−24	−10	−13	−19	−11
(volume changes)[3]	*(−14)*	*(−30)*	*(− 3)*	*(−15)*	*(−12)*	*(−15)*
(price changes)	*(−15)*	*(6)*	*(− 7)*	*(2)*	*(− 7)*	*(4)*

[1] Kuwait, Libya, Oman, Qatar, Saudi Arabia and United Arab Emirates. [2] Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Nigeria and Venezuela. [3] The volume effects have been calculated by applying estimated changes in volume to the previous year's export and import values; the differences between these calculated volume effects and the changes in export and import values are considered to reflect primarily price effects. [4] A minus sign indicates an increase in imports.

import prices were weakening as a result of the strength of the dollar. In the second half of the year the adverse volume trend of exports accelerated as the earlier build-up of oil stocks in the OECD area gave way to sizable destocking.

1981 saw a further polarisation of the balances of payments of OPEC countries with high and low import absorptive capacities. While the aggregate current payments surplus of the "low absorbers", at $77 billion, was only $15 billion less than in 1980, the current-account balance of the "high absorbers" is estimated to have swung from a surplus of $22 billion in 1980 to a deficit of $16 billion in 1981. This occurred, however, mainly for reasons unrelated to the two groups' ability to absorb imports. In fact, both groups' imports increased in value by about the same amount, with considerably higher volume growth being recorded by the low absorbers. The major differences were on the export side, where the low absorbers maintained the 1980 level of earnings while the high absorbers experienced a $25 billion decline owing mainly to cutbacks in the oil production of Iran and Iraq. Their combined output of oil amounted to only 2.2 mb/d in 1981, compared with 7.8 mb/d three years earlier.

The only counterpart to the decline in the OPEC surplus was found in the *Group of Ten countries and Switzerland*, whose aggregate current-account deficit fell from $48 billion in 1980 to $4 billion in 1981, with all of the improvement originating in the trade account. The following table illustrates the principal factors behind the large shift in the trade account of the Group of Ten countries (measured on the basis of customs data) that occurred in 1981, as well as in the two preceding years. The net oil deficit, after rising in 1979 and 1980 by a total of $120 billion, declined in 1981 by $9 billion, while the group's traditional surplus on non-oil trade, after falling by $2 billion in 1979, went up by $74 billion in the following two years. These developments can be traced to the interaction of three influences: firstly, the average increases in oil prices of 40 and 60 per cent. respectively in 1979 and 1980, which caused the surge in the group's net oil deficit during those two years;

secondly, the anti-inflationary policies adopted by the Group of Ten countries in response to the second oil shock, which contributed not only to the large rise in the group's non-oil trade surplus in 1980 and 1981 but also to the declines of 12 and 13 per cent. respectively in the volume of their oil imports in these two years; thirdly, the buoyant growth of the OPEC market, which was the other major reason for the expansion of the group's non-oil trade surplus in 1980 and 1981.

Estimated changes in components of the aggregate trade balance of the Group of Ten countries and Switzerland, 1979–81.*

Year	Changes in						
	trade balance	net oil payments			non-oil trade balances		
		total	vis-à-vis OPEC countries	vis-à-vis non-OPEC countries	total	vis-à-vis OPEC countries	vis-à-vis non-OPEC countries
	in billions of US dollars (– = increase in deficit/decrease in surplus)						
1979	–53	–51	–38	–13	–2	–8	6
1980	–33	–69	–55	–14	36	16	20
1981	47	9	14	– 5	38	16	22

* Based on customs data; exports f.o.b. and imports c.i.f.

The biggest changes in the Group of Ten countries' trade account during 1979–81 were, of course, vis-à-vis the OPEC countries. At the same time, there were two other noteworthy changes in their trade balance. The first of these was a shift in the pattern of their net oil payments. In each of the last three years net purchases of oil from non-OPEC countries outside the Group of Ten have risen, by a cumulative amount of $32 billion. Moreover, the 1981 increase of $5 billion in such purchases was accompanied by a $14 billion decline in the net oil deficit with OPEC countries. This seems to suggest that under recent conditions of over-supply in the oil market it is OPEC countries that have increasingly been playing the rôle of residual suppliers. Secondly, despite the further increase in net oil payments to outside-area non-OPEC countries in 1981, the Group of Ten countries' aggregate trade surplus with these countries nearly tripled between 1980 and 1981. This explains, at least to some extent, why the current payments deficits of the other developed countries and of the non-oil developing countries have remained so stubbornly high in the face of the decline in the OPEC surplus.

In the *developed countries outside the Group of Ten and Switzerland* the aggregate current payments deficit widened in 1981, as is shown in the table on page 93, by $10 to 32 billion, reflecting both a deterioration in the trade account and a decline in the traditional surplus on invisible transactions. The deficit on merchandise trade increased last year to almost $37 billion owing to weak export market conditions and a further decline in the terms of trade. Within the group current-account trends diverged considerably, mainly in response to differing domestic policy stances. The impact of a high level of economic activity, reinforced by a decline in gold export earnings, was the principal reason for the $7.8 billion deterioration in South Africa's trade account, all of which was reflected in last year's turn-round on current account to a $4.5 billion deficit. In Australia the current

payments deficit more than doubled to $8.3 billion, primarily because strong domestic demand caused the trade balance to swing from a $1.5 billion surplus in 1980 to a $2.4 billion deficit in 1981. In Ireland and Portugal, too, the current-account deficits increased significantly last year, reaching 13 and 11 per cent., respectively, of gross domestic product. On the other hand, there was a sizable increase, from $1.1 to 2.4 billion, in Norway's current-account surplus, essentially reflecting higher oil export earnings and depressed domestic economic conditions. Turkey succeeded last year in cutting its current-account deficit by $1.1 to 2.1 billion. There was an exceptional 60 per cent. rise in the volume of exports, brought about by the combination of a competitive exchange rate, tight domestic demand management and exceptional factors. In addition, Yugoslavia, Finland, Denmark and Austria recorded improvements in their current accounts, mainly as a result of cyclically induced cutbacks in import volumes.

In the *non-oil developing countries* the current payments deficit is estimated to have risen in 1981 by $10 billion to a new record level of $69 billion. Mainly because of high interest rates net invisibles payments went up by $2 billion, but the bulk of the deterioration was accounted for by a rise in net merchandise imports. The basic reason for the increase in the trade deficit, from $45 billion in 1980 to $53 billion in 1981, was a 5 per cent. fall in the terms of trade, the fourth consecutive annual decline. Growth in export volume, which had amounted to 8 per cent. in 1980, slowed down to 7 per cent., while real imports continued to expand at the previous year's rate of 6 per cent.

The worsening in the aggregate trade balance of these countries was more than accounted for by a significant decline in their surplus on trade in non-fuel primary products. This reflected the sharp fall in primary product prices brought about by weak market conditions in the major industrial countries. During the second half of 1981 non-fuel primary product prices were in US dollar terms on average 21 per cent. below their level in the corresponding period of 1980. Partly offsetting this development, the group's net oil import bill declined last year, despite an 11 per cent. rise in the average price of crude oil, by perhaps as much as $5–7 billion. Rapidly expanding indigenous production of oil enabled the group to reduce the volume of its oil imports by roughly one-third. In addition, the rise in the non-oil developing countries' structural deficit on trade in manufactured products — it worsened by about $30 billion between 1978 and 1980 — appears to have come to a halt in 1981.

Partly as a consequence of these divergent movements in major components of the aggregate trade balance, individual groups of non-oil developing countries experienced rather diverse trade-account developments in 1981. In the first place, those developing non-OPEC countries which are net exporters of oil or which are at least close to self-sufficiency in oil saw their aggregate trade account deteriorate from near-balance in 1980 to a deficit of perhaps $8 billion. Increased export earnings were more than offset by a substantial rise in import volume. The largest oil producer in this group is Mexico, whose oil export proceeds were boosted last year by nearly one-half to some $14 billion but whose imports, mainly in support of a large-scale domestic investment programme, went up by around 25 per cent. Secondly, those countries which in recent years have built up sizable capacities for

exporting manufactured goods succeeded in gaining export market shares last year. Their total export volume rose by an estimated 13 per cent., compared with growth in world trade in manufactured products of only 3 per cent., and their combined trade deficit may have fallen by about $4 billion in 1981. Nonetheless, several of these countries were faced with precarious external positions last year; Brazil, for example, had to introduce a domestic stabilisation programme which restrained its imports. Lastly, it was in the large number of non-oil developing countries whose export earnings are derived mainly from sales of non-fuel primary products that the most unfavourable trade developments were recorded last year. The fall in the prices of their exports resulted in a further deterioration in their terms of trade, bringing the cumulative decline since 1977 to more than 20 per cent. Indeed, these primary producing countries have accounted for over two-thirds of the $45 billion deterioration in the non-oil developing countries' aggregate trade balance since 1977.

The overall merchandise trade surplus of the *centrally planned economies* is estimated to have risen last year from $6 to 11 billion. Much of the improvement was attributable to the People's Republic of China, where the surplus jumped from less than $½ to around 4 billion. In the countries of eastern Europe (including the USSR), the trade surplus is estimated to have risen by $1 to about 7 billion, the increase being more than accounted for by an expansion in the Soviet Union's gold sales.

Estimates for the current-account balance of the eastern European countries with western developed countries indicate a deficit of $6 billion last year, about $½ billion lower than the 1980 level. The group's merchandise trade balance improved by about $1½ billion but there was a deterioration in the invisibles account, as net payments increased from $5 to over 6 billion. The Soviet Union's current payments surplus with western developed countries is estimated to have remained at almost $2 billion. Sharply increased gold sales more than counterbalanced a substantial deterioration in the rest of the trade account, caused in part by a rise in grain imports. The combined current-account deficit of the other countries in the group is estimated to have been fractionally lower at just under $8 billion. A small improvement on merchandise trade was almost cancelled out by a further worsening in the invisibles account as a result of higher debt interest payments. Among individual countries, trade performances were mixed, mainly reflecting varying degrees of adjustment, which in some countries was prompted by the limited availability of foreign credit.

Financing of global balance-of-payments disequilibria.

Both the rapid decline in their combined current payments surplus and the increased polarisation of the external positions of countries with a low and a high absorptive capacity were mirrored clearly in *OPEC countries'* investment behaviour in 1981. As is shown in the table overleaf, about two-thirds of identified new OPEC foreign investment took place in the first half of the year, when the aggregate current-account surplus was running at an annual rate of around $90 billion. By the last quarter, when the OPEC surplus had probably almost disappeared, total identifiable new placements of OPEC funds had dwindled to less than $9 billion.

Estimated deployment of the OPEC countries' investible surplus, 1980–81.[1]

Items	1980	1981		
		year	first half	second half
	in billions of US dollars			
Identified investible surplus	86.5	53.9	33.9	20.0
Short-term investments	42.6	3.2	7.2	−4.0
of which:				
in the United States[2]	*0.3*	*−2.6*	*−0.4*	*−2.2*
in the United Kingdom[2]	*16.3*	*8.4*	*5.7*	*2.7*
(of which: Euro-currency deposits)	*(14.8)*	*(7.9)*	*(4.9)*	*(3.0)*
in other industrial countries[3]	*26.2*	*−2.6*	*1.9*	*−4.6*
Long-term investments	43.9	50.7	26.7	24.0
of which:				
in the United States	*13.8*	*18.7*	*7.8*	*10.9*
in the United Kingdom	*2.5*	*0.6*	*0.3*	*0.3*
in other industrial countries	*17.0*	*21.7*	*13.3*	*8.4*
with international institutions[4]	*4.9*	*2.5*	*1.3*	*1.2*
in developing countries	*6.7*	*7.2*	*4.0*	*3.2*

[1] The difference between the current-account position and identified foreign investment reflects, apart from recording errors, borrowing (net of repayments) by OPEC countries, direct investment inflows, trade credits and other unidentified capital flows. [2] Includes bank deposits and money-market placements. [3] Bank deposits only. [4] IBRD and IMF.

Source: Bank of England.

The pronounced shift towards longer-term investment which had accompanied the diminution of the OPEC surplus after the first oil shock repeated itself last year. The share of short-term placements in total identified new investment dropped from about one-half in 1980 to no more than 6 per cent. in 1981. Identified additions to OPEC deposits with international banks declined between the two years from $41.6 to only 3.7 billion. This shift in the term structure of OPEC investment was related partly to the differing liquidity preferences of low and high absorbers and partly to the sharp deterioration in the high absorbers' balance-of-payments positions. Available data indicate that those countries in the Middle East which are regarded as low absorbers continued to build up their deposits with banks. Adjusted for exchange-rate-induced valuation effects, their identified deposits rose by nearly $20 billion in 1981, which was $6 billion more than in the preceding year. OPEC high absorbers in this region, on the other hand, drew down their bank deposits by $11 billion, following an increase of $16 billion in 1980. Finally, OPEC countries' regional preferences as regards the investment of short-term funds changed significantly last year, presumably reflecting both the strength of the dollar and traditional market preferences of the few remaining surplus countries. New short-term placements by OPEC countries as a group were made only in the United Kingdom, and almost exclusively in the form of Euro-dollar deposits. In contrast, other industrial countries, which had received the lion's share of new OPEC short-term investment in 1980, experienced a $5.2 billion withdrawal of funds last year.

The financing of payments imbalances in the *Group of Ten countries and Switzerland* is discussed in greater detail in the following section. For the group as a whole estimated external financing, at $37 billion, was only about $10 billion less than in 1980, despite the $43 billion reduction in the aggregate current-account deficit. This was because the improvement on current account was, to a large extent,

offset by a change in the estimated balance of autonomous capital movements (the basis on which these capital movements have been distinguished from capital movements that were in the nature of financing items is described on pages 107–108) from a balanced position to a net outflow of $33 billion. The main reason for the change in net aggregate autonomous capital movements was a sharp rise in net banking outflows from the Group of Ten countries to the rest of the world, which was related to the drying-up of inflows from OPEC countries into Group of Ten commercial banks. In addition, and also as a result of the decline in the OPEC surplus, the shift in the balance of autonomous capital movements partly reflected the fact that official external borrowing for balance-of-payments purposes last year was to a considerable extent financed with funds from within the Group of Ten area.

Total capital inflows of $28½ billion into *the developed countries outside the Group of Ten and Switzerland* fell short of last year's current payments deficit, so that the group's total official reserves (excluding SDR allocations and changes in gold reserves) declined by $3 billion, in contrast with a $3 billion build-up of reserves in 1980. As in previous years, a major part of capital inflows represented net borrowing from the international banking sector, which, adjusted for exchange rate effects, amounted to $13.5 billion, or $4 billion more than in 1980. New funds raised through sales of international bonds totalled $5.8 billion, virtually the same as in the year before. In addition, while in 1980 the group as a whole slightly reduced its net indebtedness vis-à-vis the International Monetary Fund, there was net recourse to IMF credit of $0.5 billion in 1981. This reflected net borrowing of $0.4 and 0.6 billion by Turkey and Yugoslavia respectively, while several other countries in the group made net repayments.

In the group of *non-oil developing countries* the current payments deficit was primarily financed from the same three sources as in the past. Net direct investment inflows may have risen by $1½ billion to a total of $9 billion; net receipts from concessionary loans are estimated to have increased by $1½ to 12 billion; and net borrowing from BIS reporting banks, adjusted for exchange rate effects, was $31 billion, as compared with $34 billion in 1980. In addition, net drawings by non-oil developing countries on the International Monetary Fund, reflecting the introduction in late 1980 of the Fund's policy of enlarged access, totalled about $5½ billion last year, about $2 billion more than in 1980. Finally, total official reserves, excluding SDR allocations and changes in gold reserves, remained virtually unchanged.

Balance-of-payments developments in the Group of Ten countries and Switzerland.

Adjustments in current payments positions.

The very large improvement in the aggregate current-account balance of payments of the Group of Ten countries plus Switzerland between 1980 and 1981 was widely spread among the individual countries of the group. With the exception of Belgium and Canada, all members of the group recorded more favourable current-account balances in 1981. However, $39 billion, or 90 per cent., of the

decline in the group's aggregate current payments deficit was accounted for by four countries — Japan, the United Kingdom, Germany and the Netherlands. Improvements in other Group of Ten countries' current external accounts, though much smaller in dollar terms than those which occurred in the four countries mentioned above, were nevertheless in some instances quite large in relation to gross national product.

At the same time, there were some pronounced divergences in current-account movements during the course of the year. In the United Kingdom and the United States the surpluses on current external payments declined markedly between the two halves of 1981, while in France the deficit widened significantly. In three other countries the current account strengthened substantially during the year. Between the first and second halves of 1981 the Japanese surplus more than doubled and the Italian deficit almost halved; in Germany by the final quarter the current account had swung into surplus.

Within the overall decline in the aggregate current-account deficit, there were some marked differences in the evolution of Group of Ten countries' current accounts between 1980 and 1981 which reflected divergent developments in three main components — the net oil balance, the non-oil trade balance and the invisibles balance (including unilateral transfers).

Changes in individual countries' net oil balances were less divergent last year than movements in the other current-account components. As the "law of one price" generally applies to crude oil and petroleum products, differences in the evolution of net oil balances last year originated primarily in different changes in the volume of oil imports, owing partly to conjunctural factors and partly to short-run oil inventory policies. Sizable cutbacks in imports helped to lower markedly net oil payments in Germany and France, while in some other countries the reduction in oil import volume fell short of the 12 per cent. rise in the average price of oil in 1981. However, the largest change was in the net oil balance of the United Kingdom, where higher net exports of oil contributed roughly $5 billion to the improvement on current account.

The invisibles balances were most prominently influenced last year by shifts in net investment income flows. These shifts resulted both from stock changes in countries' net foreign investment positions and from upward movements in the level of interest rates. While the United States and the United Kingdom benefited from increased net investment income, recording improvements on invisibles balances of $5.4 and 2.3 billion respectively, Italy, France, Japan and Canada were all faced with a deterioration on invisibles account arising mainly from adverse net investment income flows.

The largest divergences in the evolution of countries' current external accounts, however, occurred in their non-oil trade balances. These divergences were in part attributable to individual countries' varying success in export markets outside the Group of Ten, especially in the OPEC market which was the most buoyantly growing outlet for industrial countries' exports. More importantly, however, the differences in non-oil trade performances were a reflection of the fact that more than half of the total foreign trade of the Group of Ten countries and Switzerland takes

place between members of the group themselves, with the consequence that non-oil trade balances respond sensitively to shifts in relative demand pressures and/or in international competitive positions between individual countries of the group.

The following table attempts to provide some rough indications of the impact that changes in terms of trade, in relative levels of economic activity and in "other factors" have had on individual Group of Ten countries' non-oil trade balances during the last two years. The "other factors" include principally the effects of changes in international competitive positions in terms of costs and prices, i.e. in real effective exchange rates, as well as the influence of non-price factors such as the availability, quality and product structure of exports. In estimating the quantitative effect which the three determinants may have had on trade-balance changes the following method was used. Firstly, changes in non-oil trade balances were divided into two components, representing the contributions of volume movements and of variations in relative trade prices. The terms-of-trade effect is shown separately in the table. Secondly, the influence on real trade balances of relative cyclical positions was estimated independently, taking into account both the effect of each country's export market growth on the volume of its exports and the impact of changes in total domestic demand on its real imports. Finally, those changes in actual trade balances which were not accounted for by terms-of-trade movements or relative demand pressures were attributed to the "other factors" mentioned above, with this item also including estimation discrepancies.

Estimated components of changes in non-oil trade balances in the Group of Ten countries and Switzerland, 1980–81.[1]

Countries	1980				1981			
	Changes in non-oil trade balance	Due to changes in			Changes in non-oil trade balance	Due to changes in		
		terms of trade	cyclical position	other factors[2]		terms of trade	cyclical position	other factors[2]
	in billions of US dollars							
Belgium	− 1½	− 1½	1½	− 1½	1½	− 2	2½	1
Canada	5	2	2	1	− 0	0	2	− 2
France	− 6	4½	3½	−14	2½	1½	1½	− ½
Germany	½	− ½	6½	− 5½	4	− 8½	10	2½
Italy	− 7½	1	− 3	− 5½	8	− 5½	½	13
Japan	16½	− 5	5	16½	20	8½	9½	2
Netherlands	2	2	4	− 4	5	1	5½	− 1½
Sweden	− ½	1	½	− 2	1½	½	2	− 1
Switzerland	− 2½[3]	− 1½	− ½	− ½	1[3]	0	1½	− ½
United Kingdom	3	4	10	−11	3½	2	7	− 5½
United States	22½	− 5½	12½	15½	− 8	16½	4½	−29

[1] Based on customs data; exports f.o.b. and imports c.i.f. [2] Includes also the residual arising from second order terms and initial trade-account imbalances. [3] Excludes erratic items.

Several features can be distinguished in the adjustment of individual Group of Ten countries' non-oil trade balances during the last two years. Firstly, in some instances exchange rate movements appear to have exercised, through short-term J-curve effects, a significant influence. For example, last year's average effective exchange rate appreciations of the US dollar and the yen (by 12½ and 13 per cent. respectively) and depreciation of the Deutsche Mark (by 7½ per cent.) strongly affected the non-oil terms of trade of the United States, Japan and Germany and

brought about sizable price effects on the trade balance which were significantly different from those experienced in 1980.

Secondly, with the exception of Italy and Switzerland in 1980, when sharp increases in total domestic demand produced adverse cyclical effects in these countries, all Group of Ten countries experienced improvements in their real trade balances as a result of cyclical effects in both 1980 and 1981. This was attributable to the fact that in these years economic activity was generally more buoyant outside the Group of Ten area. In addition, however, changes in relative demand pressures in individual Group of Ten countries exerted a powerful impact on the distribution of non-oil trade balances within the group. For example, the recovery of domestic demand in the United States in 1981 reduced the positive contribution of cyclical volume effects on the US non-oil trade balance to well below the 1980 level and at the same time contributed to a very favourable volume response in the non-oil trade balance of Japan, which holds the second largest export share of the US market. On the other hand, the large volume gains on non-oil trade in both 1980 and 1981 resulting from cyclical factors in the United Kingdom, the Netherlands and Germany were primarily a reflection of the sluggishness of domestic demand in these countries.

Thirdly, the figures in the table suggest that an important — in some instances the most important — influence on changes in non-oil trade balances may have been exerted by the "other factors" — perhaps the most notable of which have been movements in real effective exchange rates. While the method used here for isolating different influences on non-oil trade balances can provide no more than indications of orders of magnitude, it appears from the table that the size and, even more, the direction of the changes between 1980 and 1981 that are attributed to "other factors" corresponded broadly to movements in individual countries' international competitive positions that had taken place somewhat earlier. This is particularly true for two major countries: the United States, where a large swing in the contribution of "other factors" to the change in the trade balance followed with a lag the movements in the dollar's real effective exchange rate; and the United Kingdom, which suffered both in 1980 and 1981 from the effects of the deterioration in its international competitive position in the preceding years. In Japan, too, where the favourable change in the residual became much smaller in 1981, competitiveness had weakened in 1980. Conversely, in Italy and in Germany the adverse influence of "other factors" on the change in the trade balance recorded in 1980 disappeared last year, following the earlier depreciations of the two countries' real effective exchange rates. The effects of competitiveness were, however, less strong in some of the smaller countries. In Sweden and Canada this may in part be attributed to the relatively large shares of these countries' exports accounted for by primary products, which tend to be much less responsive to movements in real effective exchange rates. Belgium's weak reaction to a steady improvement in its competitive position since 1977 may be ascribed to an export structure which is relatively heavily oriented towards declining markets.

Of all countries in the Group of Ten area, *Japan* recorded the largest change on current account last year, with the balance swinging from a deficit of $10.7 billion in 1980 to a surplus of $4.8 billion. This was more than accounted for by a

$17.9 billion expansion in net exports, all of it in the form of non-oil trade. The traditional deficit on invisible transactions, including transfers, widened by $2.4 billion, owing mainly to a higher deficit on fees and royalties and a deterioration on net investment income account.

The sharp rise in the trade surplus to $20 billion last year was due to favourable trends in both relative trade prices and volumes. The terms of trade improved by 2½ per cent., and reinforced the strong effects of a 10½ per cent. expansion in the volume of exports and a cutback in real imports of 2 per cent. The quantity of imported mineral fuel declined by 6½ per cent., while non-oil imports expanded by about 2½ per cent. in real terms. The largest export gains in US dollar terms were recorded in sales to the Middle East (+23½ per cent.), the United States (+23 per cent.) and the United Kingdom (+26½ per cent.), whereas exports to other countries in western Europe rose by only 7 per cent. On the import side, a very large increase was registered in purchases from the United Kingdom (+39½ per cent.), while imports from other western European countries expanded by 4 per cent.

The surplus on Japan's trade account peaked in the third quarter of 1981 when, on a seasonally adjusted basis, it reached $6.3 billion. In the fourth quarter the surplus fell to $5 billion, the volume of exports declining by 4½ per cent. while that of imports grew by 5 per cent. In the first three months of 1982 the surplus on trade account declined further to $3.9 billion. However, as net invisible payments also fell in this period, the seasonally adjusted current account showed a surplus of $0.9 billion, only marginally less than in the preceding quarter.

In the *United Kingdom* the current-account surplus is estimated to have reached the record level of $16.2 billion in 1981. This represented an increase of $8.8 billion over 1980, three-quarters of which occurred in visible trade. On invisibles account, a rise of $2.3 billion in net receipts was entirely attributable to the re-emergence of a surplus on investment income account. Most of this improvement resulted from an increase in UK banks' net interest receipts from borrowing and lending in foreign currencies and from a decline in foreign oil companies' earnings from their UK operations.

The official estimate of the current-account balance for 1981 implies a trade surplus of a little over $9 billion, compared with one of $2.8 billion in 1980. A large part of the improvement resulted from the United Kingdom's having become a significant net exporter of oil. Customs figures indicate that the oil trade balance shifted from about equilibrium in 1980 to a surplus of over $5 billion and that the non-oil trade deficit declined by $3.6 to 3.9 billion.

The precise evolution of the trade balance during the course of 1981 is obscured both by the absence of several months' statistics, owing to a civil service dispute, and by changes in the method of recording exports. However, it is clear that the trade surplus declined quite sharply during the course of the year. A comparison of seasonally adjusted trade data on a balance-of-payments basis for the fourth quarter of 1981 with those of the first quarter shows that while the oil trade surplus fell by $0.5 billion there was a much stronger deterioration in the non-oil trade balance from a surplus of $2 billion to a deficit of $0.3 billion. The level of

both non-oil exports and imports had been abnormally low in the first quarter of 1981, but both exports and imports picked up later in the year. By the fourth quarter the volume (excluding erratic items) of non-oil exports was 10½ per cent. higher than in the first three months whereas that of non-oil imports expanded by 24 per cent. between the two periods, partly as a result of the slower reduction of stocks from mid-year onwards. Looking at non-oil trade volume developments over a longer period, imports increased by over 8 per cent. between early 1980 and the final quarter of 1981, despite the fall in domestic demand, while exports fell by 1½ per cent. These movements must partly reflect a loss of international competitiveness.

Owing largely to a decline in net exports of oil the seasonally adjusted trade surplus amounted to only $0.1 billion in the first two months of 1982, compared with $0.5 billion in the preceding two months. On current account the surplus for the two months of this year is estimated at $1.9 billion.

In *Germany* current-account developments in 1981 were dominated by changes in the trade balance. Nearly all of the $8.6 billion improvement in the current account, which more than halved the deficit, to $7.6 billion, can be traced to a $7.9 billion rise in the trade surplus. Between the first and fourth quarters of the year the trade surplus increased, on a seasonally adjusted basis, from $1.5 to 6.5 billion, turning the current account from a $4.4 billion deficit to a $1.6 billion surplus. The deficit on invisibles and transfers, although higher than in 1980 in Deutsche Mark terms, expressed in dollars showed a small decline of $0.7 to 22.8 billion.

About 40 per cent. of the improvement in the trade surplus was attributable to a decline in net oil payments, the volume of oil imports falling by nearly 15 per cent. In addition, the non-oil trade balance benefited from a 5½ per cent. increase in the volume of exports, more than twice the real growth of Germany's export markets last year. This reflected both the improvement in Germany's competitive position that has resulted from the depreciation of the Deutsche Mark and a particularly large rise in exports to OPEC countries. Non-oil imports fell by only 1 per cent. in real terms, despite a 2½ per cent. decline in total domestic demand, suggesting that foreign suppliers may have accepted reductions in profit margins in order to defend their share of the German market. In addition to the rise, of more than 50 per cent. in Deutsche Mark terms, in exports to OPEC countries, large gains were also recorded in sales to developing countries (+23 per cent.), the United States (+21 per cent.) and the United Kingdom (+14 per cent.). Exports to centrally planned economies practically stagnated. More than one-half of the 1981 improvement in the trade balance in terms of Deutsche Mark occurred vis-à-vis OPEC countries, while, by contrast, there was virtually no change in the trade balance with EEC countries.

The underlying strengthening of Germany's external position continued in the first quarter of 1982. On the basis of a favourable trade performance, the current payments deficit declined to $0.7 billion, compared with a shortfall of $4.4 billion in the corresponding quarter of 1981.

The current-account balance of the *Netherlands*, too, improved very markedly last year, from a deficit of $2.6 billion to a surplus of $3.4 billion, mainly as a result

of a strong improvement in merchandise trade. In addition, net invisible payments dropped slightly, from $1.4 to 0.9 billion, owing to the emergence of a small surplus on services transactions. With the terms of trade unchanged last year, the impressive turn-round in the trade balance from a deficit of $1.2 billion to a surplus of $4.3 billion was chiefly attributable to a 7 per cent. decline in the volume of imports. The principal factor was the weakness of total domestic demand, which is estimated to have fallen by 5 per cent., more than in any other OECD country. This reflected declines in investment and stockbuilding, both of which could be expected to have a relatively large impact on import demand. The volume of exports, on the other hand, increased by only 1 per cent.

In *Switzerland* the improvement of the current-account balance between 1980 and 1981, from a deficit of $0.5 billion to a surplus of $2.3 billion, reversed the deterioration that had taken place between 1979 and 1980. While the invisibles account shared in last year's improvement, with a $0.4 billion rise in net receipts, the major contribution was made by merchandise transactions, the deficit on which narrowed by $2.4 to 3.5 billion. About $1 billion of this reduction was attributable to a more favourable outturn on trade in "erratic" items, such as precious stones and works of art. Leaving these items aside, exports were 3 per cent. higher in real terms, implying a gain in market share, while imports, partly in response to a downturn in domestic demand, fell by 2 per cent. These volume changes more than outweighed a slight deterioration in the terms of trade.

In the *United States* the surplus on current external payments went up in 1981 by $2.9 to 6.6 billion. There was an increase in net merchandise imports of $2.5 billion but this was more than offset by a rise of $5.4 billion, to $34.4 billion, in the surplus on invisible transactions and transfers. The bulk of the improvement in the invisibles account came from net investment income flows. While net earnings from direct investment, primarily in the form of undistributed profits, were $5 billion lower than in 1980, there was a $9 billion increase in other net investment income, reflecting essentially last year's rise in the level of interest rates.

The small widening in the merchandise trade deficit, to $27.8 billion, was the net outcome of contrasting volume and price movements. In real terms the trade balance deteriorated last year by around $15 billion, the volume of exports declining by 1 per cent. and that of imports rising by 5 per cent. Within the increase in total real imports, the volume of oil imports fell by about 11½ per cent., while that of non-oil imports expanded strongly, by 12½ per cent. Most of the adverse impact of these volume movements was offset by an improvement in the terms of trade of 5½ per cent., arising out of the sharp appreciation in the dollar's effective exchange rate.

Except for a $9.4 billion improvement in the trade deficit with OPEC countries, trade balances with all major groups of countries deteriorated in 1981. In particular, the balance on trade with other industrial countries turned round from a $9.5 billion surplus in 1980 to a $2.2 billion deficit in 1981, entirely owing to a deterioration in trade balances with the EEC countries and Japan. By categories of merchandise, a large decline of $7.5 billion was registered in net exports of non-oil industrial supplies and raw materials and the deficit on trade in consumer goods, including automotive vehicles, rose by $5.5 billion.

While the trade deficit widened relatively little for 1981 as a whole, there was a substantial deterioration during the course of the year despite a $2.3 billion decline in net imports of crude oil and petroleum products. As the terms of trade improved strongly during the second half of 1981, rising by 6 per cent. in comparison with the first half, volume trends must have been particularly unfavourable during this period. As at the same time relative demand pressures on the trade balance began to ease when total demand in the United States fell off in the latter part of 1981, it appears that the deterioration in the trade account during the course of the year resulted primarily from the continuing loss of international competitiveness. During the first three months of 1982, when imports declined more rapidly than exports, the seasonally adjusted trade deficit narrowed to $5.9 billion, compared with a $9.1 billion shortfall in the final quarter of 1981.

In *Sweden* the reduction in the current-account deficit from $4.5 to 3 billion between 1980 and 1981 was more than accounted for by a shift in the balance on merchandise trade from a deficit of $0.4 billion to a surplus of $1.5 billion. Net invisible payments, on the other hand, increased by $0.4 to 4.5 billion, including a $0.7 billion rise in the deficit on investment income account. Merchandise trade developments were dominated by a 7 per cent. fall in the volume of imports, reflecting a slackening of final demand and destocking of oil. Real exports grew by 1½ per cent. over the year as a whole, having picked up after the 10 per cent. devaluation of the krona in September. The gain in the volume balance of trade was partly offset by a 2 per cent. deterioration in the terms of trade.

In *Italy* the current-account deficit declined in 1981 by $1 to 8.7 billion. The trade deficit was sharply reduced, from $16.4 to 10.9 billion, but much of this improvement was offset by a fall of $4.5 billion in the surplus on invisibles account. Most of the deterioration on invisibles account came from higher outpayments on investment income account and lower net receipts from tourism.

Customs data indicate that last year's reduction in net merchandise imports was wholly attributable to non-oil trade. Net oil payments in fact rose by $1.8 billion, as oil import volume fell by only 3½ per cent. while the average price of oil imports was 13 per cent. higher than in 1980. The non-oil trade balance improvement of $8.3 billion was entirely the result of favourable volume trends; indeed, it was achieved despite the terms of trade having deteriorated by nearly 10 per cent. Export volume expanded vigorously, by 5½ per cent., with sales to OPEC countries rising from 13 to 17 per cent. of the value of total exports. On the import side, volume fell by 11½ per cent., easily the largest decline in any major industrial country in 1981. While this was partly a response to the steep fall in total domestic demand, the sharpness of the decline in imports reflected in part the imposition of an import deposit scheme in May.

During the course of 1981 Italy's current payments position improved by much more than the annual data suggest. At seasonally adjusted annual rates, the deficit fell from $11 billion in the first half of the year to only $6 billion in the second half, with virtually all of the improvement occurring in the trade account.

In *France* the current-account payments deficit in 1981, at $7.5 billion, was only marginally smaller than in 1980. There was a $3.5 billion reduction in the trade

deficit, almost offset by a decline of $3.1 billion in the invisibles surplus, the largest part of which was accounted for by lower net receipts from investment income. Customs data indicate that roughly one-third of the improvement in the trade account can be ascribed to a decline in the volume of net oil imports. The non-oil trade balance improved both because export volume growth slightly exceeded that of import volumes and because of a small gain in the non-oil terms of trade. French exporters of manufactured products appear to have benefited from the marked fall in the real effective exchange rate of the French franc since 1980. The rise in import volume was concentrated in the latter part of the year, when domestic demand recovered in line with the shift in the authorities' policy stance. At a seasonally adjusted annual rate the trade deficit widened from $7.4 billion in the first half to $10.4 billion in the second half of the year.

In 1981 the current-account deficit of the *Belgium-Luxembourg Economic Union* increased slightly to $5.3 billion, entirely owing to a small deterioration in the trade account. Customs data indicate that the adverse effects of a 5 per cent. terms-of-trade loss were largely offset by a 4 per cent. cutback in the volume of imports. Exports in real terms remained unchanged despite the fact that a continuing improvement in competitiveness has been registered since 1977. The relatively poor export performance appears to be attributable mainly to structural factors. In Belgium exports are concentrated more heavily than in other industrial countries on products — such as steel and textiles — in which trade has grown comparatively slowly and in which competition from the newly industrialising countries has been intense.

Canada's deficit on current external payments, which had narrowed appreciably in 1980, widened in 1981 by $3.9 to 5.5 billion. The merchandise trade surplus shrank by $1.3 billion, mainly because an energy pricing dispute between Alberta and the Federal Government temporarily disrupted domestic oil production and led to higher oil imports. Trade balances for the other main commodity categories were broadly unchanged. An important element in the deterioration of $2.6 billion in the invisibles balance was an increase of $1.1 billion in net interest payments to non-residents. This reflected the substantial increase in foreign holdings of Canadian interest-bearing debt and, to a lesser extent, a rise in the rates of interest payable on that debt.

Capital flows and the financing of external imbalances.

In the Group of Ten countries and Switzerland the reduction in the aggregate current-account deficit in 1981 was accompanied by a broadly offsetting shift in the balance of private-sector capital movements (including the balancing items in countries' external accounts) from an almost balanced position in 1980 to aggregate net outflows of about $40 billion. As has been pointed out earlier, a significant part of these outflows was attributable to a very large rise in net capital exports by banks located in the Group of Ten countries.

The following table summarises the overall balances of payments of individual countries of the group in 1980 and 1981, with capital movements being divided, so far as is possible, into those which were autonomous in character and those which

were in the nature of financing items. The method used has been to classify as autonomous all capital movements that cannot with reasonable certainty be identified as official, or officially induced, external borrowing operations undertaken to finance external imbalances. In certain instances the classification of capital flows is to some extent arbitrary, since the dividing line between autonomous and compensatory transactions is not always clear. Thus, while all private capital flows have been classified as autonomous (except where official external financing has taken place through the domestic banking system or where foreign borrowing by private-sector enterprises was subject to government authorisation), in some instances such flows were influenced by administrative actions on the part of the authorities. In the table direct investment flows are distinguished from other private capital movements, since the latter are in general more sensitive to interest rate and exchange rate developments. These developments, which essentially affect the

Group of Ten countries and Switzerland:
Capital flows and the financing of external imbalances, 1980–81.

Countries	Years	Current balance	Autonomous capital flows (net)				Balance on current account plus autonomous capital movements	Financed by	
			Official sector[1]	Direct investment	Other private capital and balancing item	Total		net official sector borrowing[2] (increase +)	net official monetary movements[3] (improvement −)
		in billions of dollars							
Belgium-Luxembourg	1980	− 5.1	− 0.1	1.4	− 0.3	1.0	− 4.1	5.0	− 0.9
	1981	− 5.3	− 0.1	1.7	− 6.1	− 4.5	− 9.8	7.5	2.3
Canada	1980	− 1.6	2.6	− 1.9	− 0.4	0.3	− 1.3	0.6	0.7
	1981	− 5.5	6.3	− 8.5	8.5	6.3	0.8	− 0.6	− 0.2
France	1980	− 7.9	− 1.2	0.2	10.0	9.0	1.1	5.5[4]	− 6.6
	1981	− 7.5	− 1.0	− 0.7	− 3.1	− 4.8	−12.3	7.3[4]	5.0
Germany	1980	−16.2	− 0.6	− 3.3	− 7.4	−11.3	−27.5	12.2	15.3
	1981	− 7.6	− 2.5	− 2.8	1.0	− 4.3	−11.9	11.2	0.7
Italy	1980	− 9.7	− 0.2	− 0.2	7.0	6.6	− 3.1	3.8	− 0.7
	1981	− 8.7	− 0.1	− 0.1	3.6	3.4	− 5.3	4.6	0.7
Japan	1980	−10.7	4.1	− 2.1	13.4	15.4	4.7	–	− 4.7
	1981	4.8	5.1[5]	− 4.7	− 1.0	− 0.6	4.2	–	− 4.2
Netherlands	1980	− 2.6	− 0.1	− 1.4	5.1	3.6	1.0	–	− 1.0
	1981	3.4	− 0.2	− 2.0	− 1.9	− 4.1	− 0.7	–	0.7
Sweden	1980	− 4.5	− 0.1	− 0.4	− 0.3	− 0.8	− 5.3	5.2	0.1
	1981	− 3.0	− 0.2	− 0.6	2.4	1.6	− 1.4	1.7	− 0.3
Switzerland	1980	− 0.5	–	.	− 3.4	− 3.4	− 3.9	–	3.9
	1981	2.3	–	.	− 2.0	− 2.0	0.3	–	− 0.3
United Kingdom	1980	7.4	0.5	− 1.1	− 6.9	− 7.5	− 0.1	− 2.2	2.3
	1981	16.2	0.1	− 5.5	−12.6	−18.0	− 1.8	− 3.2	5.0
United States	1980	3.7	− 3.0	− 7.7	− 2.1	−12.8	− 9.1	1.2	7.9
	1981	6.6	− 0.2	11.7	−17.2	− 5.7	0.9	− 1.9	1.0
Total	1980	−47.7	1.9	−16.5	14.7	0.1	−47.6	31.3	16.3
	1981	− 4.3	7.2	−11.5	−28.4	−32.7	−37.0	26.6	10.4

[1] Other than borrowing. [2] External borrowing undertaken or induced by government for balance-of-payments considerations, including foreign currency borrowing through domestic banks. [3] Excludes SDR allocations and, in principle, valuation adjustments. [4] Includes borrowing by non-bank private enterprises subject to authorisation by the Government. [5] Estimate.

pattern of private capital flows inside the Group of Ten area, had a major influence on the changes that occurred between 1980 and 1981 in the balance on private capital movements in most individual countries of the group.

In virtually all Group of Ten countries the balance of autonomous capital movements in 1981 was significantly different, and in some instances very different, from what it had been in 1980. In five countries — the United Kingdom, Japan, the Netherlands, Canada and Italy — the change in autonomous capital flows broadly offset the change on current account between the two years. In four other countries — Germany, the United States, Sweden and Switzerland — the changes on capital account reinforced those on current account, while in France and the Belgium-Luxembourg Economic Union broadly unchanged deficits on current external account were accompanied by large adverse shifts on capital account between the two years.

In the *United Kingdom* total autonomous capital outflows increased by $10.5 billion in 1981, to $18 billion, rather more than offsetting the improvement between the two years on current account. One of the two main elements in this increase was a fivefold rise, to $5.5 billion, in net direct investment outflows, which resulted about equally from higher UK investment abroad and lower inward direct investment. These changes may in part have been related to the very low level of company profits in the United Kingdom. In the rest of the private-sector capital account, where total net outflows nearly doubled to $12.6 billion, the main change was a jump from $1 to 5 billion in the adverse balancing item. The other principal constituent of private capital outflows was net portfolio investment abroad, which, after a very large increase to $6.7 billion in 1980 following the abolition of exchange controls, went up further to $7.6 billion in 1981.

The total net outflow from autonomous capital transactions exceeded the estimated current-account surplus by $1.8 billion and the authorities made repayments, some of them ahead of schedule, of $3.2 billion of official foreign borrowing during the year. Consequently, there was a $5 billion decline in net official monetary assets, all of which was reflected in a fall in reserves.

In *Japan*, as in the United Kingdom, a large positive swing in the current account was more than counterbalanced by changes in autonomous capital transactions. Net autonomous inflows of $15.4 billion in 1980 gave way to net outflows of $0.6 billion, which were amply covered by the current-account surplus of $4.8 billion. The resulting rise in net official monetary assets of $4.2 billion was almost the same as in 1980.

While official-sector net capital outflows are estimated to have risen by $1 billion to over $5 billion in 1981, there was a sharp reversal of private-sector capital movements from net inflows of $11.3 billion in 1980 to net outflows of $5.7 billion in 1981. The principal factor behind this swing — which was entirely attributable to residents' capital transactions — was apparently the marked interest rate differential between Japan and the United States, which favoured investments in dollar-denominated assets throughout the year. Net exports of private long-term capital expanded by about $10 billion to a total of $11.6 billion. On direct investment account net outflows rose by $2.6 to 4.7 billion, and a similar movement in private

portfolio investment reduced net inflows to $1.2 billion. Other long-term net capital outflows, comprising trade credits and private lending, were $4.5 billion higher at $8 billion. Net inflows of short-term capital (including the balancing item) shrank from $13.1 to 5.9 billion, owing principally to a $6.8 billion drop in net banking inflows.

In the *Netherlands*, too, the improvement on current account was more than offset by the turn-round in the balance of autonomous capital movements, from net inflows of $3.6 billion in 1980 to net outflows of $4.1 billion in 1981. The largest element in this change was a reversal of the balance on external transactions of the banking sector, from net inflows of $4.4 billion to net outflows of $0.9 billion. In the first three quarters of the year there were sizable net outflows through the banks, which were related mainly to the fact that the interest rate differential between the guilder and the Deutsche Mark — the two currencies are generally regarded as close substitutes — shifted in February in favour of the Deutsche Mark. Indeed, in the final quarter, after the interest rate differential had again become favourable for the guilder, the net outflows gave way to substantial inflows. In addition, net portfolio inflows were over $2 billion less than in 1980, with a substantial reduction in non-resident purchases of Dutch securities. As total net autonomous outflows in 1981 exceeded the current-account surplus by $0.7 billion, there was a corresponding decline in net official monetary assets.

In *Canada* external financing needs rose very sharply in 1981. The current external deficit increased threefold, to $5.5 billion, and Canadian takeovers of foreign-owned companies, mainly in the oil and gas industry, were associated with a rise in net direct investment outflows from $1.9 to 8.5 billion. These financing needs were more than covered by net inflows from autonomous capital transactions other than direct investment. Official-sector inflows totalled $6.3 billion, as compared with $2.6 billion in 1980, mainly through an exceptionally high level of foreign bond issues by provincial and municipal authorities. In addition, there were net short-term inflows of $16.1 billion through the banking system, as the banks borrowed very large amounts of foreign currencies abroad to finance loans to Canadian residents, including loans to finance the takeovers mentioned above. Partly offsetting these banking inflows, the balancing item in the external accounts showed net unidentified outflows of $7.1 billion.

In *Italy* the small reduction in the current external deficit in 1981 was more than offset by a decline, from $6.6 to 3.4 billion, in the net inflow from autonomous capital movements. Consequently, the official financing requirement rose last year to $5.3 billion, the bulk of which was covered by public-sector foreign borrowing. The decline in autonomous net inflows included very large and, to a considerable extent, offsetting changes between the two years in the pattern of banking and identified private non-bank flows other than direct investment. In the banking sector, the huge $8 billion net inflow that had occurred in 1980 gave way to a net outflow of $1.4 billion; in the private non-bank sector, where the capital account (excluding direct investment) had been about in balance in 1980, there was a net inflow of $7 billion in 1981, broadly half of it in the form of trade credit. These movements, while classified as autonomous in the table, were to a significant degree a by-product of two administrative measures — the ceiling on banks' import

financing and the import deposit scheme — introduced in the early months of 1981. While these measures were aimed at improving the trade account, they clearly also had the effect of shifting a part of the current-account financing from the bank to the non-bank sector.

In *Germany* the improvement on current external account in 1981 was accompanied by a sharp fall, from $11.3 to 4.3 billion, in net autonomous capital outflows. Consequently, the total official financing requirement fell between the two years from $27.5 to 11.9 billion. In contrast to 1980, when there was a sizable loss of official reserves, nearly all of the official financing in 1981 was provided through external borrowing of $11.2 billion. Of this amount, $10.1 billion was borrowed by the Federal Government, more than half of it from OPEC countries.

The decline in total capital outflows occurred despite a rise of $1.9 billion in net official outflows, which included increases both in lending to developing countries and in net sales of public-sector securities by non-residents. In the private sector, total net outflows declined between 1980 and 1981 from $10.7 to 1.8 billion, responding to the marked rise in German interest rates in February and, later in the year, to favourable exchange rate expectations with respect to the Deutsche Mark. There were three main elements in this decline. A fall of $2.3 billion in net outward portfolio investment, owing partly to lower purchases of foreign securities by German residents and partly to higher purchases of German securities by non-residents; a $2.1 billion inflow from long-term loans and credits, the inward and outward movements of which had been about in balance for 1980; and a favourable shift of $3.7 billion in the balancing item, indicating a reversal in unidentified capital movements from net outflows to net inflows.

In the *United States* the decline of total autonomous capital outflows (excluding changes in foreign monetary authorities' holdings of dollar reserves in the United States, which are included in the official monetary position) from $12.8 to 5.7 billion between 1980 and 1981 was the net outcome of a further rise in net outflows through the banking sector and of an even larger increase in other capital inflows.

The net outflow from banks in the United States increased between 1980 and 1981 from $36.2 to 43.1 billion. These banking movements are discussed in detail in Chapter VI on pages 130–131. In the rest of the capital account total autonomous net inflows increased very substantially, from $23.4 to 37.4 billion. In both years there were very large unidentified inflows, amounting to $29.6 billion in 1980 and $24.6 billion in 1981, and if these are excluded the balance on identified non-bank capital movements shifted between 1980 and 1981 from net outflows of $6.2 billion to net inflows of $12.8 billion.

The principal reason for this change was that direct investment transactions, which traditionally show substantial net outflows from the United States, produced in 1981, for the first time in over twenty years, very substantial net inflows. US direct investment abroad fell from $18.5 to 7 billion, while foreign direct investment in the United States went up from $10.9 to 18.7 billion, resulting in a turn-round in net direct investment from outflows of $7.7 billion to inflows of $11.7 billion. The sharp drop in direct investment abroad included a decline in the reinvested earnings

of US companies' foreign affiliates, as well as large inflows resulting from the sale of Canadian energy affiliates of US companies and from borrowing abroad by US corporations. The increase in foreign direct investment in the United States included a $9.4 billion rise in inflows over inter-company accounts and through foreign purchases of US equities. There is no doubt that some of these capital inflows that are classified as direct investment — in particular the borrowing abroad by US corporations and other movements over inter-company accounts — were related to interest rate differentials between the United States and other countries.

The net official monetary position of the United States, excluding the SDR allocation, deteriorated by $1 billion. This reflected an increase in official assets of $4.1 billion, mainly due to a rise in the IMF reserve position, and an addition of $5.1 billion to liabilities to foreign official institutions. A reduction of $11.9 billion in official liabilities to industrial countries was more than offset by a $17 billion increase in liabilities to other countries, of which $12.9 billion was vis-à-vis OPEC countries.

In *Sweden* the balance of autonomous capital flows shifted from a deficit of $0.8 billion to a surplus of $1.6 billion and, since the current account also improved, by $1.5 billion, the balance for official financing fell by nearly $4 to 1.4 billion. This permitted a major reduction in official foreign borrowing, from $5.2 to 1.7 billion, and net reserve assets rose by $0.3 billion. The more favourable autonomous capital balance resulted principally from a switch to surplus in private transactions. Larger inward portfolio flows and higher borrowing abroad contributed equally to a $1 billion gain in long-term inflows, and banks' net short-term foreign assets rose by a further $0.7 billion. In addition, the adverse balancing item fell by $0.9 to 0.4 billion.

In *Switzerland* the shift to a surplus on current external account in 1981 was accompanied by a reduction in autonomous capital outflows from $3.4 to 2 billion. The decline was entirely attributable to larger unidentified capital inflows, which, as indicated by the balancing item, increased last year by $3 to 10.1 billion. Identified net capital outflows, on the other hand, rose between the two years from $10.4 to 12.1 billion. Swiss residents increased their net portfolio holdings by $9.1 billion, or $1.9 billion more than in 1980, while net outflows through the banks, including dollars swapped with the National Bank, were, at $3.1 billion, only marginally smaller than in the previous year. As the current-account surplus was almost matched by net capital outflows, the net official monetary position remained virtually unchanged last year.

In *France* there was a major adverse movement in the balance of autonomous capital flows between 1980 and 1981, from net inflows of $9 billion to net outflows of $4.8 billion. Together with a slightly lower current-account deficit of $7.5 billion, this resulted in an official financing requirement of $12.3 billion, of which $7.3 billion was covered through external borrowing and the remainder by a reduction in net official monetary assets. Identified net private capital inflows, which had amounted to over $5 billion in 1980, virtually disappeared last year, mainly as a result of higher net outward portfolio investment and long-term lending abroad. The largest change, however, was in the balancing item, which turned round from a

positive figure of $5 billion to a negative figure of $3.9 billion. There were large outflows of funds following the presidential elections in May, but later in the year the capital balance improved after a sharp upward movement in domestic interest rates and a reinforcement of exchange controls.

In the *Belgium-Luxembourg Economic Union*, too, there was an adverse shift in autonomous capital movements, from net inflows of $1 billion in 1980 to net outflows of $4.5 billion in 1981. These outflows, together with the current-account deficit of $5.3 billion, resulted in an official financing requirement of $9.8 billion, of which $7.5 billion was covered by official external borrowing and the remainder by a decline of $2.3 billion in net official monetary assets. The main change on capital account between the two years was an increase from $0.3 to 6.1 billion in autonomous private-sector outflows other than direct investment. Two-thirds of last year's net outflows were through the banks, excluding trade credits and borrowing on behalf of the Government. Non-bank residents added $2.5 billion to their net foreign currency assets with BLEU banks, while non-residents drew down their holdings of Belgian and Luxembourg francs with these banks by $1.4 billion. These shifts appear to have been stimulated by the narrowing of short-term interest rate differentials in favour of the Belgian franc, as well as by exchange rate expectations.

VI. THE INTERNATIONAL CREDIT AND CAPITAL MARKETS.

Highlights.

1981 was another year of strong growth in the international financial markets. With no shortage of loanable funds, and with continued high demand for international bank credit from private and sovereign borrowers in both developing and developed countries, the gross external assets of the BIS reporting banks increased on an exchange rate adjusted basis by $268 billion, as compared with a rise of $242 billion in 1980. Excluding double-counting arising out of the redepositing of funds between these reporting banks, the growth of their international lending is estimated to have accelerated between 1980 and 1981 from $160 to 165 billion. There was also a high level of activity in the foreign and Euro-bond markets in 1981, with new bond financing, net of estimated redemptions and repurchases of securities, having amounted to $36.5 billion, as compared with $28 billion in 1980.

In the international banking sector, on the sources side of the market there was a marked shift in the geographical pattern of the supply of new funds to the reporting banks between 1980 and 1981. The sharp fall in the aggregate OPEC current payments surplus during 1981 was associated with a decline from about $42 to only 3 billion in new deposits received by the banks from these countries, and in the second half of the year there were actual withdrawals of OPEC funds. However, this drying-up of one of the most important sources of new funds to the international banking sector was easily offset — without any general tightening of market conditions — by larger supplies from elsewhere. The supply of new funds from the main industrial countries in particular showed a strong further acceleration, from around $100 to 135 billion (net of double-counting), mainly as a result of faster growth in the external assets of banks and non-banks in the United States. On the uses side of the market the overall pattern of lending was not much different from what it had been in 1980. There was a moderate increase in the total of new funds employed by the banks within the reporting area itself (essentially the Group of Ten countries, Switzerland, Austria, Denmark and Ireland), but new lending to outside-area countries was about the same as in 1980. New lending to non-OPEC developing countries and to developed countries outside the reporting area was a little higher than in 1980, but new credits to eastern European countries slowed down sharply, partly as a consequence of the Polish situation. Combining the two sides of the market, as a result of the reporting area having replaced the OPEC countries as the principal source of net new funds, the main feature of 1981 was a return to the situation existing before the 1979–80 oil price increases: a large net flow of new capital from the main industrial countries via the international banking sector to the rest of the world.

Since the end of 1981 there have been signs that a new situation may be developing in the banking market, in particular with regard to new lending to outside-area countries. Whereas last year the countries of eastern Europe were the

only group of non-OPEC outside-area countries to which the banks' new lending slowed down, the continued high payments deficits of non-oil developing countries, together with renewed political unrest, may now be making banks more generally reluctant to lend to countries with vulnerable external situations. It is, however, too soon to say whether this reassessment of certain countries' creditworthiness will lead to any significant slowdown in the overall growth of international bank lending.

The international lending aggregates in 1981.

One notable feature of international banking activities last year was their rapid growth. Expressed in current dollars, the external claims of banks in the Group of Ten countries, Switzerland, Austria, Denmark and Ireland and of the branches of US banks in offshore centres of the Caribbean and Far East expanded from $1,322 to 1,542 billion. In nominal terms this increase of rather more than 16 per cent. was somewhat lower than the rates recorded in previous years. However, the nominal data present in some respects a misleading picture. With the combination of a worldwide recession and a strong dollar, there was a sharp turn-round last year in the dollar price trend of internationally traded goods. Whereas, for example, from the fourth quarter of 1979 to the fourth quarter of 1980 the unit value index of world exports, expressed in dollars, had risen by 13 per cent., in the course of 1981 it declined by about 3 per cent. Although this overall unit value index cannot do full justice to the differences between the situations of individual groups of countries, there can nevertheless be little doubt that in real terms the expansion in the international banking aggregates accelerated sharply last year and was one of the largest yet recorded. Or, as seen from the point of view of the debtor countries, whereas in preceding years their net new bank borrowings had been offset in large measure through the amortisation of part of their outstanding debts via inflation, there was no such debt relief in 1981.

Moreover, as in 1980, the expansion of the dollar figures strongly understated the underlying growth momentum of the market, since the appreciation of the dollar reduced the exchange value of assets denominated in currencies such as the Deutsche Mark, the Swiss franc and the yen. If these exchange rate effects are eliminated the increase in the reporting banks' external assets for 1981 works out at $268 billion, which compares with a $242 billion expansion in 1980. Since the exclusion of exchange rate effects provides a more realistic picture of the magnitude and pattern of new international banking flows, all the flow figures given in the following text and tables are, unless otherwise specified, on an exchange rate adjusted basis. Unadjusted stock data are attached as an annex to this chapter.

As usual, the figures for the banks' external assets and liabilities last year were substantially inflated by the double-counting resulting from the redepositing of funds between reporting banks. After elimination of this double-counting, the total amount of funds channelled through the international banking sector may be estimated to have expanded in 1981 by roughly $165 billion, or 21.5 per cent., to a total of about $940 billion.

**Estimated lending in international markets:
Changes in external claims of banks and international bond issues.**

Lenders	Flows excluding exchange rate effects[1]				Stocks at end-1981
	1978	1979	1980	1981	
	in billions of US dollars				
Banks in European reporting countries[2]	111.9	150.9	158.7	136.0	992.3
of which in foreign currency (Euro-currency market)	*97.3*	*130.3*	*131.0*	*114.5*	*840.0*
Banks in Canada and Japan	14.8	16.5	26.5	23.5	122.5
Banks in the United States (including IBFs)	38.0	17.1	40.7	76.5	255.4
Branches of US banks in offshore centres[3]	15.0	21.0	13.7	31.6	171.8
Total	179.7	205.5	241.6	267.6	1,542.0
minus: double-counting due to redepositing among the reporting banks	89.7	80.5	81.6	102.6	602.0
A = Net international bank lending[4]	90.0	125.0	160.0	165.0	940.0
Euro-bond and foreign bond issues	37.5	37.3	38.0	47.8	.
minus: redemptions and repurchases[5]	8.5	9.3	10.0	11.3	.
B = Net new international bond financing	29.0	28.0	28.0	36.5	.
A+B = Total new bank and bond financing	119.0	153.0	188.0	201.5	.
minus: double-counting[6]	6.0	8.0	8.0	6.5	.
Total net new bank and bond financing	113.0	145.0	180.0	195.0	.
Memorandum item: non-reporting banks in offshore centres[7]	*30.0*	*28.0*	*40.0*	*61.0*	*236.0*

[1] Bank credits in non-dollar currencies are converted at constant end-of-quarter exchange rates, non-dollar bonds at end-of-month rates. [2] Austria, Belgium-Luxembourg, Denmark, France, Germany, Ireland, Italy, the Netherlands, Sweden, Switzerland and the United Kingdom. [3] Bahamas, Cayman Islands, Panama, Hong Kong and Singapore. [4] In addition to direct claims on end-users, these estimates include certain interbank positions: first, claims on banks outside the reporting area, i.e. outside the financial and offshore centres, 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; second, 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; third, 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 to other banks in the reporting area; a deduction is made, however, in respect of working balances and similar items. While the persistence of some element of double-counting in these estimates cannot be ruled out, it should be noted on the other hand that there are gaps in the statistics and the figures available at present do not cover all international bank lending. [5] These figures are based on very rough guesses and are inserted here mainly for purposes of illustration. But although the margins of error are large in relation to the size of the figures, they are unlikely to alter significantly the figure for total net new international financing. [6] 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. [7] Estimates — at current exchange rates — for non-reporting banks in offshore centres mentioned under footnote 3 and for all banks located in Bahrain and the Netherlands Antilles.

Strong activity was also recorded in the international bond market. Gross new issues in the foreign bond and Euro-bond sectors amounted to $47.8 billion, up by nearly $10 billion on 1980. After allowing for the redemption of outstanding issues and overlapping with the international banking sector, this added an estimated $30 billion to the new funds channelled through the international financial markets last year. Total international credit growth net of double-counting may therefore be put at around $195 billion, or $15 billion more than in 1980.

In the banking sector, banks in the United States (including the US affiliates of foreign banks) recorded particularly pronounced growth in their international

activity. Their external assets soared by 43 per cent., although the coming into existence of the new US international banking facilities (IBFs) in the last month of the year made a significant contribution to this increase. But even the assets of branches of US banks in the offshore centres of the Caribbean and the Far East expanded quite sharply, viz. by 23 per cent. Very rapid growth, of nearly 35 per cent., seems to have occurred, moreover, in offshore centre business not directly covered by the BIS statistics. And, finally, remarkably strong expansion was recorded by banks in Japan, whose external assets increased by 32.5 per cent. The external claims of banks in the reporting European countries, on the other hand, showed more moderate growth of 16 per cent. and, in continuation of a trend already perceptible in preceding years, their share in total outstanding positions showed a substantial decline.

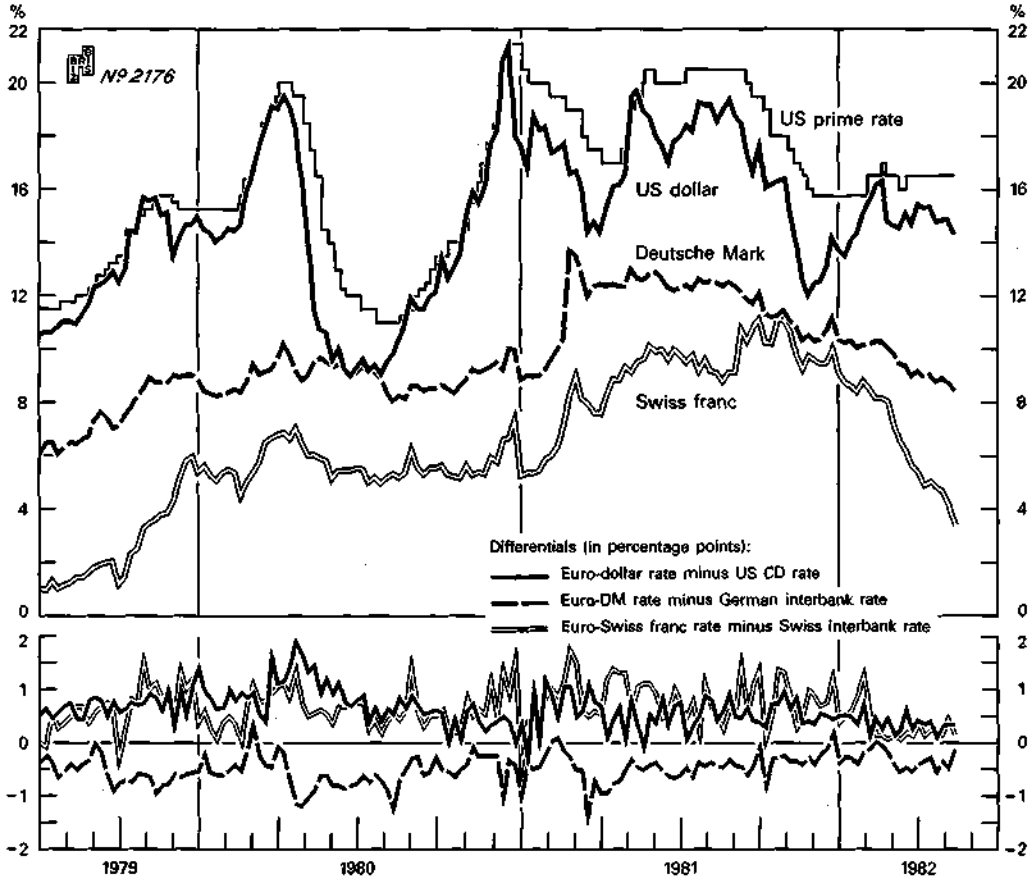
Main influences.

In 1981 the situation in the international banking markets was characterised by an ample supply of new funds and strong demand for credit. In some instances, however, the banks were less willing to lend than before. During the course of the year new lending to eastern Europe more or less dried up, for a combination of economic and political reasons, and in addition the banks adopted a more cautious attitude towards a few countries with large outstanding external indebtedness and a vulnerable payments position. These countries had to concede wider lending spreads, as well as having recourse to short-term borrowing. Given the ample supply of funds, the banks' hesitation in regard to some countries made them particularly anxious to increase their lending elsewhere, with the result that most groups of private and sovereign borrowers were able to obtain credit at very narrow lending spreads.

A second influence that contributed to the continued downward pressure on lending spreads charged on loans to prime borrowers was the exogenously determined very high level of nominal and real interest rates, which largely reflected the developments in national markets, notably the monetary situation in the United States. Thus, the very high rates on funds in dollars, the currency in which most international banking business is denominated, tended to accelerate the effective supply of new funds to the market while at the same time acting somewhat as a damper on the growth of effective demand, thereby tilting the balance of market forces further in favour of prime borrowers.

Interest rate developments help to explain another feature of the international financial scene last year, namely the increasing osmosis between the domestic and the international banking markets. Both the high level and the volatility of interest rates tended to add to the competitive advantage which the international market enjoys as a result of its freedom from regulatory and institutional constraints. Thus, banks were quite often able to offer their larger prime customers more favourable conditions by booking transactions through their foreign affiliates instead of through their domestic offices. This trend was fostered by institutional developments such as banks in the United States offering their large domestic corporate customers the option between borrowing at the prime rate or at LIBOR related rates. The resultant

US prime rate, interbank rates on three-month Euro-currency deposits and differentials over domestic rates.



Note: Interbank rates and differentials are based on Wednesday figures.

rerouting of banking business through the international market may to some extent have inflated the international banking aggregates without giving rise to genuine international capital flows and without directly affecting conditions on domestic or international markets.

For many countries last year the accentuation of the borrowers' market in international banking funds occurred despite some important changes that did not favour the supply side of the market. Firstly, the shrinkage of the oil-exporting countries' current-account surplus contributed to a very sharp slowdown in their supply of new funds to the banks. Secondly, political developments, as well as other risk considerations, and perhaps also the expectation that US interest rates were about to peak, seem to have encouraged shifts of non-US funds from the international banking sector to the US security markets. For the first time since such statistics were collected, official deposits with banks in the narrowly defined Euro-currency market recorded a major decline — of $13 billion — in 1981, while at the same time US liabilities to official holders outside western Europe showed an increase of over $20 billion.

However, the reduction in the supplies of new funds from these sources was offset by very large money exports by banks in the United States and by large flows of US non-bank funds to the international market. Excluding double-counting resulting from the redepositing of funds between reporting banks, it may be estimated that about $80 billion of new funds was supplied from these two sources alone to the rest of the world in 1981.

Another important influence last year on the supply of banking funds stemmed from developments in the exchange markets, notably the appreciation of the dollar and the volatility of exchange rates in general. The dollar's strength, combined with very high dollar interest rates, greatly enhanced the attractiveness of Euro-dollar deposits, largely at the expense of deposits denominated in other Euro-currencies. However, there was no actual decline in the total of deposits held in Euro-currencies other than the dollar.

Exchange rate movements also influenced the shares of the various national banking systems in total market growth. In the reporting European countries the upward movement of the dollar increased the domestic currency value of their international dollar books. The resultant stretching of gearing ratios, together with moves towards extending prudential supervision to banks' internationally consolidated positions, had a restraining influence on the growth of banks' international business in some European countries. This applied in particular to German banks, whose room for manoeuvre internationally was also in some instances affected by domestic problems.

On the other hand, banks in the United States recorded consistent rapid growth in their international business, easily maintaining their dominant share of, and their leading position in, the international market. The strength of the dollar worked, if anything, in their favour, and they were less affected than many European banks by the worsening of the financial situation of eastern European borrowers. The most dynamic group of operators in the international market last year, however, seems to have been the Japanese banks. In the face of weak domestic credit demand, and encouraged by an easing of official restraints on their foreign lending, they actively sought to expand their share of international banking business. Banks of the Middle Eastern oil-exporting countries, too, made their influence increasingly felt in the international markets last year. Backed by strong capital positions, they markedly expanded their share of the syndicated loan market.

On the uses side of the international banking market, the situation last year was characterised both by continuing large, or even growing, borrowing needs and by increasing borrowing constraints, such as the largely exogenously determined record level of real interest rates and, in the case of some borrowers, banks' mounting reluctance to increase their exposure. The large contraction in the OPEC surplus did not result in a corresponding decrease in international financing requirements. Its primary counterpart was an improvement in the current-account balances of some major industrial countries, whose residents' recourse to international bank credit was not affected to any great extent by the improvement in their own countries' balance-of-payments fortunes. For other groups of countries, the positive influence which the decline of the OPEC surplus might otherwise have

exerted on their external payments balances was more than offset by adverse developments in the industrialised world. Economic stagnation in the main industrial countries had a sharply depressive influence on the demand for other countries' exports and on raw-material prices. In addition, the unusually high level of dollar interest rates added substantially to borrowing countries' debt-service burdens. Particularly for non-OPEC developing countries, which are mostly only modest oil importers, this factor alone in several instances more than offset the benefits of economies in oil consumption. Finally, the appreciation of the dollar tended to increase the real cost of oil imports despite the easing of the oil-market situation. Although a number of debtor countries reacted to this state of affairs by cutting back on domestic economic activity, the combined current-account deficit of the non-OPEC developing countries continued to expand.

While these developments maintained the developing countries' demand for international bank credit, they did not help the credit standing of some borrowers. Countries with relatively modest external debts were still able to obtain credits on rather favourable conditions, but some important borrowers with large accumulated debts had to concede more ample spreads. Moreover, the fact that most of these countries' external debts are denominated in dollars meant that the sharp increase in the exchange value of that currency tended to add to countries' debt burdens even without any net new borrowings.

The international financial position of eastern European countries was to a large extent affected by the same negative influences as that of non-oil developing countries. But, in addition, the credit standing of these countries suffered from the backlash of developments in Poland, the deterioration in the East-West political climate and, in some cases, from home-made economic problems. Despite increasing external borrowing needs, these countries saw their access to international bank credit narrowing sharply, with the banks' willingness to accommodate their requirements essentially limited to reinsurable and government-guaranteed credits.

Amongst the industrial countries, the demand for international bank credit remained strong. This was in large measure due to continuing appreciable balance-of-payments and public-sector financing requirements. But there was also a substantial amount of private-sector borrowing stimulated by the relative cost advantage of international bank credits. And the repercussions of the worsening recession on corporate profits and balance sheets helped to maintain financing needs, despite high interest rates and the unfavourable outlook for investment activity.

Looking ahead to the prospects for the growth of the international banking market in the near future, potential demand for new credits, despite the sharp reduction of the OPEC surplus, seems likely to be sustained by continuing payments deficits in many parts of the world. Moreover, some countries whose balance-of-payments situation has improved may wish to borrow from the banks, as they did after the effects of the 1973 oil price increase had worn off, in order to strengthen their reserve positions. Equally, on the sources side of the market, the ample supply of new funds that has been at the disposal of the banks so far may well persist, since the drying-up of the inflows to the banks from OPEC countries has

been offset by the much greater availability of funds from within the reporting area, in the same way as happened from 1975 onwards.

What may be changing, however, is the banks' perception of the risks involved in their international lending. In 1981 the banks were already exercising greater caution in adding to their exposure vis-à-vis eastern European countries and a few other highly-indebted countries. Recently there have been signs that political disturbances may be leading the banks, for understandable reasons, to extend this caution more widely. One way in which this has been showing up is in a widening of the gap between the lowest and the highest spreads at which new credits are granted, together with an increase in the number of countries to which higher spreads are being applied. Whether or not this reassessment will lead to an overall deceleration in the growth of international bank lending is not yet clear, since in a situation where the supply of new funds continues to be ample a slowdown in lending to some parts of the world might lead the banks to seek enlarged outlets elsewhere.

Over the past decade banks have come to play the leading rôle in international financing and this means that the maintenance of sound practices by the banks in their international lending is important both in itself, on prudential grounds, and for the world economy too. In the present situation greater caution may well be justified in the provision of additional finance to a number of countries where the banks' exposure is very high and which need to undertake domestic adjustment programmes. At the same time, it is perfectly consistent with the maintenance of sound banking standards that banks should differentiate carefully between the justified needs of different countries for external finance. Moreover, there are dangers in exposing countries to too sharp an adjustment process, just as there are dangers, as past experience has shown, in delaying adjustment through over-generous lending. A sound international banking system that seeks to avoid both these dangers is of great importance to a smooth working of the international adjustment process.

Sources and uses of international banking funds.

The year 1981 saw a marked shift in the geographical pattern of international banking flows. As a result of the virtual drying-up of new deposits by OPEC countries, the supply of new funds to the reporting banks from countries outside the reporting area slowed down sharply from about $58 billion in 1980 to $28 billion, while at the same time supplies of new funds from within the reporting area (excluding double-counting) accelerated from $102 billion to roughly $137 billion. In contrast, on the uses side of the market the overall geographical pattern was not very different from that of 1980. There was a moderate increase from roughly $87 to 93 billion in new funds employed within the reporting area itself and new credit to the outside area, at about $72 billion, continued at the same level as in 1980. As a result, taking the two sides of the market together, the net amount of new capital channelled by the international banking sector from the reporting area to the rest of the world increased dramatically between 1980 and 1981, from $15 to 44 billion.

Geographical pattern of international banking flows.[1]

	Flows at constant end-of-quarter exchange rates						Stocks at end-1981
	1978	1979	1980 1st half	1980 2nd half	1981 1st half	1981 2nd half	
	in billions of US dollars						
Banks' claims on:							
Group of Ten countries and Switzerland, Austria, Denmark and Ireland	102.6	112.6	56.0	80.2	41.5	101.6	819.9
of which: Reporting European area	*75.2*	*69.7*	*37.3*	*67.1*	*16.6*	*54.4*	*568.3*
United States	*12.8*	*28.5*	*5.0*	*2.8*	*10.3*	*35.7*	*133.6*
Canada	*5.7*	*3.1*	*2.7*	*1.8*	*8.9*	*4.4*	*36.8*
Japan	*8.9*	*11.3*	*11.0*	*8.5*	*5.7*	*7.1*	*81.2*
Offshore banking centres[2]	23.6	32.2	13.6	19.3	24.4	25.9	237.5
Other developed countries	5.7	7.5	7.4	8.1	8.5	8.4	98.9
Eastern Europe	5.6	7.1	2.0	5.0	2.9	1.9	60.8
OPEC countries[3]	16.4	7.2	− 0.9	8.0	− 1.0	5.3	72.0
Other developing countries	21.8	35.3	14.4	24.8	13.7	27.9	230.1
of which: Latin America[4]	*12.9*	*22.9*	*10.5*	*17.9*	*12.0*	*20.6*	*158.5*
Unallocated[5]	4.0	3.6	1.8	1.9	4.9	1.7	22.8
Total	179.7	205.5	94.3	147.3	94.9	172.7	1,542.0
of which: inside area, gross	*124.7*	*143.5*	*69.3*	*99.3*	*67.9*	*127.7*	*1,050.0*
inside area, net of double-counting[6]	*35.0*	*63.0*	*55.0*	*32.0*	*38.0*	*55.0*	*448.0*
outside area[7]	*55.0*	*62.0*	*25.0*	*48.0*	*27.0*	*45.0*	*492.0*
Total net international bank lending	90.0	125.0	80.0	80.0	65.0	100.0	940.0
Banks' liabilities to:							
Group of Ten countries and Switzerland, Austria, Denmark and Ireland	110.7	144.5	62.3	94.0	52.8	102.8	948.4
of which: Reporting European area	*76.3*	*116.4*	*35.7*	*67.3*	*21.6*	*52.5*	*658.6*
United States	*27.0*	*21.7*	*20.3*	*16.4*	*26.7*	*42.6*	*228.1*
Canada	*3.0*	*2.0*	*3.1*	*2.5*	*2.1*	*2.5*	*27.4*
Japan	*4.4*	*4.4*	*3.2*	*7.8*	*2.4*	*5.2*	*34.3*
Offshore banking centres[2]	24.8	42.0	6.7	20.5	16.6	38.7	219.5
Other developed countries	8.3	7.4	0.6	5.3	− 0.7	4.1	51.1
Eastern Europe	1.6	4.6	− 2.9	3.7	− 5.1	5.2	14.8
OPEC countries[3]	2.9	37.0	24.2	17.4	6.7	− 3.5	156.8
Other developing countries	14.0	12.4	1.6	2.5	0.3	10.1	98.3
of which: Latin America[4]	*7.2*	*4.7*	*− 2.3*	*2.6*	*1.7*	*4.8*	*39.8*
Unallocated[5]	0.5	4.0	8.2	− 1.5	6.2	4.4	34.1
Total	162.8	251.9	100.7	141.9	76.8	161.8	1,523.0
of which: inside area, gross	*131.8*	*183.9*	*72.7*	*111.9*	*70.8*	*139.8*	*1,158.0*
inside area, net of double-counting[6]	*59.0*	*57.0*	*52.0*	*50.0*	*59.0*	*78.0*	*575.0*
outside area[7]	*31.0*	*68.0*	*28.0*	*30.0*	*6.0*	*22.0*	*365.0*
Total net international bank lending	90.0	125.0	80.0	80.0	65.0	100.0	940.0

Note: The figures in this table are partly based on estimates. As from 1979 the figures for banks in the United States exclude all custody items except negotiable US bank certificates of deposit held on behalf of non-residents. Previously the only custody items excluded were non-resident holdings of Treasury bills and certificates. Flows for the second half of 1981 as well as the stock figures for end-1981 include the external positions of international banking facilities.

[1] Geographical distribution of the changes in the external assets and liabilities of banks located in the Group of Ten countries and Switzerland, Austria, Denmark and Ireland and of the offshore branches of US banks located in the Bahamas, Cayman Islands, Panama, Hong Kong and Singapore. [2] Bahamas, Barbados, Bermuda, Cayman Islands, Hong Kong, Lebanon, Liberia, Netherlands Antilles, Panama, Singapore, Vanuatu (formerly New Hebrides) and other British West Indies. [3] Includes, in addition, Bahrain, Brunei, Oman, Trinidad and Tobago. [4] Including those countries in the Caribbean area which cannot be considered as offshore banking centres. [5] Including international institutions other than the BIS. [6] Excluding redepositing among the reporting banks but including part of the unallocated item and positions vis-à-vis the Bahamas, Cayman Islands, Panama, Hong Kong and Singapore. [7] Including positions vis-à-vis the remaining offshore centres as well as the rest of the unallocated item.

Outside the reporting area, the non-oil developing world continued to be the principal net and gross borrower of international banking funds. The reporting banks' identified claims on these countries rose by $41.6 billion to a total of $230 billion last year. This was about $2.5 billion more than the expansion recorded in

1980, and, if allowance is made for the gaps in the statistics, such as loans booked via non-reporting banks in offshore centres, this credit flow might easily have exceeded $45 billion. As usual, Latin American countries were the largest receivers of credit, accounting for $32.6 billion, or over three-quarters of total identified new credit. Perhaps somewhat surprisingly, new deposits by developing countries showed an even stronger acceleration last year than their borrowing, from $4.1 to 10.4 billion. As a result, on a net basis these countries actually recorded a decline in their net recourse to international banking funds from $35.1 billion in 1980 to $31.2 billion. Most of the deposit build-up occurred in the fourth quarter of 1981 when the temporary decline in US interest rates and the weakness of the dollar appear to have encouraged some anticipatory borrowing.

Data for individual countries are not available on an exchange rate adjusted basis, and, in terms of the banks reporting, their coverage is somewhat narrower than that of the figures for the area totals; for these two reasons they tend somewhat to understate the size of the movements that occurred last year. Nevertheless, it may be noted that in the developing world, Mexico ($14.2 billion), Brazil ($6.5 billion) and Argentina ($4 billion) were the largest individual borrowing countries last year. However, Mexico also added $2.7 billion to its deposits with the reporting banks. Most of Brazil's borrowing was concentrated in the final quarter of 1981 and, unlike in preceding years, this borrowing was not accompanied by a parallel drawing-down of the country's deposits with the reporting banks. Outside Latin America, South Korea was the largest borrower, with $3 billion of net new takings. China, on the other hand, not only reduced its gross banking debts but added $2.2 billion to its deposits, thereby building up its net creditor position vis-à-vis the reporting banks from $0.3 to 3 billion. Taiwan, which added $1.2 billion to its deposits, also became a net supplier of banking funds in the course of last year.

Eastern European countries, owing partly to the backlash effect of the Polish situation, received only $4.8 billion of new credits last year, as against $7 billion in 1980. Most of last year's new borrowing was by the Soviet Union and the German Democratic Republic. New deposits by eastern European countries were reduced to a mere trickle. The Soviet Union drew heavily on its deposits with the reporting banks in the first half of the year but later, with the aid of substantial gold sales, succeeded in largely rebuilding its balances.

Developed countries outside the reporting area, like the developing countries, experienced a widening in their combined current-account deficit last year and borrowed $16.9 billion in new funds, which was $1.4 billion more than in 1980. Since, at the same time, new deposits supplied by these countries slowed down by $2.5 to 3.4 billion, their total net recourse to international banking funds picked up quite strongly from $9.6 to 13.5 billion. The largest individual borrowers in this group last year were Spain, South Africa, Australia, Portugal and Greece.

OPEC member countries shifted last year from being net suppliers to net users of international banking funds. After a rapid contraction during the course of 1980, new OPEC deposits still amounted to $5 billion in the first quarter of 1981 before falling to $1.7 billion in the second quarter and giving way to withdrawals of $0.9 and 2.6 billion in the third and fourth quarters respectively. The course of OPEC

borrowings showed the opposite pattern; whereas in the first quarter these countries reduced their gross debts to the reporting banks by $2.4 billion, they added $2.9 billion to them in the fourth quarter. These developments meant that OPEC countries, after being net suppliers of new funds to the international banking sector to the extent of $7.7 billion in the first half of the year, became net takers of funds to the extent of $8.8 billion in the second half.

In the Middle East, the "low absorbing" OPEC countries may be estimated to have added nearly $20 billion to their deposits with banks outside the United States, which corresponded only to about 25 per cent. of their combined current-account surplus. The "high absorbers", on the other hand, appear to have met the bulk of their financing requirements through drawing down their deposits in the international banking sector. Their balances with banks outside the United States may be estimated to have declined by $11 billion, and the $2.4 billion of Middle Eastern OPEC deposits withdrawn from banks in the United States was probably also accounted for by these countries. At the same time, the Middle Eastern "high absorbers" hardly borrowed any new funds from the reporting banks. Outside the Middle East, and including exchange rate effects, Nigeria scaled down its deposits with the reporting banks by $3.7 billion, while obtaining $1.4 billion in new credits. Venezuela borrowed $0.9 billion, but built up its deposits by $2.8 billion, thereby substantially reducing its net indebtedness vis-à-vis the reporting banks.

It might be added that the figures in the two preceding paragraphs do not include new OPEC funds supplied to the international banking sector via trustee accounts of banks in Switzerland. It is conceivable that these inflows amounted to up to $2–3 billion last year.

Inside the reporting area, by far the largest contribution to the $137 billion supply of new funds was made by the United States. External assets of banks in the United States soared by $76.5 billion, although this figure is inflated by double-counting. But, even on an assets-minus-liabilities basis, the external creditor positions of these banks rose by $38.5 billion, or nearly 100 per cent. In addition, the US non-bank sector built up its deposits with the reporting banks abroad by $31.2 billion, or 56 per cent. Deposits by non-bank residents of other reporting countries (excluding Japan) increased by $20 billion, and approximately $15 billion of new non-bank funds was provided to the market via trustee accounts in Switzerland. About $20 billion was supplied to the international market via the money exports of banks in the other reporting countries.

At around $93 billion, the use of international banking funds within the reporting area continued at a very high level last year. Direct credits to the non-bank sectors of the reporting countries may be estimated to have expanded by around $60 billion (for details see the following section). The remainder is largely accounted for by the reporting banks' own use of external funds for lending at home in domestic currency. Here the rôle of the United States was considerably less important than on the sources side of the market. Admittedly, interbank claims on the United States showed a strong increase, but most of this was for relending outside the United States.

Use of the international banking sector by non-bank residents of Group of Ten countries.

The table on the following page illustrates the rôle of the international banking sector as a direct deposit outlet and source of credit for non-bank entities in the Group of Ten countries and Switzerland. It also contains, for comparative purposes, data on the growth of these countries' broadly defined domestic monetary and credit aggregates, expressed in US dollars. Two features stand out. Firstly, the rapid growth during the past two years in the direct use of the international banking sector by domestic non-bank entities both as a source of credit and as an investment medium. Secondly, the growth of this depositing and borrowing has in several countries become very large in relation to the growth of the broadly defined domestic monetary and credit aggregates.

In assessing the significance of the increased use of the international banking market by the non-bank sectors of the Group of Ten countries and in particular its implications for the efficacy of domestic monetary policy, two points need to be borne in mind. Firstly, those countries which are important international banking centres also quite often serve as domiciles for international non-bank corporations or their affiliates (such as finance companies). Although these firms may be important depositors and borrowers of international banking funds, they are in many cases not really part of the domestic economy of the host country and the significance of their international banking business for money and credit conditions in the host country may be quite limited. For example, this applies in particular to Belgium-Luxembourg, where the very sizable total of the domestic non-bank sector's foreign currency deposits with domestic banks is attributable in large measure to international firms with Luxembourg addresses. Similar considerations probably apply to the links between domestic non-bank entities and the international banking sector in Switzerland and, to a lesser extent, in the United Kingdom. Secondly, and apart from the rôle of international firms, non-bank borrowers in the international banking sector are quite often public-sector entities or private firms which, for balance-of-payments reasons, have been officially encouraged to seek credit abroad. In such cases, international borrowing can hardly be considered as interfering with domestic policy goals, but will tend rather to provide the authorities with an additional degree of freedom. Nevertheless, and despite these qualifications, it cannot be denied that the build-up of private liquidity in the international market and residents' use of the market as a source of credit may in some instances, by affecting the behaviour of the domestic monetary and credit aggregates, pose problems for national authorities.

On the sources side of the market, the highlights of developments in 1981 were undoubtedly the very sharp acceleration from $9.6 to 31.2 billion in new international bank deposits by US non-bank entities and the substantial growth of such deposits held by residents of the United Kingdom ($5.6 billion), Belgium-Luxembourg ($4.7 billion) and Switzerland ($4.2 billion). In the case of the United States, the deposit build-up, which was equivalent to about 14 per cent. of M_3 growth, predominantly took the form of additions to dollar deposits with banks abroad. It occurred although the interest rate premium on Euro-deposits over comparable money-market placements in the United States was on average

The international banking sector[1] as a deposit outlet and source of credit for non-banks in Group of Ten countries and Switzerland.

Residents of:	Types of positions		Deposits: in domestic currency: abroad	Deposits: in foreign currency: at home	Deposits: in foreign currency: abroad[2]	*Memorandum item:* Domestic broad monetary aggregates[3]	Borrowings: in domestic currency: abroad	Borrowings: in foreign currency: at home	Borrowings: in foreign currency: abroad[2]	*Memorandum item:* Domestic credit[4]
			in billions of US dollars[5]							
Belgium-Luxembourg	Changes	1979	0.6	0.9	0.6	3.0	0.1	2.5	0.7	6.1
		1980	1.1	0.7	1.0	2.3	0.1	2.9	2.0	4.7
		1981	0.5	3.0	1.2	1.8	–	3.4	2.9	2.2
	Stocks at end-	1981	2.1	7.2	5.3	44.2	0.2	11.5	7.8	47.0
Canada	Changes	1979	.	−0.5	−0.3	14.7	.	0.6	0.4	16.1
		1980	.	0.8	0.1	11.7	.	1.8	1.1	11.1
		1981	.	−3.4	4.9	23.5	.	9.2	1.7	23.5
	Stocks at end-	1981	.	5.6	6.7	148.3	.	21.1	7.3	150.3
France	Changes	1979	0.1	0.4	0.8	38.9	0.1	0.1	0.7	45.8
		1980	0.1	0.4	0.5	28.2	0.4	3.7	1.3	44.2
		1981	–	−0.2	0.4	29.0	−0.2	1.2	1.8	47.4
	Stocks at end-	1981	0.3	1.8	3.8	273.9	0.4	8.7	8.5	332.3
Germany	Changes	1979	0.3	−0.3	0.4	23.4	−1.0	–	1.2	78.0
		1980	1.4	0.2	1.2	22.1	9.4	0.2	1.2	67.0
		1981	1.0	−0.2	0.2	15.4	7.9	–	2.3	58.0
	Stocks at end-	1981	3.7	1.3	3.6	342.9	29.6	1.5	7.6	712.2
Italy	Changes	1979	–	0.2	0.4	68.8	0.1	2.0	1.0	37.7
		1980	–	–	0.1	56.7	–	7.1	3.7	29.1
		1981	–	0.2	0.5	47.1	–	−0.9	7.0	16.7
	Stocks at end-	1981	–	1.2	2.8	336.3	0.1	14.5	17.4	200.5
Japan	Changes	1979	–	.	−0.1	129.4	0.3	.	0.2	79.9
		1980	–	.	0.2	136.6	–	.	0.5	89.4
		1981	–	.	0.2	164.9	0.2	.	−1.5	112.7
	Stocks at end-	1981	0.1	.	0.8	1,671.2	0.5	.	8.6	1,248.3
Netherlands	Changes	1979	–	0.3	0.5	3.2	0.2	0.8	0.1	14.6
		1980	–	0.2	1.1	1.8	–	0.5	1.0	10.7
		1981	0.2	0.7	0.9	1.7	0.1	0.2	0.5	5.7
	Stocks at end-	1981	0.4	3.1	4.7	42.4	0.6	2.6	4.1	99.1
Sweden	Changes	1979	.	0.1	–	6.3	.	1.2	−0.1	12.4
		1980	.	–	–	10.5	.	1.4	2.8	14.7
		1981	.	0.1	–	7.8	.	2.0	0.5	12.9
	Stocks at end-	1981	.	0.5	0.6	63.7	.	7.0	7.6	83.2
Switzerland	Changes	1979	0.2[6]	0.3	3.0	10.1	0.3	–	0.8	8.5
		1980	0.4[6]	–	2.2	4.7	0.2	0.4	0.7	11.6
		1981	0.4[6]	0.5	3.3	3.8	0.2	−0.5	0.1	10.3
	Stocks at end-	1981	1.9[6]	3.8	17.0	120.8	1.1	3.2	4.9	107.1
United Kingdom	Changes	1979	0.7	2.0	0.2	14.6	0.9	0.9	0.6	22.2
		1980	1.5	2.8	1.2	26.1	−0.1	1.0	0.1	28.9
		1981	−0.3	4.8	1.1	17.6	–	4.8	0.5	16.8
	Stocks at end-	1981	1.9	18.5	6.2	151.3	1.3	27.0	7.1	155.1
United States	Changes	1979	15.5[7]	.	0.5	118.7	2.7	.	1.7	123.1
		1980	9.6[7]	.	–	214.6	2.3	.	0.3	103.6
		1981	30.2[7]	.	1.0	223.9	5.6	.	−0.2	75.3
	Stocks at end-	1981	82.2[7]	.	4.6	2,192.7	15.8	.	4.4	1,326.9
Total	Changes	1979	17.4	3.4	6.0	.	3.7	8.1	7.3	.
		1980	14.1	5.1	7.6	.	12.3	19.0	14.7	.
		1981	32.0	5.5	13.7	.	13.8	19.4	15.6	.
	Stocks at end-	1981	92.6	43.0	56.1	.	49.6	97.1	85.3	.

[1] Banks in reporting European countries, Canada, Japan and — starting from the third quarter of 1980 — the United States. [2] Including the local currency of the accepting/lending bank, except in the case of the Swiss banks for which a bank/non-bank breakdown is not available. [3] M_2 for Belgium, France and the Netherlands; M_3 for the other countries (including in addition government deposits for Canada, CDs for Japan, but excluding overnight Euro-dollar deposits with the Caribbean branches of US banks for the United States); whenever needed, the figures have been adjusted so as to exclude the foreign currency component shown separately, with the exception of Japan, for which this item (not publicly available) is still included in the broad monetary aggregate. [4] Credit to the private sector and net credit to the public sector adjusted whenever needed to exclude the foreign currency component shown separately. [5] Changes are given at constant end-of-quarter exchange rates. [6] Excluding trustee deposits. [7] Including deposits with the offshore branches of US banks.

somewhat lower than in 1980, but it may have reflected both the growing rôle of US mutual funds as Euro-market depositors and the increased awareness of US non-bank entities in general of the higher deposit yields available in the international market. In the United Kingdom the large increase in non-bank deposits, most of which was in the form of foreign currency with banks at home, has to be seen against the background of the abolition of exchange controls in the autumn of 1979. In 1981, moreover, the growth of these deposits was stimulated by the combination of very high dollar interest rates and the strong exchange-market performance of the dollar.

More generally, it can probably be said that dwindling money illusion has in recent years reinforced investors' search for yields that avoid an erosion of the real value of the invested funds through inflation and taxation. With the upward mobility of deposit rates in national markets frequently impaired by regulatory constraints, institutional rigidities and imperfections of competition, the international market, not too surprisingly, was very successful in attracting this kind of funds.

On the uses side of the market, the largest Group of Ten non-bank borrowers last year were residents of Canada ($10.9 billion), Germany ($10.2 billion), Belgium-Luxembourg ($6.3 billion) and Italy ($6.1 billion). Identified direct new borrowing by US non-bank residents from the international banking market, at $5.4 billion, was much smaller than the increase in their international bank deposits. However, this figure does not include credits that may have been extended to the US non-bank sector by the branches of US banks and other banking offices in the offshore centres of the Caribbean and Far East and there may also have been substantial borrowing by US firms via their foreign affiliates (see pages 130–131). After allowing for these missing items, new credits extended by banking offices outside the United States to the US non-bank sector may have been of the order of $12–15 billion.

The very large amount of Euro-currency borrowing by Canadian residents, chiefly from banks at home, was in large measure related to the Government's "Canadianisation" policy in the energy sector (see page 132). The Euro-currency borrowing by German non-bank residents, most of which came from the Euro-Deutsche Mark market, was primarily due to the larger German firms taking advantage of the lower rates of interest occasionally available at the German banks' foreign affiliates. To the extent that this borrowing was not associated with circular movements of funds, but represented genuine net capital imports, it was certainly welcome for balance-of-payments and exchange rate reasons. Balance-of-payments considerations were also a reason for the recourse to international bank credit during 1981 of non-bank borrowers in Belgium-Luxembourg, Italy, France and Sweden. In these countries a substantial part of this borrowing was undertaken directly by public-sector entities or the Government itself. A large amount of foreign currency borrowing from domestic banks, the so-called "impact loans", seems to have occurred in Japan following the relaxation of exchange controls in autumn 1980. Data on the volume of this activity are, however, not available.

Currency structure of international bank activity.

On the face of it, 1981 may appear to have been the year of the dollar in the international banking market. At current exchange rates the dollar accounted for 89 per cent. of the increase in the exchange value of the reporting banks' external assets and for 99 per cent. of the increase in their liabilities. This predominance of the dollar in new business was, however, largely the result of the especially rapid growth of the external business of banks in the United States and the offshore branches of US banks, nearly all of which is in dollars, and of the appreciation of the dollar.

The picture looks somewhat different if attention is focused on the narrowly defined Euro-currency market, and if the effects of the appreciation of the dollar are excluded. On a valuation-adjusted basis, dollar positions accounted for only 65.3 per cent. of the increase in the reporting European banks' external assets in foreign currencies, whereas at the end of 1980 they had represented 69 per cent. of total outstanding assets; and it was only on the liabilities side of the banks' balance sheets that the share of the dollar showed a slight increase. Moreover, the increase in dollar positions was largely concentrated in the fourth quarter of 1981, when the dollar was relatively weak in the exchange markets, whereas in the first nine months the dollar's market share was well below average. This can probably be attributed to the fact that, at times when the dollar was considered to be appreciation-prone, borrowers preferred to incur debt in other currencies and at interest rates that were considerably lower than those for dollar credits.

These influences also showed up in the currency structure of the reporting European banks' direct business with non-banks. On the uses side of their balance sheets the share of new credits denominated in currencies other than the dollar, which had already expanded strongly in 1980 when the dollar began to recover in

Currency composition of Euro-currency flows.*

Years	Dollars			Other foreign currencies						
		of which vis-à-vis			*of which*					
					vis-à-vis					
	Total	non-banks	official monetary authorities	Total	non-banks	official monetary authorities	Deutsche Mark	Swiss francs	pounds sterling	yen
	in billions of US dollars at constant end-of-quarter exchange rates									
	Assets									
1976	33.8	9.9	1.2	8.1	0.9	0.5	2.6	1.4	0.6	.
1977	38.4	13.8	– 0.4	23.8	6.6	– 0.3	15.5	1.7	2.7	.
1978	71.1	18.7	3.0	26.2	6.0	0.2	16.1	– 1.3	1.4	3.1
1979	88.4	20.1	– 3.5	41.9	7.2	0.1	21.0	10.0	3.1	2.0
1980	90.8	27.3	2.2	40.3	15.1	0.1	13.3	15.1	0.9	2.6
1981	74.8	28.0	– 0.8	39.7	16.3	0.4	14.0	10.3	2.8	6.6
	Liabilities									
1976	40.6	5.3	9.5	6.8	2.0	– 1.0	3.1	– 0.5	1.4	.
1977	42.8	4.7	4.6	25.5	2.3	3.0	15.4	3.0	2.3	.
1978	69.7	10.0	– 0.4	24.9	2.3	5.7	13.7	– 0.5	2.7	2.8
1979	88.0	19.9	17.8	59.5	5.0	13.8	28.8	12.0	3.8	5.6
1980	111.7	19.7	2.9	42.3	6.7	3.3	12.7	15.2	7.1	– 1.0
1981	83.2	32.2	– 7.7	36.2	5.8	– 5.4	8.9	16.0	– 0.9	5.8

* Banks in reporting European countries (see table on pages 139 and 140).

the exchange markets, registered some further increase. On the sources side of the market, by contrast, new deposits in non-dollar currencies slowed down, whereas the inflow of new dollar deposits accelerated sharply and, at $32.2 billion, reached by far the highest figure yet recorded. Another significant feature last year was the $13.1 billion drawdown of Euro-currency deposits by official monetary institutions. However, it does not appear that these withdrawals were primarily related to exchange rate considerations, since they included a $7.7 billion reduction in dollar deposits (see also Chapter VII, pages 166–168).

As regards individual currencies other than the dollar, in absolute terms the largest growth was, as usual, shown in the reporting European banks' Deutsche Mark and Swiss franc assets, which rose by $14 and 10.3 billion respectively. In terms of growth rates, however, their yen assets expanded much more rapidly, by $6.6 billion, or by two-thirds. As a result, the yen has overtaken sterling in quantitative importance on the assets side of the banks' balance sheets and ranks third among the non-dollar currencies, after the Deutsche Mark and the Swiss franc. At less than 2 per cent., however, its total market share remains small.

Developments in individual market centres.

The external assets of banks in reporting European countries expanded by $136 billion last year to a total of $992 billion. This was less than the $159 billion growth recorded in 1980. The slowdown was essentially due to a sharp contraction in the volume of new interbank business within the reporting European area, whereas new lending to non-banks was slightly larger than in 1980. There was also some slackening in the volume of new credits to countries outside the broader reporting area, notably to eastern Europe. On the sources side of the European banks' balance sheets, there was a sharp slowdown in new deposits from oil-exporting countries, and liabilities to eastern Europe actually declined. On the other hand, there were large inflows of new funds via trustee accounts of banks in Switzerland and from the United States.

As regards the rôle of individual reporting European countries, the main feature of 1981 developments was undoubtedly the very large share of banks in the United Kingdom in total Euro-market growth. The external assets in foreign currencies of banks in the United Kingdom expanded by $74.7 billion, or 23 per cent., accounting for 65 per cent. of the total increase for all reporting European banks. By comparison, growth was rather slow in the two other major Euro-market centres, France and Luxembourg, where such assets expanded by only $5.2 and 6 billion, or by 4.5 and 7.5 per cent., respectively. After the United Kingdom, the next largest increases in Euro-currency assets were posted instead by banks in Belgium ($8.7 billion) and Italy ($6.6 billion).

Looking at the European banks' rôle as net exporters and importers of funds, by far the largest movement was shown by banks in France, whose net external debtor position in foreign currencies increased by $9.9 billion to a total of $11.9 billion. A sizable part of these borrowings, however, seems to have been used to finance a $4.2 billion expansion in the largely trade-related net external creditor

Changes in external positions of banks in individual reporting countries and of certain offshore branches of US banks.

		Assets				Liabilities			
		1978	1979	1980	1981	1978	1979	1980	1981
		in billions of US dollars at constant end-of-quarter exchange rates							
Austria	Domestic currency ..	0.6	1.1	1.3	1.1	0.3	0.3	0.4	0.2
	Foreign currencies ...	1.5	3.9	2.0	1.3	2.0	4.6	5.4	1.8
Belgium	Domestic currency ..	– 0.1	0.1	1.1	–	0.3	1.7	2.2	– 1.1
	Foreign currencies ...	7.2	7.1	14.0	8.7	7.9	9.6	15.8	10.9
Luxembourg	Domestic currency ..	0.2	0.4	– 0.1	0.3	–	0.3	0.2	– 0.2
	Foreign currencies ...	10.2	18.8	13.6	6.0	9.0	19.3	12.6	4.2
Denmark	Domestic currency ..	–	0.1	0.1	– 0.1	0.1	–	0.1	–
	Foreign currencies ...	0.6	0.9	–	0.8	0.9	0.9	–	0.4
France	Domestic currency ..	5.0	4.2	4.0	4.1	0.8	0.7	2.9	– 0.1
	Foreign currencies ...	15.9	18.6	20.9	5.2	12.6	19.4	25.3	15.1
Germany	Domestic currency ..	4.0	4.8	9.7	6.1	12.0	11.8	2.8	1.2
	Foreign currencies ...	2.8	0.8	0.3	3.0	3.1	4.3	0.4	1.8
Ireland	Domestic currency ..	.	.	–	–	.	.	0.3	0.3
	Foreign currencies ...	– 0.2	–	0.5	0.4	–	–	1.2	0.3
Italy	Domestic currency ..	0.3	0.7	– 0.2	–	0.4	0.8	0.4	– 0.1
	Foreign currencies ...	6.9	6.0	2.0	6.6	5.5	7.1	9.0	4.4
Netherlands	Domestic currency ..	2.2	2.6	1.0	2.4	1.9	2.7	2.7	0.7
	Foreign currencies ...	7.4	7.3	8.2	5.0	8.6	8.2	9.1	4.0
Sweden	Domestic currency ..	– 0.1	0.1	0.2	– 0.3	–	0.1	0.3	0.2
	Foreign currencies ...	– 0.1	1.3	1.7	0.2	0.9	3.1	3.3	1.9
Switzerland	Domestic currency ..	0.9	7.1	5.0	2.5	– 0.5	0.4	5.6	2.3
	Foreign currencies ...	7.4	–	– 1.0	2.6	8.1	3.6	2.0	0.3
United Kingdom	Domestic currency ..	1.6	– 0.6	5.6	5.4	0.2	6.0	7.1	4.9
	Foreign currencies ...	37.7	65.6	68.8	74.7	36.0	67.4	69.9	74.1
Canada	Domestic currency ..	0.1	0.1	– 0.1	0.6	0.6	0.4	0.1	1.5
	Foreign currencies ...	4.0	3.0	10.2	2.1	5.5	7.3	10.9	16.5
Japan	Domestic currency ..	3.6	5.3	3.4	5.4	2.9	– 3.5	7.2	1.7
	Foreign currencies ...	7.1	8.1	15.0	15.4	5.6	16.1	21.7	19.9
United States	Domestic currency ..	36.7	18.4	38.7	74.7[1]	21.2	38.5	7.4	37.2[1]
	Foreign currencies ...	1.3	– 1.3	2.0	1.8[1]	1.5	– 0.5	2.0	0.8[1]
Offshore branches	Foreign currencies[2] ..	15.0	21.0	13.7	31.6	15.4	21.3	14.3	33.5
Grand total	Domestic currency ..	55.0	44.4	69.7	102.2	40.2	60.2	39.7	48.7
	Foreign currencies ...	124.7	161.1	171.9	165.4	122.6	191.7	202.9	189.9

[1] Including international banking facilities. [2] Including small amounts in the domestic currencies of the centres concerned.

position in French francs. The other main net importers of external funds were banks in Sweden ($2.2 billion) and Belgium ($1.1 billion). The banks of most other reporting European countries were substantial net capital exporters in 1981.

The external claims of banks in the United States rose by $76.5 billion last year and their liabilities by $38 billion. Part of these very large gross and net capital exports was undoubtedly related to the use of the LIBOR option in US domestic loan contracts and may therefore have been associated with circular flows of funds.

Typically, the lending US bank would book the credit as a claim on its foreign branch, which in turn might show it as a claim on the US corporate customer's foreign affiliate, with the funds being rebooked to the United States through intra-company accounts. However, these circular flows can hardly account for the major part of money exports shown on the books of banks in the United States, and there can be little doubt that without the rôle of the US banking sector as a net capital exporter the upward pressures on the dollar would have been even stronger last year, and liquidity in the international banking market much tighter.

Another factor which helps to explain the strong increase in the gross external assets of banks in the United States was the opening on 3rd December of international banking facilities (IBFs). Since the IBFs are not subject to reserve requirements and enjoy a number of other regulatory and fiscal privileges, no business with the US non-bank sector or with non-affiliated banks in the United States other than IBFs may be booked through them. On the other hand, they are linked to the US domestic financial sector through intra-bank transactions with their parent offices in the US market. After only four weeks of existence, at the end of 1981 the IBFs showed external assets of $61.3 billion and external liabilities of $46.4 billion, approximately half of these amounts being accounted for by the US affiliates of foreign banks.

The funds booked through the IBFs seem to have come essentially from four sources. Firstly, a shift of external assets from banks' US books to the IBFs, which was reflected in a $19.2 billion decline during December in the "traditional" foreign assets in dollars of banks in the United States. Secondly, the rechannelling through the IBFs of deposits booked at the foreign affiliates of US banks; in December banks in the United States reported a $17.3 billion increase in their dollar liabilities to their foreign offices, while at the same time foreign branches of US banks recorded a sharp decline in their claims on residents of countries other than the United States. Thirdly, an outright shift, without going through intra-bank accounts, of both assets and liabilities from foreign offices to the IBFs, or perhaps a genuine increase in international business done via the United States without any offsetting decline elsewhere; thus, external liabilities of banks in the United States, other than those to their own offices abroad, showed a $13.1 billion growth during December. Finally, there appears to have been an expansion in international bank lending financed with funds obtained by the IBFs from within the United States via their US offices. The total net external creditor position in dollars of banks in the United States (including IBFs) showed a $11.6 billion increase during December. In short, of the $61.3 billion (including a small amount of non-dollar positions) of assets booked through the IBFs, at most $24.7 billion represented new business. And a substantial proportion of this smaller amount would undoubtedly have accrued even without the IBFs.

In the principal offshore centres of the Caribbean area and the Far East, the external assets of US banks' foreign branches expanded by $30.8 billion (including fairly small exchange rate effects) to a total of $171.8 billion in 1981. Their claims on the United States alone went up by $29.8 billion, $10.5 billion of which was vis-à-vis non-affiliated banks and the US non-bank sector, while the other $19.3 billion represented funds channelled back to head offices. The major part of this reflux, or,

more correctly, "rebooking", to head offices occurred in the fourth quarter and was associated with the opening of IBFs. The IBFs also help to explain why, after a $6.7 billion increase in the first nine months of the year, the claims of the offshore branches on non-OPEC developing countries dropped by $7.5 billion during the fourth quarter. Conversely, the claims of banks in the United States (including IBFs) on these developing countries, which had expanded by only $5.2 billion over the preceding three quarters, soared by $18.5 billion, or 34 per cent., during the fourth quarter. On the sources side of the balance sheets of the offshore branches, too, by far the largest movement was a $28.1 billion increase in liabilities to US residents, although this was not linked to any major extent with the IBFs. Liabilities to US non-bank entities alone increased by nearly $12 billion, or almost 50 per cent.

Banks in Japan once more reported a rapid expansion of their international activities last year. Their external assets rose by $20.8 billion to a total of $84.6 billion. Their external liabilities, too, continued to expand rapidly, though by considerably less than in 1980. As a result, the banks' net external debtor position, which in 1980 had increased by $10.5 billion in connection with the country's large balance-of-payments financing requirements, widened by only a further $0.8 billion last year, to $15.8 billion. The sharp growth of the Japanese banks' external claims in 1981 owed much to the relaxation of official guidelines governing the participation of domestic banks in international syndicated loans. In addition, the relatively low interest rates charged on yen loans, as well as the fairly weak exchange-market performance of the yen, helped to stimulate foreign demand for yen credits. The strong expansion in external liabilities was due in part to the removal in December 1980 of all restrictions on the so-called "impact loans", viz. foreign currency credits to residents. These loans, which are largely funded by the Japanese banks abroad, appear to have increased quite sharply last year. On the other hand, the inflow of oil funds, particularly into yen deposits, came to an end.

Banks in Canada were heavy net importers of external funds last year. Their external liabilities went up by no less than $18 billion, while their assets showed an increase of only $2.7 billion. Besides being facilitated by favourable interest rate differentials, these net banking inflows reflected two special factors. Firstly, foreign currency loans to Canadian residents for financing takeovers of foreign-owned energy firms. Secondly, the imposition in February 1981 of a 3 per cent. reserve requirement on Canadian non-bank residents' foreign currency deposits with banks in Canada. This led to a shift of such deposits abroad, from where they were recovered by banks in Canada via the international interbank market.

The international bond markets.

Judged by the volume of activity, 1981 was a very successful year for the international bond markets. After four years of hesitant growth the gross amount of new issues increased sharply — by $9.8 billion to $47.8 billion. The expansion encompassed both Euro-bond issues, which soared by nearly one-third to $26.5 billion, and foreign issues in national markets, which rose by 19 per cent. to $21.3 billion.

International bond issues.[1]

Borrowing countries or areas	Years	Euro-bond issues				Foreign issues			
		Total	of which			Total	of which		
			US dollars	Deutsche Mark	private placements		in United States	in Switzerland	private placements
		in millions of US dollars							
Western Europe ...	1979	7,360	3,760	2,220	2,570	5,830	970	4,160	2,680
	1980	9,070	4,860	2,110	1,580	5,930	610	3,380	1,550
	1981	7,580	5,230	860	660	5,450	640	3,070	1,400
	1982/I	4,430	3,550	590	.	1,610	–	630	.
Canada	1979	1,400	830	30	30	2,730	2,070	510	570
	1980	1,440	1,150	60	–	1,740	1,500	160	310
	1981	5,010	4,060	130	20	5,950	4,800	870	1,040
	1982/I	1,630	1,150	60	.	1,430	700	690	.
United States	1979	2,870	2,780	60	430	1,210	–	60	–
	1980	4,390	3,960	120	260	1,370	–	200	120
	1981	5,850	5,700	30	70	700	–	700	470
	1982/I	3,730	3,650	–	.	530	–	380	.
Other developed countries[2]	1979	1,780	780	960	330	3,810	80	3,500	3,210
	1980	2,260	1,220	780	350	2,620	–	2,310	1,830
	1981	3,240	2,500	230	200	3,050	320	2,370	1,920
	1982/I	1,170	940	10	.	1,250	–	1,010	.
Rest of the world[3] .	1979	1,900	1,360	410	210	1,190	140	300	350
	1980	1,180	750	390	–	570	80	140	100
	1981	2,320	2,060	90	210	1,120	440	90	350
	1982/I	1,090	920	130	.	300	–	100	.
International institutions	1979	2,040	700	1,090	1,400	5,210	1,110	950	4,050
	1980	1,710	1,360	–	1,050	5,720	550	1,280	2,880
	1981	2,490	1,700	40	460	5,040	1,380	1,030	570
	1982/I	640	510	–	.	1,280	–	320	.
Total issues placed	1979	17,350	10,210	4,770	4,970	19,980	4,370	9,480	10,860
	1980	20,050	13,300	3,460	3,240	17,950	2,740	7,470	6,790
	1981	26,490	21,250	1,380	1,620	21,310	7,580	8,130	5,750
	1982/I	12,690	10,720	790	.	6,400	700	3,130	.

[1] Based on IBRD and OECD sources. [2] Australia, Japan, New Zealand and South Africa. [3] Including eastern European countries.

This strong expansion in bond issues occurred in conditions that were not in all respects favourable for capital markets, with long-term interest rates rising for much of the year, inverted yield curves, pronounced short-term interest and exchange rate volatility as well as more general political and economic uncertainties. However, it appears to have been precisely this instability and harshness of the environment that brought out more clearly the comparative advantages of the international market over the national markets — namely, its greater flexibility, its informality and its innovative character.

Another factor that worked in favour of the international market was the strength of the US dollar, which added to the appeal of dollar bonds for non-US investors. Moreover, foreign investors, apparently less pessimistic than their US counterparts about the interest rate outlook in the United States, were at times very strongly attracted by the unprecedentedly high level of dollar yields. This helps to explain why borrowing costs in the Euro-dollar bond market were for much of the

year lower than in the US market, a circumstance which exerted a strong attraction on North American borrowers. Naturally, the strong dollar and the unusually high dollar interest rates did not appeal to non-US borrowers. Nevertheless, deteriorating liquidity positions, the even higher level of short-term interest rates and the fact that the Euro-Deutsche Mark market was at times virtually closed, left them sometimes little choice.

These various influences were closely reflected in the currency structure and geographical pattern of new bond issues last year, and in the types of instrument used. The outstanding feature of the currency structure was the buoyancy of the dollar sector. Euro-dollar issues expanded from $13.3 billion in 1980 to $21.3 billion, accounting for more than the whole of the expansion in the Euro-bond market. Foreign issues in the United States soared from $2.7 to 7.6 billion, despite the relatively sluggish performance of the US domestic market.

Foreign issues in the German market and Euro-DM issues, on the other hand, did not fare very well in 1981. At $2.6 billion, their combined total came to only 30 per cent. of the 1980 figure. In the early months of 1981 the market was virtually closed, largely for balance-of-payments reasons, but even after its reopening in mid-April activity remained subdued. Investors were discouraged by yields that were considerably lower than those on dollar bonds and by the weakness of the Deutsche Mark against the dollar, and borrowers by the fact of having to offer coupons carrying record post-war interest rates. However, the market began to revive in the fourth quarter when short-term interest rates came down quite sharply and the improvement of Germany's underlying balance of payments gave rise to hopes that German interest rates might be able to detach themselves somewhat from developments in the United States.

Although labouring under some of the same handicaps as the Deutsche Mark, the other sectors of the international bond market did quite well. In Switzerland foreign issues expanded by $0.7 to 8.1 billion, and in Japan by $1.2 to 2.7 billion.

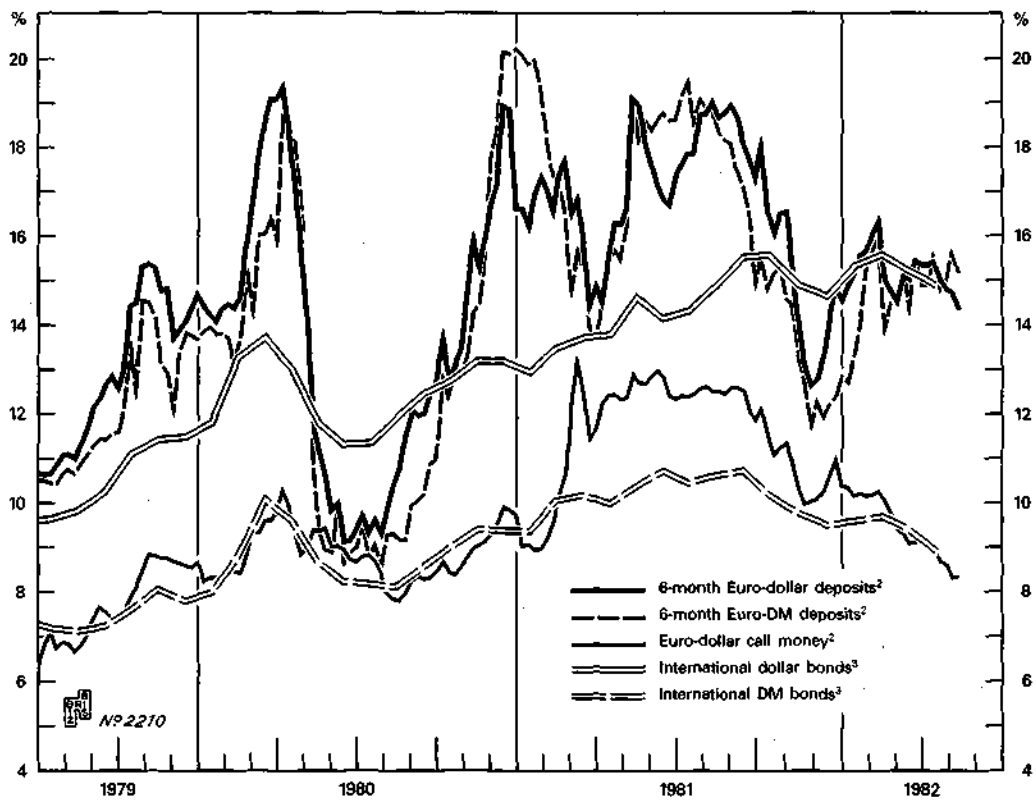
Last year the international bond markets again demonstrated their ability to thrive on adversity by adapting their instruments to the changing preferences of their customers. With persistent uncertainties about the future course of inflation and interest rates, floating rate notes continued to account for an increasing share of the market; this was true both of the dollar sector, where their share increased to one-third last year, and, on a much more modest scale, of the Swiss franc sector. Moreover, as regards straight issues, the market sought to stimulate investors' interest through a number of innovative features such as zero coupon bonds — which for tax reasons seemed to appeal especially to Japanese investors — warrant-attached issues and tap issues.

As regards groups of borrowers, the main features last year were a sharp increase in the share of funds raised by North American borrowers, substantially larger takings by developing countries, both directly and via the international development institutions, and a significant decline in the share accounted for by European borrowers. With interest rates in Canada even higher than those in the United States, external offerings by Canadian borrowers rose from $3.2 billion in 1980 to $11 billion last year and accounted for the bulk of the sharp increase in

foreign issue activity in the United States. US corporate borrowers stepped up their recourse to Euro-bond finance from $4.4 to 5.9 billion, but owing to the weakness of the Deutsche Mark sector borrowed less in national markets abroad. Non-OPEC developing countries raised $3 billion, more than twice as much as in 1980, with Mexico alone accounting for three-quarters of this amount. Development institutions obtained $5 billion, or $1.2 billion more than in 1980, thereby contributing to an increase from 14 to 17 per cent. in the market share of bonds issued by or on behalf of developing countries. Eastern European countries were absent from the market last year. Western European takings declined by $2 billion and their share in the total market offtake contracted from nearly 40 per cent. to only 27 per cent. Smaller borrowings by Scandinavian countries (other than Finland) were the main factor behind this decrease. After Canada and the United States, the third largest borrowing country was Japan, about half of the $4.9 billion of new issues by Japanese entities being in the form of convertible bonds.

Despite the large issue volume, market conditions last year were mostly rather unsettled and activity was heavily concentrated in those periods when short-term interest rates were temporarily coming down. The pick-up, especially in the straight

Euro-currency deposit rates and yields on international markets for US dollar and DM bonds.[1]



[1] The bond yields are calculated to average maturity. [2] Weekly averages of daily quotations. [3] Monthly averages.

dollar bond sector, was particularly strong in the fourth quarter, when dollar bond yields were receding from their record level of nearly 16 per cent. in September and when the yield curve was temporarily restored to normal.

Although interest rates rose again towards the end of 1981 and in the new year, issue activity in the first quarter of 1982 continued to expand very strongly. In the Euro-bond sector in particular the new issue volume, at $12.7 billion, was nearly double the quarterly average for 1981 and one-third greater than in the fourth quarter. Owing to a sharp drop of issues in the US market, not fully offset by a strong expansion of issue activity in Switzerland, the volume of foreign bond issues was somewhat smaller than in the fourth quarter. Continuing uncertainties about interest rates were reflected in a further increase in the share of floating rate and convertible bond issues. The salient feature, however, was a spectacular rise in zero coupon issues during the first two months of the year before the Japanese authorities banned the sale of such securities to Japanese investors, whereas the volume of other straight dollar bond offerings declined sharply. In the Euro-bond sector, where new offerings by US corporations were by far the most important expansionary influence, the bulk of issue activity continued to be in dollars.

Geographical distribution of external positions of banks in the reporting area and of certain offshore branches of US banks.[1]

	1978	1979	1980	1981			
	Dec.	Dec.	Dec.	March[2]	June	Sept.	Dec.
	in billions of US dollars						
Banks' claims on:							
Group of Ten countries and Switzerland, Austria, Denmark and Ireland	467.6	588.3	704.4	717.2	702.6	743.8	819.9
of which: Reporting European area	*360.3*	*437.8*	*522.8*	*523.9*	*499.7*	*519.5*	*568.3*
United States	*53.0*	*81.9*	*89.0*	*90.7*	*97.3*	*111.5*	*133.6*
Canada	*16.0*	*19.2*	*23.5*	*26.5*	*32.1*	*35.8*	*36.8*
Japan	*38.3*	*49.4*	*69.1*	*76.1*	*73.5*	*77.0*	*81.2*
Offshore banking centres[3]	124.4	157.1	188.8	202.7	210.6	225.3	237.5
Other countries in western Europe	50.4	58.7	70.1	71.4	71.7	73.6	77.1
Australia, New Zealand and South Africa	13.5	13.7	15.6	16.1	16.9	19.2	21.8
Eastern Europe	47.5	55.9	59.8	58.8	57.1	58.7	60.8
OPEC countries[4]	56.4	64.1	70.0	66.3	65.9	68.5	72.0
Other developing countries	119.7	155.6	193.3	196.1	201.2	212.3	230.1
of which: Latin America[5]	*79.0*	*102.5*	*129.2*	*132.9*	*136.7*	*145.7*	*158.5*
Middle East	*6.5*	*7.8*	*9.7*	*9.2*	*10.0*	*9.9*	*11.5*
Other Asia	*22.9*	*31.0*	*38.5*	*38.4*	*39.6*	*40.5*	*43.1*
Other Africa	*11.3*	*14.3*	*15.9*	*15.6*	*14.9*	*16.2*	*17.0*
Unallocated[6]	13.6	17.6	19.9	21.0	20.7	21.4	22.8
Total	893.1	1,111.0	1,321.9	1,349.6	1,346.7	1,422.8	1,542.0
of which: inside area, gross	*586.1*	*738.0*	*884.9*	*911.6*	*906.7*	*961.8*	*1,050.0*
inside area, net of double-counting[7]	*228.0*	*292.0*	*373.0*	*382.0*	*385.0*	*414.0*	*448.0*
outside area[8]	*307.0*	*373.0*	*437.0*	*438.0*	*440.0*	*461.0*	*492.0*
Total net international bank lending	535.0	665.0	810.0	820.0	825.0	875.0	940.0
Banks' liabilities to:							
Group of Ten countries and Switzerland, Austria, Denmark and Ireland	533.9	686.4	823.9	838.4	830.8	879.7	948.4
of which: Reporting European area	*404.7*	*528.8*	*613.9*	*612.6*	*591.8*	*613.5*	*658.6*
United States	*101.9*	*123.8*	*159.9*	*169.8*	*185.2*	*204.8*	*228.1*
Canada	*15.8*	*17.8*	*23.1*	*23.0*	*24.9*	*27.0*	*27.4*
Japan	*11.5*	*16.0*	*27.0*	*33.0*	*28.9*	*34.4*	*34.3*
Offshore banking centres[3]	97.8	140.3	166.0	171.3	179.8	198.8	219.5
Other countries in western Europe	35.4	42.6	46.4	44.5	42.4	45.6	47.7
Australia, New Zealand and South Africa	2.7	3.5	3.9	4.0	3.5	3.4	3.4
Eastern Europe	10.6	15.4	15.6	11.4	9.3	10.8	14.8
OPEC countries[4]	82.5	120.3	159.7	161.5	158.0	157.3	156.8
Other developing countries	75.8	88.7	91.4	88.6	87.5	89.4	98.3
of which: Latin America[5]	*32.5*	*37.8*	*36.0*	*34.5*	*34.0*	*35.4*	*39.8*
Middle East	*13.9*	*15.7*	*18.3*	*18.5*	*18.7*	*18.0*	*19.3*
Other Asia	*22.1*	*26.0*	*27.3*	*26.3*	*25.9*	*27.0*	*29.2*
Other Africa	*7.3*	*9.2*	*9.8*	*9.3*	*8.9*	*9.0*	*10.0*
Unallocated[6]	17.7	22.2	27.6	27.6	29.4	28.7	34.1
Total	856.4	1,119.4	1,334.5	1,347.3	1,340.7	1,413.7	1,523.0
of which: inside area, gross	*624.4*	*816.4*	*981.5*	*1,000.3*	*1,002.7*	*1,068.7*	*1,158.0*
inside area, net of double-counting[7]	*303.0*	*362.0*	*457.0*	*473.0*	*487.0*	*530.0*	*575.0*
outside area[8]	*232.0*	*303.0*	*353.0*	*347.0*	*338.0*	*345.0*	*365.0*
Total net international bank lending	535.0	665.0	810.0	820.0	825.0	875.0	940.0

Note: The figures in this table are partly based on estimates. The figures for banks in the United States exclude all custody items except negotiable US bank certificates of deposit held on behalf of non-residents; those for December 1981 include the external positions of international banking facilities.

[1] The offshore branches of US banks whose external positions are included in the figures are those located in the Bahamas, Cayman Islands, Panama, Hong Kong and Singapore. [2] Since March 1981 the figures also include external positions of a number of securities firms in the United States whose assets and liabilities amounted to $2.8 billion and $0.2 billion respectively, mainly vis-à-vis the reporting area. [3] Bahamas, Barbados, Bermuda, Cayman Islands, Hong Kong, Lebanon, Liberia, Netherlands Antilles, Panama, Singapore, Vanuatu (formerly New Hebrides) and other British West Indies. [4] *Includes, in addition, Bahrain, Brunei, Oman, Trinidad and Tobago.* [5] *Including those countries in the Caribbean area* which cannot be considered as offshore banking centres. [6] Including international institutions other than the BIS. [7] Excluding redepositing among the reporting banks but including part of the unallocated item and positions vis-à-vis the Bahamas, Cayman Islands, Panama, Hong Kong and Singapore. [8] Including positions vis-à-vis the remaining offshore centres as well as the rest of the unallocated item.

Currency breakdown of foreign currency positions of banks in reporting European countries.

End of month		Dollars			Other foreign currencies						
		Total	of which vis-à-vis		Total	of which					
			non-banks	official monetary authorities		vis-à-vis non-banks	vis-à-vis official monetary authorities	Deutsche Mark	Swiss francs	pounds sterling	yen
		in millions of US dollars									
		Assets									
1977	Dec. . . .	268,430	65,550	3,870	116,410	31,670	1,610	70,350	23,640	5,310	1,720
1978	Dec. . . .	339,520	84,250	6,880	162,450	42,950	2,060	97,430	27,890	7,300	5,400
1979	March .	327,200	85,570	4,050	162,340	42,870	1,580	94,860	26,000	8,260	6,090
	June . .	351,050	90,780	4,120	177,700	44,130	1,760	104,850	31,480	8,290	5,750
	Sept. . .	384,190	96,710	3,490	199,160	49,370	1,990	116,870	37,250	9,420	5,740
	Dec. . . .	427,960	104,320	3,380	211,770	52,140	2,200	124,430	38,660	11,140	6,280
1980	March .	438,960	108,630	4,350	204,220	54,230	2,190	115,710	38,010	11,590	8,000
	June . .	456,730	118,310	3,690	234,750	62,950	2,140	129,830	46,240	13,650	9,590
	Sept. . .	465,620	124,740	3,520	234,710	64,820	2,140	127,430	47,230	13,440	10,320
	Dec. . . .	518,730	131,620	5,540	232,510	61,880	2,230	122,930	49,620	12,970	10,560
1981	March .	525,670	135,920	5,480	236,140	63,110	2,700	123,970	51,400	13,030	12,120
	June . .	533,020	140,750	5,170	217,010	60,160	1,930	108,570	52,400	12,300	12,340
	Sept. . .	550,050	149,150	5,150	231,120	67,250	2,200	115,630	56,020	12,570	14,180
	Dec. . . .	593,530	159,650	4,730	246,520	71,240	2,410	120,280	60,020	13,120	16,430
Memorandum item:											
Positions vis-à-vis residents											
1977	Dec. . . .	*93,510*	*30,560*	.	*35,710*	*10,640*	.	.	.	.	.
1978	Dec. . . .	*106,530*	*32,690*	.	*49,550*	*13,500*	.	.	.	.	.
1979	Dec. . . .	*126,570*	*34,850*	.	*69,610*	*20,270*	.	.	.	.	.
1980	Dec. . . .	*169,560*	*42,200*	.	*85,400*	*29,860*	.	.	.	.	.
1981	March .	*182,300*	*43,560*	.	*83,090*	*27,930*	.	.	.	.	.
	June . .	*178,440*	*41,320*	.	*79,300*	*26,170*	.	.	.	.	.
	Sept. . .	*188,770*	*43,270*	.	*83,330*	*28,410*	.	.	.	.	.
	Dec. . . .	*193,430*	*48,960*	.	*88,690*	*30,130*	.	.	.	.	.
		Liabilities									
1977	Dec. . . .	278,840	34,330	49,250	117,360	12,230	17,970	68,680	22,720	6,870	2,670
1978	Dec. . . .	348,590	44,340	48,900	162,220	16,570	27,020	93,080	27,890	10,320	6,190
1979	March .	336,550	47,810	53,100	165,890	18,770	27,520	93,250	26,840	11,990	7,180
	June . .	359,930	51,820	56,660	185,430	18,780	29,000	104,630	32,270	13,050	7,840
	Sept. . .	392,420	58,640	63,760	212,040	21,570	36,540	117,790	38,280	14,550	8,820
	Dec. . . .	436,630	64,190	66,740	229,200	22,480	41,620	127,940	40,710	15,180	10,330
1980	March .	450,050	68,680	63,400	225,990	23,500	40,260	118,250	41,680	19,350	10,920
	June . .	474,000	71,380	67,690	254,490	26,860	43,420	133,000	49,240	22,930	10,020
	Sept. . .	486,110	74,410	72,370	255,760	26,410	44,650	130,470	51,690	23,070	10,130
	Dec. . . .	548,360	83,900	69,650	252,140	27,480	41,490	125,260	51,620	23,820	11,240
1981	March .	558,870	91,540	67,000	250,310	28,980	37,600	122,340	54,520	22,260	11,940
	June . .	565,350	93,980	65,010	226,640	25,530	32,390	103,150	56,420	18,280	11,770
	Sept. . .	583,110	104,800	62,390	238,080	27,690	30,870	107,910	61,330	17,540	12,380
	Dec. . . .	631,520	116,110	61,920	259,970	29,740	31,240	117,130	68,110	18,330	16,180
Memorandum item:											
Positions vis-à-vis residents											
1977	Dec. . . .	*75,310*	*12,280*	.	*30,400*	*5,460*	.	.	.	.	.
1978	Dec. . . .	*87,690*	*14,690*	.	*45,060*	*7,440*	.	.	.	.	.
1979	Dec. . . .	*108,910*	*17,180*	.	*63,940*	*9,280*	.	.	.	.	.
1980	Dec. . . .	*148,100*	*20,480*	.	*66,570*	*10,240*	.	.	.	.	.
1981	March .	*161,460*	*22,950*	.	*68,330*	*10,900*	.	.	.	.	.
	June . .	*161,220*	*25,850*	.	*65,720*	*9,940*	.	.	.	.	.
	Sept. . .	*171,470*	*26,330*	.	*70,660*	*12,200*	.	.	.	.	.
	Dec. . . .	*173,140*	*24,990*	.	*72,100*	*13,510*	.	.	.	.	.

External assets and liabilities of banks in individual reporting countries and of certain offshore branches of US banks.

			1979	1980	1981			
			Dec.	Dec.	March	June	Sept.	Dec.
			in millions of US dollars					
Austria	Assets	Domestic currency	4,160	4,840	4,770	4,330	4,840	5,230
		US dollars	6,610	7,220	7,460	7,940	8,230	8,100
		Other foreign currencies .	7,130	7,790	7,400	7,270	7,600	7,500
	Liabilities	Domestic currency	1,090	1,360	1,310	1,200	1,240	1,330
		US dollars	6,870	8,010	8,260	8,980	9,030	8,660
		Other foreign currencies .	11,040	14,040	12,710	12,220	12,870	14,030
Belgium	Assets	Domestic currency	3,330	3,280	2,930	2,640	2,740	2,740
		US dollars	23,310	33,430	34,230	35,590	35,250	36,840
		Other foreign currencies .	16,380	18,930	20,760	19,560	20,650	21,960
	Liabilities	Domestic currency	6,590	8,000	6,270	5,760	5,510	5,590
		US dollars	22,200	32,940	33,580	34,580	34,690	36,510
		Other foreign currencies .	21,350	24,990	27,020	25,850	27,250	28,940
Luxembourg	Assets	Domestic currency	1,400	1,330	1,250	1,190	1,290	1,340
		US dollars	29,300	33,620	36,040	35,660	34,220	34,970
		Other foreign currencies .	50,100	53,690	53,260	48,220	49,820	52,120
	Liabilities	Domestic currency	1,030	1,130	940	830	770	710
		US dollars	32,950	38,000	39,810	39,480	38,640	38,330
		Other foreign currencies .	42,680	45,500	45,100	39,840	40,580	44,030
Denmark	Assets	Domestic currency	150	220	130	130	130	130
		US dollars	1,860	2,140	1,900	2,130	1,990	2,140
		Other foreign currencies .	1,960	1,500	1,810	1,760	1,840	2,080
	Liabilities	Domestic currency	410	510	540	520	510	540
		US dollars	1,900	1,980	2,000	2,110	2,040	2,270
		Other foreign currencies .	1,420	1,360	1,510	1,470	1,340	1,360
France	Assets	Domestic currency	23,180	24,430	23,330	21,530	22,910	23,040
		US dollars	71,740	87,690	82,210	80,590	79,490	88,520
		Other foreign currencies .	28,700	31,080	30,930	27,730	30,070	31,920
	Liabilities	Domestic currency	6,610	8,610	7,960	6,070	5,540	6,600
		US dollars	61,100	81,450	80,840	79,880	80,920	92,390
		Other foreign currencies .	38,500	40,250	38,820	33,630	36,010	39,860
Germany	Assets	Domestic currency	47,620	51,820	47,690	42,740	43,590	51,060
		US dollars	14,360	14,190	14,250	12,680	14,300	17,120
		Other foreign currencies .	7,350	7,320	7,360	6,440	6,480	6,690
	Liabilities	Domestic currency	54,330	50,690	48,150	41,600	42,070	45,020
		US dollars	16,430	16,790	18,340	15,530	16,020	19,200
		Other foreign currencies .	7,000	6,710	6,050	5,500	5,680	5,620
Ireland	Assets	Domestic currency	.	140	90	90	100	110
		US dollars	360	540	560	550	560	430
		Other foreign currencies .	1,090	1,440	1,480	1,480	1,570	1,700
	Liabilities	Domestic currency	.	1,940	1,850	1,710	1,740	1,920
		US dollars	740	740	1,040	930	1,030	1,040
		Other foreign currencies .	1,260	2,450	2,240	2,030	1,880	2,070
Italy	Assets	Domestic currency	1,320	1,000	810	840	850	710
		US dollars	21,190	23,250	16,520	16,580	16,620	27,840
		Other foreign currencies .	7,130	6,440	6,320	6,040	6,210	7,730
	Liabilities	Domestic currency	2,900	2,900	2,310	2,110	2,130	2,240
		US dollars	25,400	31,740	24,150	24,080	22,540	34,620
		Other foreign currencies .	9,850	11,880	11,090	10,550	10,740	12,140
Netherlands	Assets	Domestic currency	11,390	11,310	11,220	11,140	11,920	12,290
		US dollars	23,010	27,960	28,760	29,070	29,390	29,780
		Other foreign currencies .	21,470	22,850	23,150	20,400	22,130	23,550
	Liabilities	Domestic currency	10,860	12,190	11,390	9,900	10,540	11,260
		US dollars	23,320	28,980	29,610	30,770	31,020	30,660
		Other foreign currencies .	21,260	23,420	22,870	19,920	20,890	22,980

Table continued on next page.

			1979	1980	1981			
			Dec.	Dec.	March	June	Sept.	Dec.
			in millions of US dollars					
Sweden	Assets	Domestic currency	1,030	1,200	910	940	1,000	720
		US dollars	2,950	4,330	4,610	4,130	4,080	4,280
		Other foreign currencies	1,830	2,120	2,140	2,240	2,210	2,180
	Liabilities	Domestic currency	900	1,000	930	1,000	920	860
		US dollars	4,620	6,850	7,340	7,330	7,890	8,030
		Other foreign currencies	3,190	3,910	3,970	3,940	4,280	4,190
Switzerland	Assets	Domestic currency	27,170	29,480	28,980	28,440	29,050	31,720
		US dollars	21,510	21,570	20,430	19,880	21,630	23,450
		Other foreign currencies	10,390	8,500	7,870	6,790	7,440	7,920
	Liabilities	Domestic currency	7,440	11,950	11,980	11,460	12,220	14,240
		US dollars	21,110	23,890	21,550	21,550	22,130	24,130
		Other foreign currencies	9,670	7,900	7,290	6,210	6,630	6,860
United Kingdom	Assets	Domestic currency	15,490	22,670	23,270	20,730	20,950	23,190
		US dollars	211,760	262,790	278,700	288,220	304,290	320,060
		Other foreign currencies	58,240	70,850	73,660	69,080	75,100	81,170
	Liabilities	Domestic currency	19,230	27,660	26,700	24,920	25,160	26,870
		US dollars	219,990	276,990	292,350	300,130	317,160	335,680
		Other foreign currencies	61,980	69,730	71,640	65,480	69,930	77,890
Total for European reporting countries	Assets	Domestic currency	136,240	151,720[1]	145,380	134,740	139,370	152,280
		US dollars	427,960	518,730	525,670	533,020	550,050	593,530
		Other foreign currencies	211,770	232,510	236,140	217,010	231,120	246,520
	Liabilities	Domestic currency	111,390	127,940[1]	120,330	107,080	108,350	117,180
		US dollars	436,630	548,360	558,870	565,350	583,110	631,520
		Other foreign currencies	229,200	252,140	250,310	226,640	238,080	259,970
Canada	Assets	Domestic currency	580	640	720	740	960	1,080
		US dollars	22,990	31,820	30,240	33,130	33,850	33,470
		Other foreign currencies	2,030	3,020	2,930	2,790	3,290	3,330
	Liabilities	Domestic currency	3,080	2,990	3,360	3,280	3,490	4,510
		US dollars	28,170	38,250	41,100	50,510	53,410	53,640
		Other foreign currencies	1,560	2,360	2,730	2,630	2,720	3,230
Japan	Assets	Domestic currency	11,350	16,960	17,210	17,570	18,570	21,000
		US dollars	30,350	43,980	52,360	47,520	57,620	56,030
		Other foreign currencies	3,730	4,730	5,200	5,190	6,190	7,580
	Liabilities	Domestic currency	3,820	12,340	11,780	11,760	12,960	13,170
		US dollars	43,900	60,440	66,660	67,500	76,380	79,120
		Other foreign currencies	2,770	7,440	8,710	7,210	7,990	8,100
United States[2]	Assets	Domestic currency	133,920	172,580	182,380[3]	197,360	209,880	250,140
		Foreign currencies	2,420	4,210	4,260[3]	3,670	4,130	5,170
	Liabilities	Domestic currency	128,180	135,530	130,310[3]	138,120	151,510	173,000
		Foreign currencies	1,920	3,750	3,300[3]	3,030	2,870	3,740
Offshore branches of US banks[4]	Assets	Foreign currencies[5]	127,640	141,000	147,150	153,980	167,730	171,830
	Liabilities	Foreign currencies[5]	128,840	142,990	149,880	157,640	172,840	175,790
Grand total	Assets	Domestic currency	282,090	341,900	345,690	350,410	368,780	424,500
		Foreign currencies	828,890	980,000	1,003,950	996,310	1,053,980	1,117,460
	Liabilities	Domestic currency	246,470	278,800	265,780	260,240	276,310	307,860
		Foreign currencies	872,990	1,055,730	1,081,560	1,080,510	1,137,400	1,215,110

[1] Including as from December 1980 the external positions of banks in Ireland. [2] The figures for banks in the United States exclude all custody items except negotiable US bank certificates of deposit held on behalf of non-residents; those for December 1981 include the external positions of international banking facilities. [3] Since March 1981 the figures also include external positions of a number of securities firms. On the old reporting coverage figures for end-March 1981 were: domestic currency assets, $179,600 million; foreign currency assets, $4,170 million; liabilities, $130,110 million and $3,270 million respectively. [4] Offshore branches of US banks in the Bahamas, Cayman Islands, Panama, Hong Kong and Singapore. [5] Including small amounts in the domestic currencies of the centres concerned.

VII. THE INTERNATIONAL MONETARY SCENE.

Highlights.

In the international monetary field the most important developments during 1981 and the early months of 1982 that are described in this chapter were those that took place in the foreign exchange markets. Between January 1981 and mid-April 1982 the dollar's effective exchange rate appreciated by 26 per cent., largely under the influence of the high level of interest rates in the United States, while the effective exchange rates of most other Group of Ten currencies depreciated, although to a lesser extent. Moreover, within this period there was considerable volatility of dollar exchange rates. This included three major movements of the dollar against other leading currencies, extending over periods of months, as well as shorter-term fluctuations and, for much of the time, increased average daily variability in spot rates. The chapter also reviews the daily variability of spot dollar exchange rates since end-1972.

In some important instances — including the dollar, the Deutsche Mark and the yen — the cumulative changes in nominal exchange rates since the end of 1980 have run counter to movements in countries' current-account balances of payments. Moreover, the changes in nominal rates have been associated with movements in real exchange rates, and by March 1982 the real exchange rates of the dollar, the Deutsche Mark and the yen were not far from their end-1972 levels. The chapter reviews the movements in these currencies' real exchange rates over the whole period since that date and discusses the extent to which these movements were necessary from the point of view of the international adjustment process, the extent to which there may have been overshooting and the economic costs that it may have entailed.

The chapter also reviews developments in the EMS exchange rate mechanism. After a period of about one and a half years in which the weakness of the Deutsche Mark contributed to the stability of nominal exchange rates in the system, despite continued divergences in national inflation rates, since March 1981 there have been three realignments of participants' central exchange rates. Looking to the future, stability of the system will require a downward convergence of participants' inflation rates.

In the gold market, the period under review saw a further decline of nearly 50 per cent. in the market price of gold, from just over $600 per ounce in January 1981 to a low of $312 per ounce in March 1982. The further fall in the price was related, on the supply side, to a substantial increase in market sales by the Soviet Union and, on the demand side, to the strength of the dollar, the high interest cost of holding gold, the weakening of oil prices and progress in reducing inflation.

Finally, the chapter reviews international liquidity developments in 1981. Overall, the international liquidity situation deteriorated in 1981 in real terms, with a sharp decline in the price at which gold reserves could be mobilised, some fall in total non-gold reserves and further increases in many countries' international

indebtedness. A feature of the year was an increase in the relative share of foreign exchange reserves held in the United States, at the expense of reserves held with banks in the Euro-currency market. Among the reasons for this shift may have been the country distribution of gains and losses of exchange reserves, the attractions of investment in the US bond market and increased perception by some monetary authorities of the risks involved in holding reserves with international banks.

Exchange rate developments.

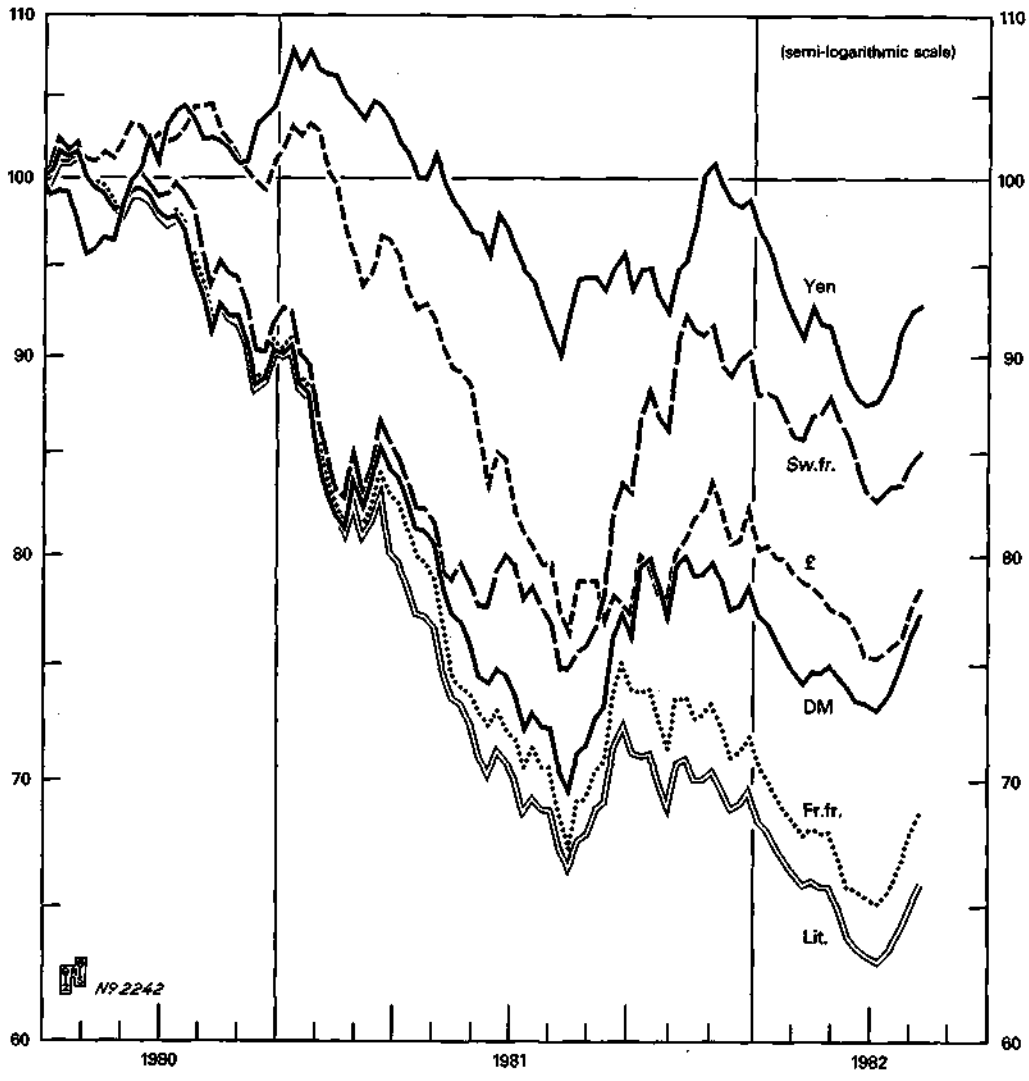
During the period under review developments in the exchange markets were characterised by three main features. Firstly, a substantial further appreciation of the US dollar: in effective terms the dollar rose between early January 1981 and April 1982 by 26.1 per cent., while its bilateral appreciation vis-à-vis other major currencies was more widespread than in 1980, including not only further rises against continental European currencies but also substantial appreciations against sterling and the yen, against both of which it had lost ground in 1980. On the effective basis, too, other major currencies (with the exceptions of the Swiss franc and the Canadian dollar) depreciated over the period under review, although their declines were smaller than the appreciation of the dollar. Secondly, there continued to be pronounced instability of exchange rates in the dollar market. There were three major swings, covering periods of between four and seven months, as well as other, shorter-term ones and in addition marked day-to-day fluctuations in spot dollar rates. Thirdly, within the EMS fixed exchange rate system, the stability of nominal exchange rates which had been observed during late 1979 and in 1980 has been followed by three realignments of participating currencies since March 1981.

The appreciation of the dollar against other major currencies over the period as a whole stood in striking contrast to balance-of-payments developments on current account. By the fourth quarter of 1981 the current external balance of the United States was no longer in surplus and that of Germany no longer in deficit. Japan's current-account balance had already moved from deficit to surplus in the second quarter of the year, while in the United Kingdom the surplus more than doubled in 1981. While these changes in fundamentals were one reason for the temporary weakening of the dollar in the second half of 1981, the most important factors behind the appreciation of the dollar over the whole period under review and its volatility within the period were the size and the movements of differentials between interest rates in the United States and other countries.

In the first of the three major phases of developments in the dollar exchange market, which lasted from early January to early August 1981, the effective exchange rate of the dollar appreciated by over 25 per cent. The Deutsche Mark and the Swiss franc depreciated against the dollar by about 25 and 21 per cent. respectively, while sterling went down by 27 per cent. and the yen by 18 per cent. However, the largest declines against the dollar during this phase, of 27¾ per cent. each, were registered by the Italian lira (which was devalued by 6 per cent. in March against other currencies in the EMS exchange rate mechanism) and the French franc. During this phase the dollar benefited from a number of favourable factors, including the continued strength of the US current-account balance of payments,

Selected industrial countries:
Movements of bilateral exchange rates against the US dollar, 1980–82.

Weekly averages, indices: end-June 1980 = 100.

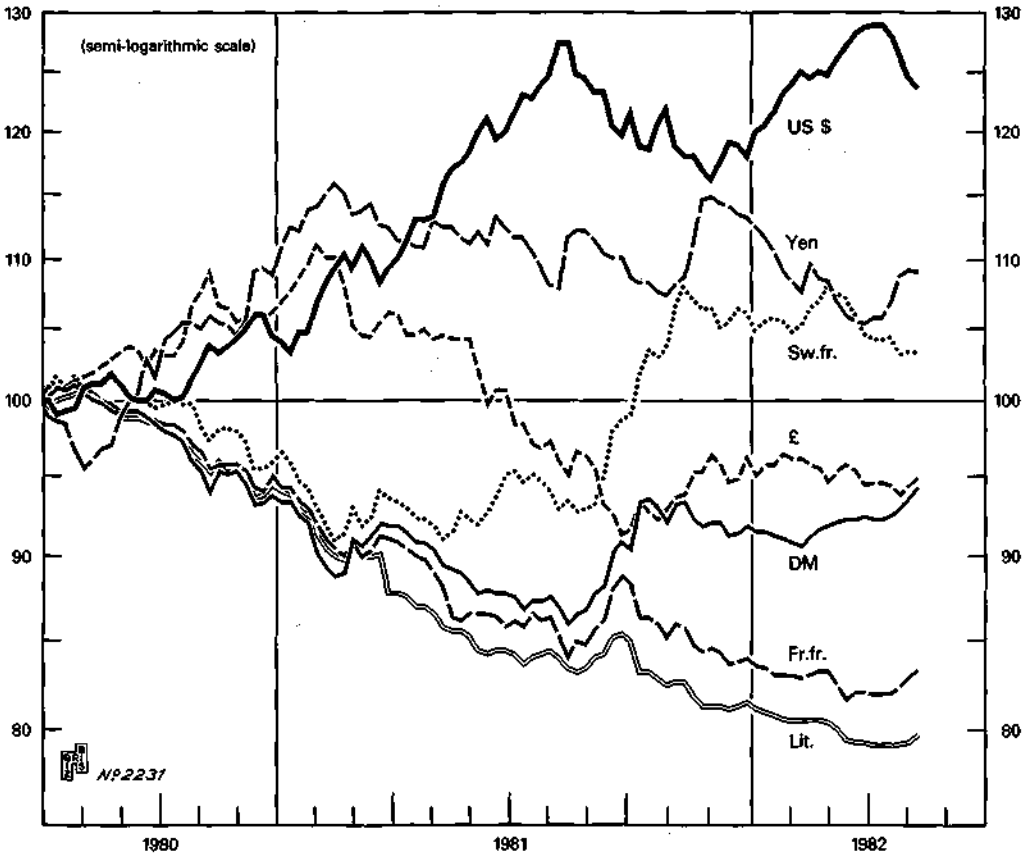


signs that inflation in the United States was slowing down, the effect on market sentiment of the firm anti-inflationary stance taken by the new US Administration and, for much of the time, large favourable interest rate differentials.

In the course of these seven months, however, there were three pronounced shorter-term movements of dollar exchange rates. The first took place between early January and mid-February 1981, when the Deutsche Mark and the Swiss franc depreciated against the dollar by about 15 per cent. each. These declines occurred despite a narrowing of interest rate differentials in favour of the dollar, the premium of three-month Euro-dollar interest rates over corresponding Deutsche Mark and Swiss franc rates having come down between late January and mid-February from 10

Selected industrial countries: Movements in effective exchange rates, 1980–82.

Weekly averages, indices: end-June 1980 = 100.



to less than 7½ percentage points and from 13 to under 11 percentage points respectively. The weakness of the Deutsche Mark in early 1981 was accentuated by the persistent deficit on Germany's current-account balance of payments and by events in Poland. On the other hand, owing to the stronger balance-of-payments positions of their countries, the declines of sterling and the yen against the dollar between early January and mid-February 1981, at 7.3 and 3.9 per cent. respectively, were much smaller than those of the continental European currencies.

An increase in German and other continental European interest rates in mid-February, accompanied by a decline in US rates, then produced a temporary reversal of the situation. Between mid-February and mid-March, when the short-term Euro-market interest rate differentials in favour of the dollar against the Deutsche Mark and the Swiss franc narrowed to 2 and 6¼ percentage points respectively, these two currencies recovered by about 10 per cent. against the dollar. From early April onwards, however, dollar interest rates and, with them, interest rate differentials in favour of the dollar began to rise again and, despite large-scale intervention by other central banks, a renewed upward movement of the dollar began which continued, with an interruption in June, until early August 1981. Between mid-March and early

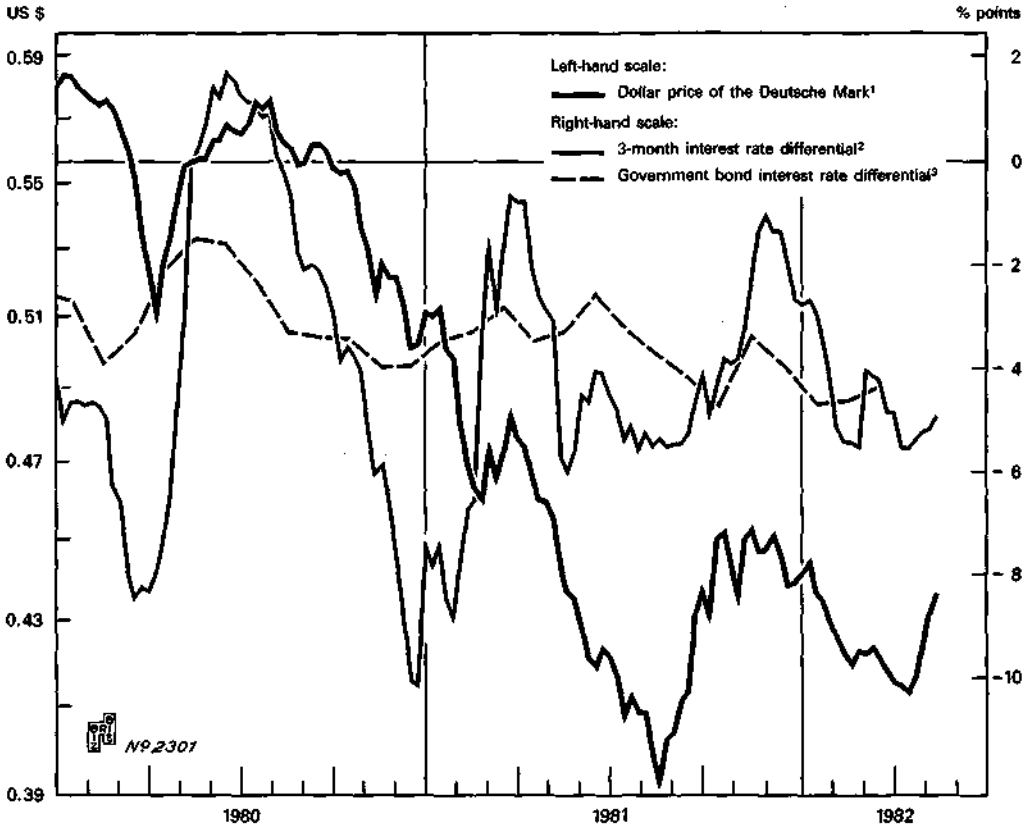
August the Deutsche Mark declined by 20 per cent. against the dollar, to about DM 2.57 — its lowest level since July 1976 and only 10 per cent. above its end-March 1973 level. To the influences of interest rate developments were added a number of other factors which favoured the dollar: in Germany the slowness of the improvement in the current external account; in France the effects on market sentiment of the outcome of the presidential elections; and in Belgium continued political and economic difficulties, including a very large deficit on the current account of the balance of payments.

While other major currencies moved broadly in line with those in the EMS exchange rate mechanism, there were some not insignificant differences in the extent to which they depreciated against the dollar. The pound sterling, which declined by 22½ per cent. against the dollar between mid-March and early August, was affected from June onwards by the weakness of oil prices and by interest rate factors. The Swiss franc and the yen, on the other hand, declined less than other major currencies against the dollar. Until early May the Swiss franc went down in parallel with the Deutsche Mark; but then further increases in the official discount and lombard rates on 11th May, as well as inflows of capital from France after the presidential elections, caused the Swiss franc to appreciate significantly against other European currencies. By end-June it had risen to Sw.fr. 0.85 against the Deutsche Mark, from about Sw.fr. 0.925 in early March. Subsequently the franc went down again with the EMS currencies vis-à-vis the dollar, the spot rate reaching Sw.fr. 2.21 in early August, about 16 per cent. below the mid-March level. Following the reduction of the official discount rate to 6¼ per cent. in March 1981, Japanese interest rates were the lowest in any developed country, and the differential with US interest rates was wider than elsewhere. The strength of the current external balance, however, in combination with the modest, and declining, inflation rate resulted in the yen depreciating less than the major European currencies against the dollar between mid-March and early August, by about 15 per cent. to Yen 243½.

The second major phase of developments in the dollar exchange market, which lasted from early August to about the end of November, produced a partial reversal of the dollar's earlier rise, with its effective exchange rate declining by 10.3 per cent. A number of factors contributed to this sharp turn-round in exchange-market conditions. The market position of the dollar had, in any case, become technically vulnerable after its earlier large appreciation. Moreover, current-account balance-of-payments developments had become less favourable to the dollar, with the US position deteriorating and those of Japan and Germany continuing to strengthen. At the same time the market's earlier confidence in the economic policies of the Reagan Administration was on the wane, while in the autumn there was a sharp decline of US interest rates and of interest rate differentials in favour of the dollar.

The Deutsche Mark began to gain ground against the dollar in mid-August and by early October it had recovered nearly 18 per cent. from its August low point, to about DM 2.18. The upward movement of the Swiss franc was more pronounced, and longer-lasting, owing partly to a further increase at the beginning of September in the Swiss National Bank's official discount and lombard rates — the fourth since early February 1981 — to the historically high levels of 6 and 7½ per cent. respectively. By mid-November 1981 the spot rate of the Swiss franc against the

Germany and the United States:
Development of the spot exchange rate and of interest rate differentials, 1980–82.



[1] Weekly averages of daily spot quotations (semi-logarithmic scale). [2] German interbank rate minus US CD rate (weekly averages). [3] Interest rate on German 10-year government bonds minus that on similar US bonds (monthly averages).

dollar stood at Sw.fr. 1.76. At that point it was 26 per cent. above the August low point and had regained the end-1980 level. The different movements of the Deutsche Mark and the Swiss franc against the dollar during this period produced a further appreciation of the franc against the Mark between August and November 1981 from over Sw.fr. 0.87 to Sw.fr. 0.79, its highest level since September 1978.

The third main phase in the dollar exchange market began in December 1981 and continued until mid-April 1982. During its course there was a renewed appreciation of the dollar's effective exchange rate by 11.9 per cent., rather more than reversing the August–November 1981 decline. The principal reason for the dollar's renewed strength was a widening of interest rate differentials in its favour. By the end of November 1981 the premium of three-month Euro-dollar rates over corresponding Deutsche Mark, Swiss franc and yen rates had narrowed to 1½, 2¼ and 4½ percentage points respectively. There then followed a renewed rise in US interest rates, accompanied by declines in interest rates elsewhere. By mid-April 1982 the three-month Euro-market interest rate differential in favour of the dollar had reached 6½ percentage points against the Deutsche Mark, 10½ percentage points against the Swiss franc and 9 percentage points against the yen.

The Deutsche Mark, the Swiss franc and sterling depreciated almost in parallel against the dollar during this third phase, their respective declines amounting to 9.2, 11.3 and 10.9 per cent. It may be noted that the decline of the Deutsche Mark against the dollar in this period was relatively limited, despite the considerable widening of interest rate differentials, part of which resulted from a deliberate lowering of interest rates in Europe. The German authorities, thanks to the improvement of the current-account balance of payments, had regained some scope for pursuing an independent interest rate policy. The weakness of the yen against the dollar was particularly pronounced during this period. Its spot rate fell by 14 per cent. between end-November and early April to almost Yen 249, the lowest level since April 1980. This weakness of the yen was to a large extent the result of very substantial capital outflows, reflecting partly interest rate differentials and partly exports of capital induced by a prospective tightening-up of tax regulations in Japan.

Changes in nominal exchange rates, January 1981–April 1982.

Currencies	Spot rates against the dollar	Effective exchange rates
	percentage changes between early January 1981 and mid-April 1982	
US dollar		+ 26.1
Belgian franc	− 32.2	− 16.6
Italian lira	− 31.1	− 16.0
French franc	− 29.2	− 13.5
Pound sterling	− 27.7	− 12.5
Deutsche Mark	− 20.4	− 1.8
Japanese yen	− 19.6	− 6.4
Swiss franc	− 11.8	+ 8.0
Canadian dollar	− 3.7	+ 12.1

Looking at the whole period from early January 1981 to mid-April 1982, the cumulative appreciation of the dollar's effective exchange rate was just over 26 per cent. At the other end of the spectrum the effective rates of the Belgian franc, the Italian lira, the French franc and sterling depreciated by amounts ranging from 16½ to about 12½ per cent. and their dollar rates weakened by between 32 and 28 per cent. The declines in the external value of the Deutsche Mark and the yen were much less, especially on the effective basis. Moreover, while these two currencies depreciated against the dollar by very similar amounts, the yen's effective exchange rate fell more than that of the Deutsche Mark. This was a reflection partly of the closer relation of the Japanese economy to the US economy and partly of the rise in the value of the Deutsche Mark against the currencies of other EMS countries which are important trading partners of Germany. The Swiss franc, thanks to its rise against all other European currencies, including the Deutsche Mark, actually appreciated on the effective basis by 8 per cent. between January 1981 and April 1982, while its decline against the dollar was relatively moderate. As a result of the high level of domestic interest rates and net capital inflows, the Canadian dollar's

decline against the US dollar was much less even than that of the Swiss franc, so that its effective exchange rate appreciated by about 12 per cent.

From mid-April onwards the gradual decline of US interest rates, induced by the persistent weakness of the US economy and hopes of official action on the budget, brought about a change in the market situation. Despite a simultaneous easing of monetary policy in a number of other industrial countries, the effective exchange rate of the dollar fell by nearly 5 per cent. between the middle of April and the second week of May. On a bilateral basis the depreciation of the dollar ranged from 4½ per cent. against the Swiss franc to 6½ per cent. against the yen. Around the middle of May, however, the dollar began to show signs of renewed strength.

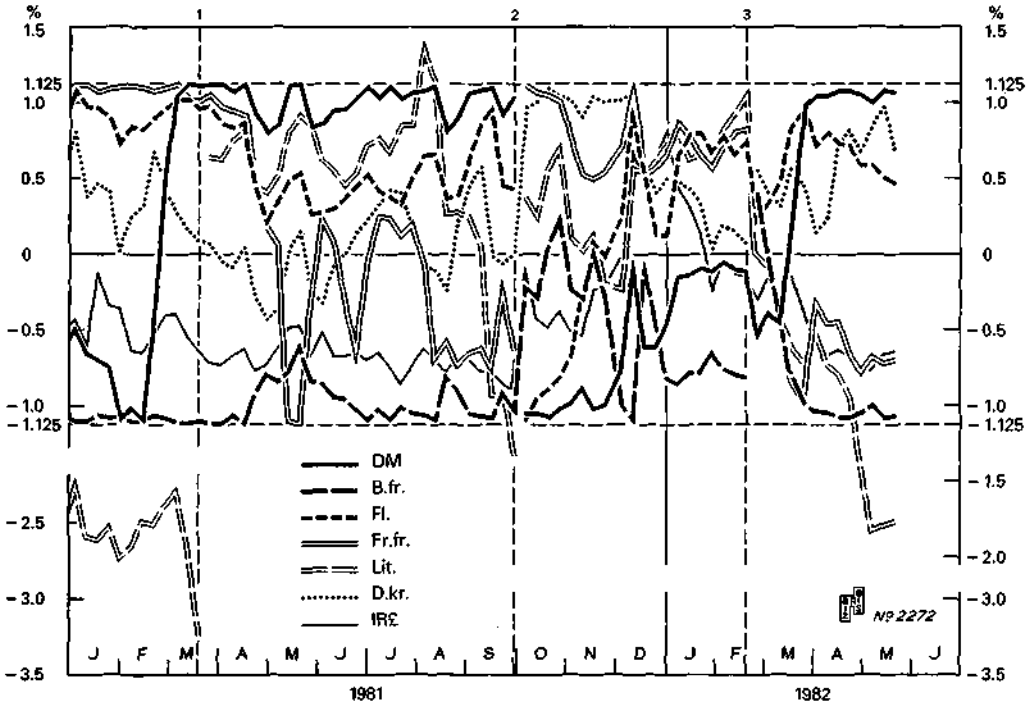
After a period of stability in the nominal central exchange rates of participating countries which had begun in late 1979 and continued throughout 1980, the exchange rate relationships between the currencies participating in *the exchange rate mechanism of the European Monetary System* have since undergone three realignments. With effect from 23rd March 1981 the Italian lira was devalued by 6 per cent. vis-à-vis all other participating currencies. In early October 1981 the Deutsche Mark and the Dutch guilder were revalued by 5.5 per cent. vis-à-vis the Danish krone, the Belgian franc and the Irish pound, while the central rates of the French franc and the lira were adjusted downwards by 3 per cent. vis-à-vis the same three currencies. And with effect from 22nd February 1982 the Belgian franc and the Danish krone were devalued by 8.5 and 3 per cent. respectively against the other EMS member currencies.

Looking at the course of developments during the period under review, a number of different phases can be distinguished. The first of these, which covered January and the first half of February 1981, was really a continuation of the situation that had prevailed during much of 1980, the main feature of which had been the persistent weakness of the Deutsche Mark, with the French franc and the Dutch guilder the strongest currencies in the system. During the first seven weeks of 1981 the Deutsche Mark came under heavy pressure, at times reaching the lower intervention point and requiring substantial support, while the French franc and the Dutch guilder continued to be at the top of the band. The weakest currency in the system at that time, as during much of the period under review, was the Belgian franc.

When German monetary policy was sharply tightened in mid-February, the Deutsche Mark began at once to move up in the EMS band, as well as in the dollar exchange market. Before mid-March it had reached its upper intervention point against the Belgian franc and it remained the strongest currency in the system for most of this second phase, which lasted until the October realignment of central rates. The strengthening of the Deutsche Mark was soon followed, in late March, by a 6 per cent. devaluation of the lira, while from April onwards the French franc weakened sharply, reaching its lower intervention point in mid-May, after the presidential elections. Later that month the franc recovered, under the influence of exchange control measures and increases in domestic interest rates. The Dutch guilder, although affected to some extent by the strength of the Deutsche Mark,

Spot exchange rates in the EMS exchange rate mechanism, 1981–82.

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



[1] With effect from 23rd March 1981, the Italian lira was devalued by 6 per cent. vis-à-vis all other participating currencies. [2] With effect from 5th October 1981, the Deutsche Mark and the Dutch guilder were revalued by 5.5 per cent. and the French franc and the Italian lira devalued by 3 per cent. vis-à-vis the Danish krone, the Belgian franc and the Irish pound. [3] With effect from 22nd February 1982, the Belgian franc and the Danish krone were devalued by 8.5 per cent. and 3 per cent. respectively vis-à-vis all other participating currencies.

remained in the upper half of the band, as did the lira, which benefited from an improvement (partly seasonal) in Italy's balance of payments. In early August, when the turn came in the dollar exchange market, the French franc began to move down again and it was soon followed by the Italian lira. These two currencies, together with the Irish pound and the Belgian franc, were the weakest currencies in the system during the weeks before the October realignment.

The realignment of central rates ushered in a fresh phase of developments. The Deutsche Mark and the guilder fell to the bottom of the band, with pressure on the former being particularly strong and necessitating substantial official intervention. The French franc, on the other hand, went to its upper intervention point immediately after the realignment and it remained one of the strongest currencies in the system for some months, together with the Danish krone and the lira. The recovery of the Belgian franc was more limited and shorter-lived. In October the franc was around the middle of the band, but it again fell to its lower intervention point in early December. Towards the end of the year the Deutsche Mark began to strengthen again, although remaining in the lower half of the band.

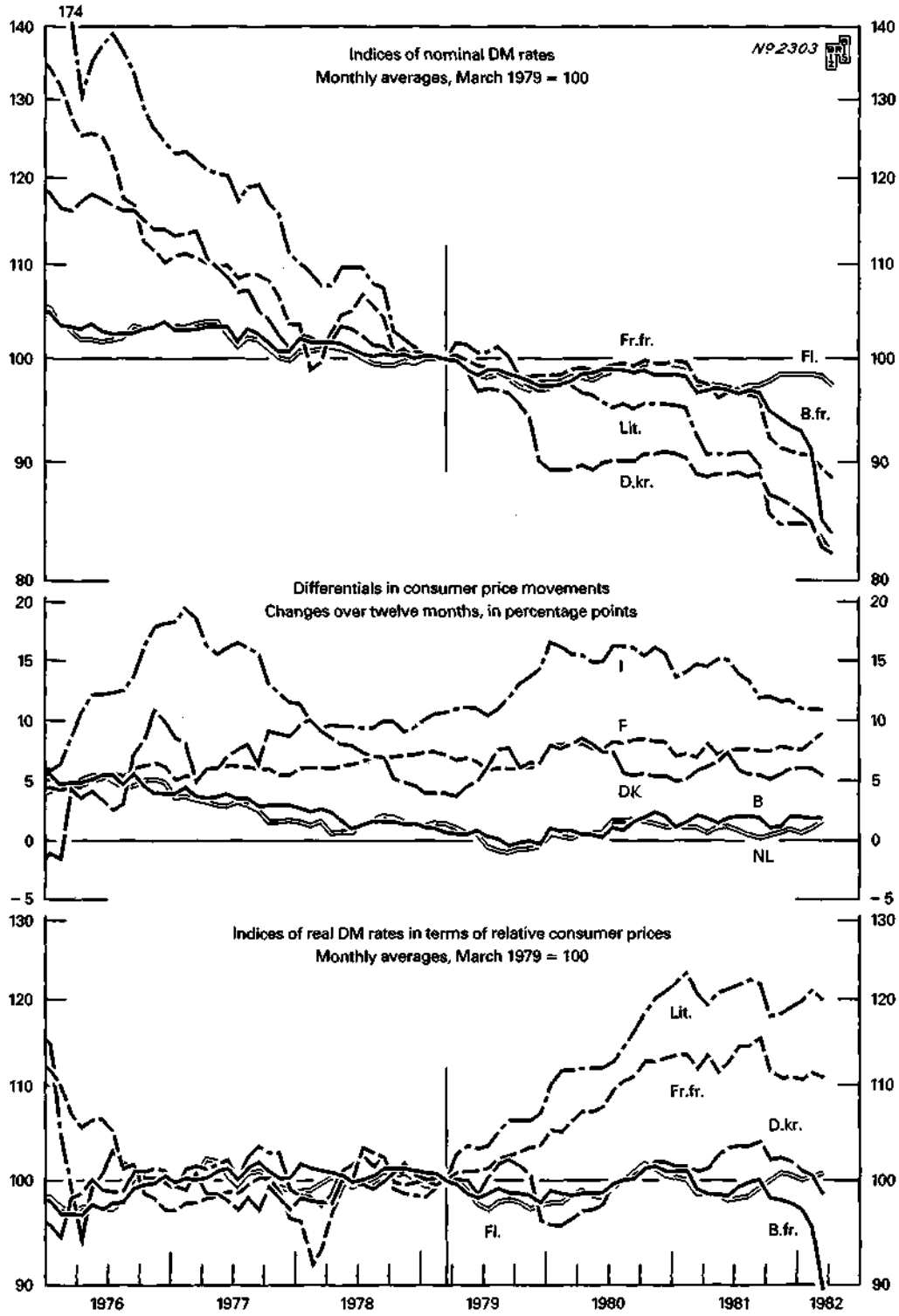
In the early part of 1982 the Belgian franc was the weakest currency in the system and the lira, the French franc and the guilder the strongest. However, during this period the EMS currency band was significantly narrower than the permitted 2¼ per cent. maximum. Thus, the devaluations of the Belgian franc and the Danish krone in February were not undertaken at a time of intense pressure on these currencies in the system but rather, in the case of the Belgian franc, as part of a longer-term stabilisation policy and, in that of the Danish krone, as a precautionary measure.

Immediately after the realignment the two currencies that had been devalued went to the top of the band. The Belgian franc very soon began to weaken again, and so did the Danish krone in late March. By that time the Deutsche Mark and the guilder had re-emerged as the strongest currencies, with the Danish krone the only other currency in the upper half of the band. In the second half of March the Deutsche Mark reached its upper intervention point and remained close to it until mid-May. The Belgian franc, from late March onwards, was very weak again and repeatedly touched its lower intervention point. The French franc dropped to its lower intervention point in mid-March and then recovered somewhat as the authorities had recourse to further increases in interest rates and exchange control restrictions. The lira, too, came under heavy pressure from mid-March onwards and similar support measures were taken by the Italian authorities.

March 1982 marked the end of the third year of the European Monetary System's existence. To what extent can it be said that the system has attained the objective, set out in the communiqué issued by the Heads of Government of the EEC countries after their July 1978 meeting in Bremen, of "the creation of closer monetary co-operation leading to a zone of monetary stability in Europe"? Such a zone of monetary stability implies a reasonable stability of nominal exchange rates within the EMS, i.e. that changes in the declared central rates of participating currencies, when they occur, should be neither too large nor too frequent. And this in turn implies two things: firstly, a downward convergence of national inflation rates within the area covered by the system, since otherwise movements of real exchange rates will take place that necessitate adjustments of nominal central rates of a size that is inconsistent with the aim of reasonable stability; and, secondly, that nominal exchange rate relationships within the system are not destabilised by disturbances arising outside the system, and in particular by sharp divergences in the relationships between individual participating currencies and the dollar.

As regards the aim of nominal exchange rate stability, the first of the following graphs shows that this was, in a reasonable measure, achieved during the first two and a half years of the system's existence, until October 1981. The nominal relationships between the lira, the French franc and the Danish krone on the one hand and the Deutsche Mark on the other hand were much more stable during this period than they had been before March 1979, while the relationships between the Benelux currencies and the Deutsche Mark showed the same sort of stability that had prevailed within the framework of the earlier joint float of European currencies against the dollar. Since October 1981 this relative stability of nominal exchange rates within the system has decreased, with two realignments of central rates having taken place within less than six months.

The development of nominal and real exchange rates of other EMS currencies vis-à-vis the Deutsche Mark and of inflation differentials between other EMS participants and Germany, 1976–82.



The second of the graphs shows that the relative stability of nominal exchange rates until late 1981 had not been accompanied by a real convergence of national inflation rates since March 1979, except for the Benelux countries, where it had already been achieved at the outset of the system's existence. The period of reasonable stability of nominal rates until late 1981 was, to a large extent, the product of the weakness of the Deutsche Mark, with balance-of-payments developments for a time outweighing the influence of inflation differentials. Once the Deutsche Mark began to strengthen again in the system, after February 1981, it was not long before the divergences of real exchange rates shown in the third of the graphs began to create tensions in nominal rate relationships, leading to the realignments that occurred.

Looking at the effects of the realignments of nominal exchange rates in 1981 and early 1982 on the structure of real exchange rates within the system, the third of the graphs shows that the real exchange rates of the French franc and the lira against the Deutsche Mark are still significantly above their March 1979 levels, while the devaluation of the Belgian franc in February 1982 took the real exchange rate of that currency against the Deutsche Mark below its March 1979 level. So far as the French franc and the lira are concerned, while their downward adjustments in 1981 were related to inflation differentials, it may also be the case that in March 1979 the real exchange rates of these currencies in relation to the Deutsche Mark were relatively favourable. The Belgian devaluation in February 1982, on the other hand, was not related to inflation differentials. Rather, it was necessitated by three years of increasing balance-of-payments deficits on current account that were caused by an industrial structure that was inadequate to meet the difficulties of a period of international economic stagnation, and that has made the franc the weakest currency in the system for much of the period since March 1979, requiring support from massive official intervention in the exchange market and from a level of interest rates that was high in relation to the needs of the domestic economy.

As regards the insulation of participants' currencies from outside shocks, the relative stability of nominal exchange rates within the system over the past three years contrasts sharply, even after October 1981, with the movements of these currencies' exchange rates vis-à-vis the dollar. By the same token, daily exchange rate fluctuations inside the system have been much smaller than in the dollar exchange market. The absence of outside shocks to the stability of the system since March 1979 has reflected the strength of the dollar against the Deutsche Mark during most of this period. The real test of the system, so far as its susceptibility to outside disturbances is concerned, will only come if there is a renewed and extended period of weakness of the dollar against the Deutsche Mark.

All in all, the verdict on the working of the EMS exchange rate mechanism during the first three years of its existence may be that for much of the time a weak German balance of payments made reasonable stability of nominal exchange rates possible, despite some marked inflation differentials between participating countries. For the future, however, stability will have to come from the achievement, and maintenance, of a downward convergence of inflation rates.

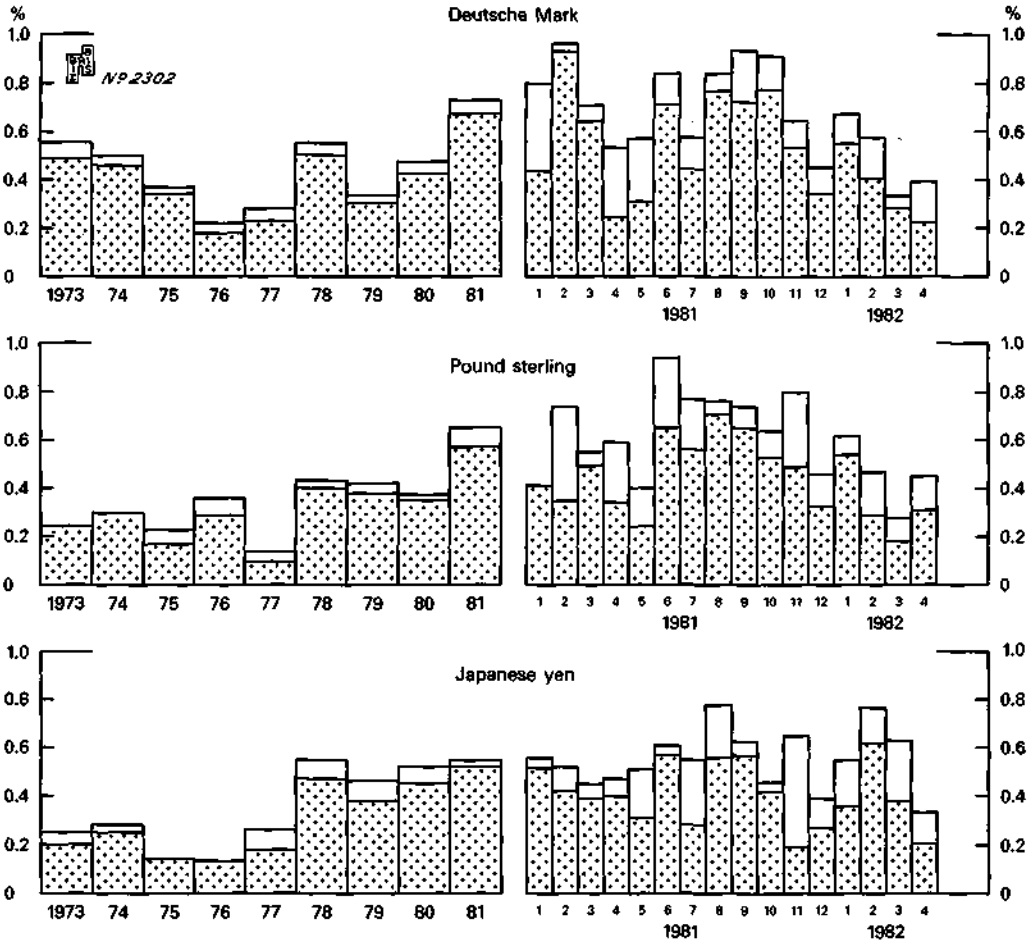
Daily variability of spot dollar exchange rates.

In addition to the wide fluctuations of dollar exchange rates discussed earlier in this chapter, which covered periods from one to seven months, there was also pronounced short-run variability of the dollar, from day to day and within the same day. The following graphs show for 1981 and the first four months of 1982 the monthly averages of the daily movements of spot rates for the Deutsche Mark, the yen and sterling against the dollar, as well as the annual averages of these daily movements for the years 1973–81. These monthly and yearly averages are shown both on an unadjusted basis and adjusted to exclude a monthly or yearly trend factor.

Looking first at the annual averages for the whole period since the dollar began to float, while the experiences of the three currencies shown in the graph have been,

Daily variability of selected spot dollar exchange rates, 1973–82.

Annual and monthly averages.



Note: Variability is defined as the average of daily percentage changes in spot exchange rates, adjusted for the asymmetry of percentage changes in cases of appreciation and depreciation. The shaded bars are adjusted for a "trend factor" so as to exclude that part of the monthly or annual movement that can be attributed to the total change over the month or year in question.

in part, quite different, there is no evidence of any longer-term tendency for the daily range of fluctuations to diminish. For all three currencies the average daily movement of the dollar rate was greater in 1981 than it had been in 1973, the first year of floating. In the DM/$ spot market, for instance, the proportion of total trading days in which the rate moved by ½ per cent. or more was 54 per cent. in 1981, as compared with 34 per cent. in 1973. This might suggest that daily volatility of rates is somehow an intrinsic feature of the floating rate system.

Nevertheless, during the first years of floating there appeared to be some evidence, particularly in the DM/$ spot market, that market participants were acquiring increasing skill in operating smoothly a floating exchange rate system. After 1973, and the initial turbulence that followed the change from par values to floating, the average size of daily fluctuations in the DM/$ market declined steadily until 1976. The renewed weakening of the dollar in the second half of 1977 and in 1978 was then associated with a return to average daily fluctuations of the same size as in 1973. The more active policy with respect to the dollar's exchange rate adopted by the US authorities in late 1978 was, in turn, followed by a new decline in the daily variability of the DM/$ spot rate in 1979, only for variability to increase again in 1980 and 1981, years marked by a major strengthening of the dollar and, since early 1981, by the adoption on the part of the US authorities of a generally "hands off" policy for the dollar. In 1978, and again in 1981, the increased daily variability of DM/$ spot rates was accompanied by similar developments in the £/$ and yen/$ spot rates.

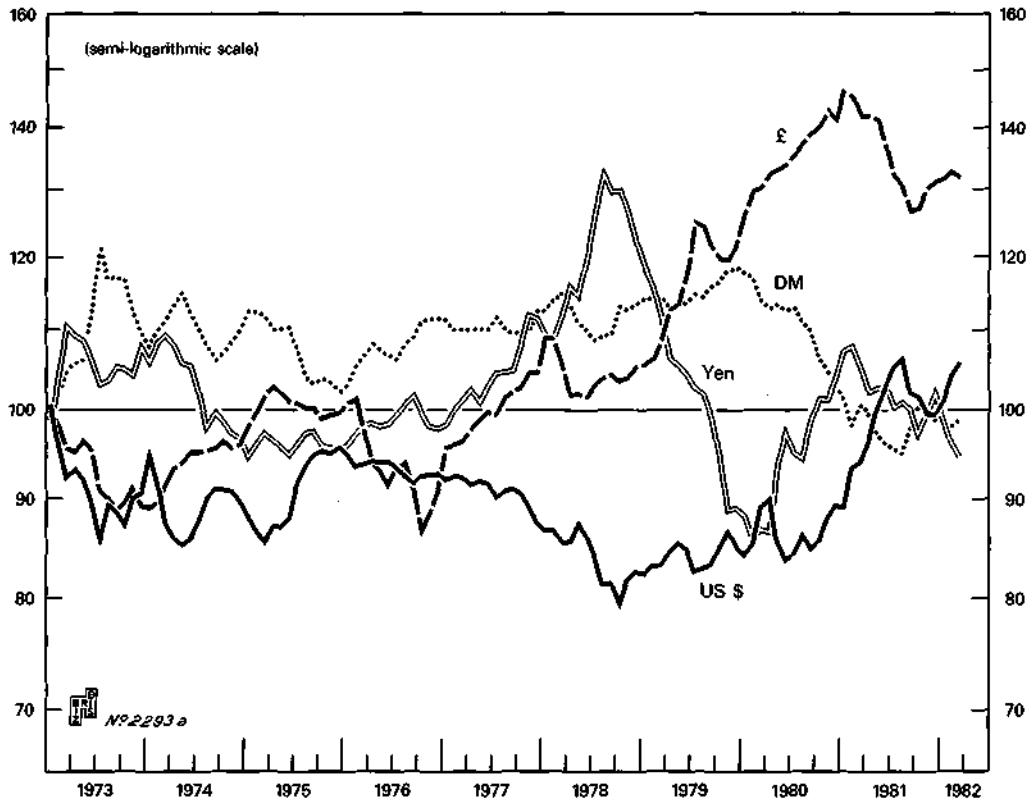
During the course of 1981 daily variability was at its highest in the DM/$ spot market in February, when the earlier strength of the dollar was temporarily reversed, and in August–October, when the dollar first peaked against the Deutsche Mark and then began to decline. It may be noted that since early 1982 the daily variability of all three rates shown in the graph has tended to diminish, especially in the case of the DM/$ spot rate. Between the third quarter of 1981 and the first quarter of 1982 the proportion of total trading days in which the DM/$ rate moved by less than ½ per cent. increased from 36 to 60 per cent. It is too soon to judge whether this is a temporary phenomenon or whether it may mean, for instance, that the markets are learning to live with the US policy of virtually total non-intervention.

Changes in real exchange rates and international competitive positions.

The 1981–82 movements in the nominal exchange rates of major currencies shown in the table on page 147 were associated with further changes in real exchange rates. The following graphs depict the evolution of the real effective exchange rates of the US dollar, the Deutsche Mark, the yen and sterling both during this period and also since the end of 1972, just before the final breakdown of the Bretton Woods fixed rate system. The first graph shows the effective exchange rates of these four currencies adjusted for the relative movements of industrial wholesale prices in the Group of Ten countries and Switzerland, and the second one their effective rates adjusted for the relative movements of unit labour costs. Since the indices from which these calculations are made are far from being wholly accurate, or fully

Selected industrial countries: Movements of real effective exchange rates in terms of relative industrial wholesale prices, 1973–82.

Monthly averages, indices: December 1972 = 100.



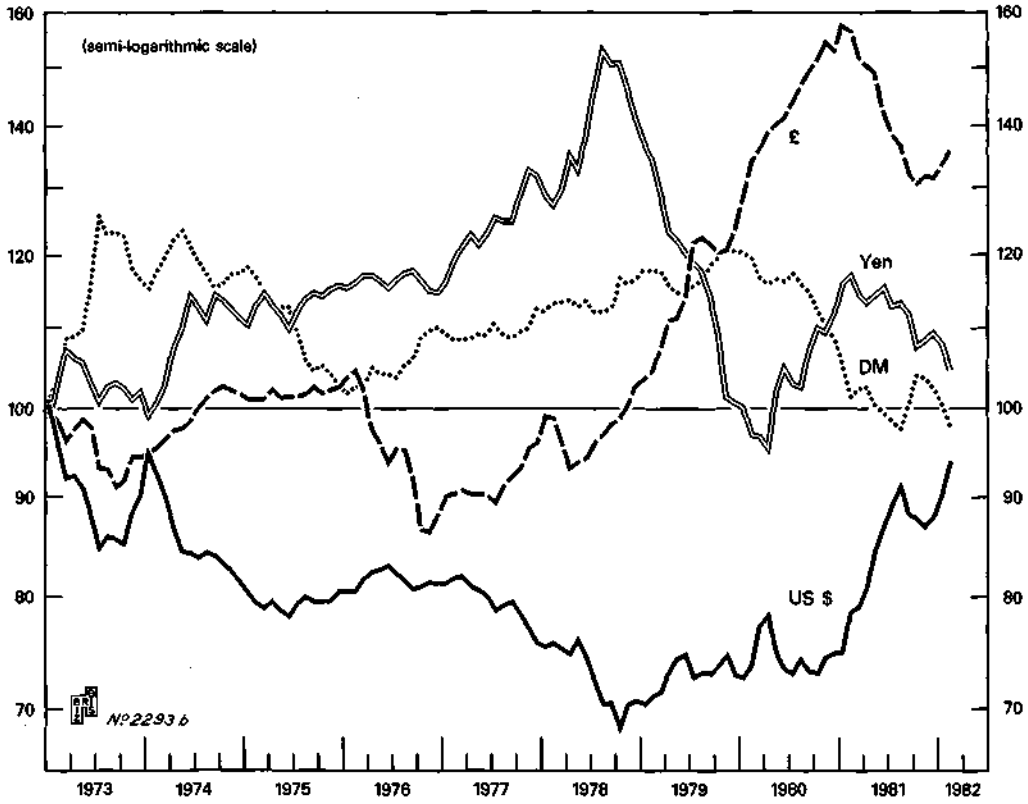
comparable internationally, the rate movements shown in the graphs are indicative rather than precise.

Since the end of 1980 the dollar has recorded easily the largest change in its real exchange rate, appreciating by a little over 21 per cent. in terms of relative industrial wholesale prices and by 25½ per cent. in terms of relative unit labour costs. The depreciation of sterling in real terms amounted to 17 per cent. on the basis of relative unit labour costs, and to 9½ per cent. on the basis of relative wholesale prices. The depreciation of the yen's real exchange rate was about the same on both bases, in the 11–12 per cent. range. In the case of the Mark, by contrast, the decline in real value was quite modest, amounting to 5½ per cent. in terms of unit labour costs and only 3 per cent. in terms of wholesale prices.

While the depreciation of the yen, as well as that of sterling, since the end of 1980 represented a reversal of earlier trends, the appreciation of the dollar and the depreciation of the Deutsche Mark continued movements that had begun earlier. Indeed, by end-March 1982 the real exchange rate of the dollar had gone up, on both bases shown in the graphs, by rather over 35 per cent. since October 1978. In the case of the Deutsche Mark, its downward movement during 1981 and the first quarter of 1982 brought the cumulative depreciation of the real exchange rate since

Selected industrial countries: Movements of real effective exchange rates in terms of relative unit labour costs, 1973–82.

Monthly averages, indices: December 1972 = 100.



late 1979 to 15½ per cent. in terms of wholesale prices and 15 per cent. in terms of unit labour costs.

Viewed in the light of developments over the whole period since the end of the fixed exchange rate system, these movements of the dollar and the Deutsche Mark represent a continuation of the wide fluctuations in real exchange rates that have characterised the past nine years. For this period as a whole two things stand out from the graphs: the size of the movements in the real exchange rates of all four currencies; and the fact that at the end of March 1982, with the exception of sterling, the real exchange rates of these currencies were not far from where they had been at the end of 1972.

In themselves, changes in real exchange rates are an essential element of the international adjustment process when a country's balance of payments is in major disequilibrium. Moreover, it can be said that such changes have become more, rather than less, necessary since the early 1970s as a result of the oil price shocks, increased interest rate volatility and diverging economic and non-economic developments in individual countries. And in fact some of the changes in real exchange rates that have taken place over the past nine years have promoted necessary balance-of-payments

adjustments. For instance, the dollar was clearly overvalued at the beginning of the period shown in the graph, and the Deutsche Mark clearly undervalued, since there was little chance of the US current-account deficit and the German surplus being eliminated without a depreciation in real terms of the dollar and an appreciation in real terms of the Deutsche Mark.

However, it is equally clear that a substantial part of the changes in real exchange rates since end-1972 have been unnecessary from the point of view of the adjustment process. The most obvious example of this was the real appreciation of sterling between late 1976 and early 1981, which amounted to nearly 70 per cent. in terms of wholesale prices and to over 80 per cent. in terms of unit labour costs. In the case of the Deutsche Mark, by 1979 its appreciation in real terms since end-1972 amounted to about 20 per cent. and had clearly contributed (together with the second oil shock) to the emergence of a large deficit on Germany's current-account balance of payments, while the subsequent depreciation had by August 1981 clearly gone too far. The fluctuations of the yen's real exchange rate over the past nine years have been larger than those of the Deutsche Mark. By August 1978 the real appreciation of the yen, which had amounted since end-1972 to over 50 per cent. in terms of relative unit labour costs, had become excessive and the same may be said of its subsequent depreciation, on the same basis, of over 35 per cent. by April 1980. Finally, if the dollar had been somewhat overvalued at the end of 1972, there was a general consensus nearly six years later, towards the end of 1978, that the decline in its real exchange rate, which amounted to over 30 per cent. in terms of relative unit labour costs, had gone too far.

There can be little doubt that exaggerated movements in real exchange rates have come about in part because of a tendency for nominal exchange rates, once they start to move, to set in motion forces that encourage further movements in the same direction. In other words, exchange rate movements have tended to acquire a life of their own. For this, there are various reasons. Firstly, inelasticities in the supply and demand schedules for internationally traded goods and services mean that exchange rate movements that are appropriate for correcting current-account imbalances tend, in the short run, to amplify those imbalances and to produce further movements, upward or downward as the case may be, in exchange rates. Secondly, where strong downward movements of nominal exchange rates occur, their effects on domestic prices have tended in a number of cases to produce a vicious circle of rising inflation and falling exchange rates. Thirdly, there is the fact that operators in the foreign exchange market neither know what the longer-term equilibrium rate for a currency is nor, if they did, could they afford to act on such knowledge, since the risks of suffering losses in the short term are too high, particularly in periods, such as that of the last nine years, which are characterised by major economic and political changes and uncertainties.

One view of the variability of exchange rates since the early 1970s is that it has been to a considerable extent caused by the behaviour of the authorities. For instance, on this view, official exchange-market intervention is seen as being destabilising, since it interferes with the smooth workings of the market. It is not easy to find confirmation in events for this view. It is true that in a number of instances large-scale official intervention in the exchange market has not prevented

major movements of currencies. But that is not to say that such interventions were themselves the cause of instability. The decision of the US authorities in late 1978 to undertake substantial exchange-market intervention was based on the experience of overshooting in the absence of official intervention, while the more recent decision of the present US Administration, early in 1981, virtually to abstain from exchange-market intervention was followed by more, rather than less, volatility of rates in the dollar market.

If, then, a considerable part of the exchange rate instability of the past nine years has been unnecessary from the point of view of the international adjustment process, it can nevertheless still be asked whether it has really done much harm. On this point opinions are divided, since the economic effects of currency instability cannot be measured, but only judged. However, looking at the matter in broad terms it is not easy to see how very large fluctuations in prices that are, macro-economically, as important as exchange rates — more important for individual countries than the price of oil — can have no economic costs.

One aspect of these costs is related to the uncertainties which the rate fluctuations generate. If it is not possible to know with any certainty what is going to happen to the exchange rate, how can an optimum allocation of resources through the price mechanism take place? Moreover, uncertainties about exchange rates may, by increasing the risk premium, have a dampening effect on investment decisions, both at home and abroad, since decisions taken on the basis of a wrong exchange rate judgement may prove very costly.

Another cost, and one for which more tangible evidence exists, is related to the consequences of excessive movements of rates. On the downward side, as already mentioned, overshooting of exchange rates makes the pursuit of anti-inflationary policies more difficult, while on the upward side it can have unfavourable effects on economic activity.

Another danger of exchange rate overshooting is that it may sow the seeds of new disequilibria and further exchange rate instability. This point is particularly relevant at the present time, when the real effective exchange rates of the dollar, the Deutsche Mark and the yen are not far from where they were at the end of 1972. At that time, the structure of exchange rates was a major factor in the breakdown of the fixed exchange rate system. It remains to be seen whether the present structure of rates is more sustainable or whether it will be followed by further major movements in the prices of currencies.

Gold production and the gold market.

Developments in gold during the period under review were dominated by a continuation of the sharp downward movement in the market price which had begun early in 1980. Quotations in the London market came down by nearly 50 per cent., from just over $600 per ounce in early January 1981 to $312 per ounce in mid-March 1982. On the supply side the price came under pressure from an increase, estimated at 185 metric tons between 1980 and 1981, in the total amount of gold available for non-monetary absorption, and on the demand side from the high

level of interest rates, the related strength of the dollar, the weakening of oil prices and a decline both in inflation rates and in inflationary expectations in the industrial world.

Estimated world gold production.

Countries	1929	1940	1946	1953	1970	1978	1979	1980	1981
	in metric tons								
South Africa	323.9	436.9	371.0	371.4	1,000.4	706.4	705.4	675.1	657.6
Canada	60.0	165.9	88.5	126.1	74.9	54.0	51.1	50.6	49.5
United States	64.0	151.4	49.0	60.9	54.2	31.1	30.2	29.6	40.6
Brazil	3.3	4.7	4.4	3.6	9.0	22.0	25.0	35.0	35.0
Philippines	5.1	34.9	–	14.9	18.7	18.2	16.7	20.4	23.4
Colombia	4.3	19.7	13.6	13.6	6.3	9.0	10.0	17.0	17.7
Australia	13.3	51.1	25.6	33.4	19.3	20.0	18.2	16.9	17.5
Papua/New Guinea	.	.	.	.	0.7	23.4	19.7	14.3	17.2
Dominican Rep.	.	.	.	.	–	10.8	11.0	11.5	12.8
Chile	0.8	10.4	7.2	4.1	1.6	3.3	4.3	6.5	11.4
Zimbabwe	17.4	25.7	16.9	15.6	15.6	10.8	11.8	11.3	11.3
Ghana	6.4	27.6	18.2	22.7	22.0	12.5	11.1	11.0	10.4
Peru	3.8	8.7	4.9	4.4	3.3	3.9	4.7	5.0	7.2
Mexico	20.4	27.4	13.1	15.0	6.2	6.2	6.3	5.9	5.2
Total listed	522.7	964.4	612.4	685.7	1,232.2	931.6	925.5	910.1	916.8
Other countries	47.3	200.6	53.6	68.3	38.8	34.4	31.5	34.9	40.2
Estimated world total*	570.0	1,165.0	666.0	754.0	1,271.0	966.0	957.0	945.0	957.0

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

World gold production (excluding that of the USSR, other eastern European countries, China and North Korea) is estimated to have increased slightly, from 945 to 957 tons. This occurred despite a decline of 17 tons in South African output, to 658 tons — its lowest level for twenty-two years. Since 1970 South Africa's share in total gold production shown in the table has come down from 79 to 69 per cent. Outside South Africa, total gold production is estimated to have increased in 1981 by 29 tons, including a rise of 11 tons in US output.

The decline in South African gold production in 1981 occurred notwithstanding a small increase, of just over 2 per cent., in the total volume of ore milled by the industry. The average price received for gold by the South African industry declined between 1980 and 1981 from $616 to $462 per ounce, while average production costs went up by 18 per cent. Consequently, and despite a 22 per cent. depreciation of the rand against the dollar, average pre-tax profits from gold production declined by 33 per cent. in 1981, after a sevenfold rise in the preceding four years.

The principal reason for last year's rise in market supplies of gold was an increase, from 90 to 300 tons, in estimated gold sales by communist countries. There were large sales of gold by the Soviet Union in the latter part of the year to replenish its foreign exchange reserves, which had been substantially reduced during the first half of 1981. Changes in western official gold stocks that affect total market supplies of gold can only be estimated roughly, since certain official gold transactions take place outside the market. In 1981 such off-market transactions included swaps of gold by South Africa with commercial banks. If these swaps are assumed to have

accounted for the 90-ton decline in South Africa's gold reserves last year, total western official offtake of gold from the market during 1981 may be estimated at 80 tons, as compared with 45 tons in 1980. Oil-exporting countries' reported gold reserves went up by 49 tons in 1981 — including increases of 22 and 15½ tons respectively in the reported gold reserves of Indonesia and Libya — and those of Latin American non-oil developing countries by 32 tons, with Colombia and Brazil accounting for 18 and 10 tons respectively. Taking production, communist countries' sales and western official market transactions together, the total of gold available for non-monetary absorption may be roughly estimated to have increased between 1980 and 1981 from 990 to 1,175 tons. A noteworthy feature of the year was the increase, from 36 to 173 tons, in gold imported by Japan for non-monetary purposes.

Estimated market sources and uses of gold.

Items	1978	1979	1980	1981
	in metric tons			
Production	965	955	945	955
Estimated sales by communist countries	450	290	90	300
Estimated changes in western official gold stocks through market transactions* (– = increase)	310	625	– 45	– 80
Total (= estimated non-monetary absorption)	1,725	1,870	990	1,175

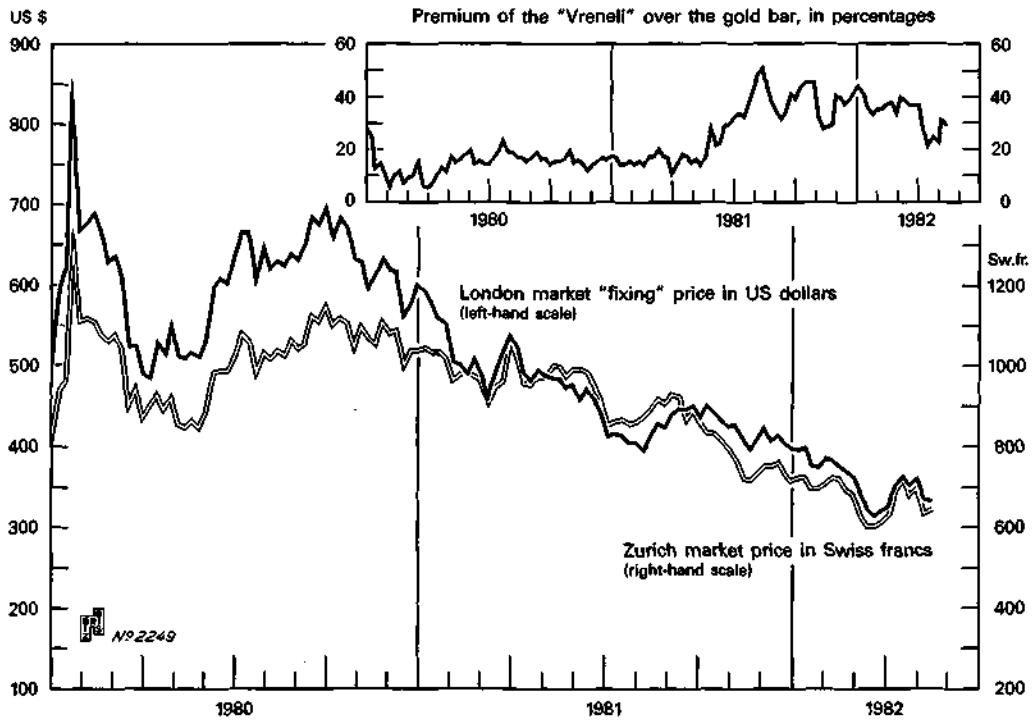
* Changes in South Africa's gold reserves have been excluded from the movements of western official gold stocks in all the years covered in the tables, since they are believed to have largely reflected the execution or unwinding of gold swaps between the South African Reserve Bank and commercial banks in other countries. In addition, the 1978 change in official stocks excludes 65 tons of gold transferred from the Japanese Ministry of Finance to the Bank of Japan and not previously included in world gold reserve statistics.

As regards price developments in the gold market during the period under review, while the general trend was downwards there were some quite marked fluctuations of the market price within the period, to some extent related to the movements of dollar exchange rates. At the end of 1980 the London market fixing price had stood at about $590 per ounce. From that level market quotations rose slightly to just over $600 on 6th January 1981, the highest price recorded during the period under review. Rising dollar interest rates and the release of the US hostages from Iran then brought about a decline in quotations to $457 in early March. Towards the end of that month, under the influence of a temporary weakening of dollar interest rates and of tensions in Poland, the price recovered to nearly $550 and, although that level was not maintained, quotations remained above $500 until towards mid-April. In mid-May a further period of decline, associated with the continuing strength of the dollar, set in and by 8th July the fixing price went below $400 for the first time since November 1979. In early August, when the dollar reached a peak against other major currencies, the price stood just above $390.

Parallel with the subsequent weakening of the dollar in the exchange markets the gold price then recovered to $464 in late September, despite a renewal of market sales by the Soviet Union. From then until mid-March 1982 the overall trend of prices was again downwards, reflecting heavy Soviet sales towards the end of 1981 and the further strengthening of the dollar. By early January 1982 the price went

Market prices of gold in US dollars and Swiss francs, 1980–82.

Friday figures, per fine ounce.



below $400 again and a low point of $312 was reached on 15th March. Following the outbreak of the Anglo-Argentine crisis, quotations rose to $367 in mid-April, but by late May they were back to around $325 per ounce.

Reserves and international liquidity.

Global reserve developments in 1981 contrasted sharply with those of the preceding years. Expressed in current dollars, countries' total reserves, excluding their gold reserves, fell by $19.3 billion to $396.3 billion, after a rise of $56.9 billion in 1980. In addition, the value of total gold reserves, calculated at market prices, declined by $180.3 billion to $379.9 billion, after increases of $66.3 billion in 1980 and $260 billion in 1979.

These figures, expressed in current dollar terms, convey an exaggerated picture both of real reserve developments last year and of the contrast between 1980 and 1981. This is true, most obviously, for gold reserves. In the absence of an official monetary price of gold, changes in the market price of the metal overstate changes in the effective purchasing power of total gold reserves. This applies both to 1979 and the first weeks of 1980, when the gold price rose very steeply, and to the subsequent period, when it fell sharply. Nevertheless, individual gold-holding countries can, to some extent, use their gold reserves, either by selling them on the market or by borrowing against gold at market-related prices. Furthermore, the extent to which

such countries can safely finance payments deficits by using their non-gold reserves is partly a function of the market value of their gold holdings. For all these reasons, therefore, last year's fall in the gold price undoubtedly had an adverse effect on the international liquidity positions of a number of countries.

As regards non-gold reserves, any appreciation of their evolution last year in current dollar terms must take account of changes in their dollar purchasing power. Thus, last year's 4½ per cent. decline in total non-gold reserves, calculated in current dollars, was accompanied by a 3 per cent. decline (on a fourth-quarter to fourth-quarter basis) in the dollar unit value of world exports, under the combined

Changes in global reserves, 1979–81.

Areas and periods	Gold		Foreign exchange	IMF reserve positions	SDRs	ECUs	Non-gold total
	in millions of ounces	in billions of US dollars*					
Group of Ten countries and Switzerland							
1979	– 95.1	199.2	– 31.2	– 2.2	3.7	42.1	12.4
1980	– 1.1	47.9	9.6	3.1	– 0.9	20.9	32.7
1981	– 0.6	–140.4	– 11.0	2.3	2.3	– 13.6	– 20.0
Amounts outstanding at end-1981	*739.0*	*295.6*	*107.6*	*14.4*	*12.5*	*49.4*	*183.9*
Other developed countries							
1979	0.7	28.2	1.1	– 0.2	0.3	0.7	1.9
1980	2.5	7.7	3.4	0.6	– 0.1	– 0.1	3.8
1981	– 2.6	– 19.3	– 2.2	– 0.2	0.4	– 0.2	– 2.2
Amounts outstanding at end-1981	*94.1*	*37.6*	*34.7*	*1.7*	*1.6*	*0.4*	*38.4*
Developing countries other than oil-exporting countries							
1979	1.8	21.4	8.7	0.4	1.1		10.2
1980	2.9	6.3	– 0.9	1.0	– 0.6		– 0.5
1981	1.0	– 13.5	0.6	– 0.3	0.8		1.1
Amounts outstanding at end-1981	*74.4*	*29.8*	*70.5*	*1.9*	*2.8*		*75.2*
Total oil-importing countries							
1979	– 92.6	248.8	– 21.4	– 2.0	5.1	42.8	24.5
1980	4.3	61.9	12.1	4.7	– 1.6	20.8	36.0
1981	– 2.2	–173.2	– 12.6	1.8	3.5	– 13.8	– 21.1
Amounts outstanding at end-1981	*907.5*	*363.0*	*212.8*	*18.0*	*16.9*	*49.8*	*297.5*
Oil-exporting countries							
1979	0.4	11.2	15.5	– 1.8	0.8		14.5
1980	3.4	4.4	19.4	1.3	0.2		20.9
1981	1.6	– 7.1	– 0.2	1.5	0.5		1.8
Amounts outstanding at end-1981	*42.2*	*16.9*	*89.8*	*6.8*	*2.2*		*98.8*
All countries							
1979	– 92.2	260.0	– 5.9	– 3.8	5.9	42.8	39.0
1980	7.7	66.3	31.5	6.0	– 1.4	20.8	56.9
1981	– 0.6	–180.3	– 12.8	3.3	4.0	– 13.8	– 19.3
Amounts outstanding at end-1981	*949.7*	*379.9*	*302.6*	*24.8*	*19.1*	*49.8*	*396.3*

* Gold reserves valued at market prices.

influence of the appreciation of the dollar and the fall in world commodity prices, while in 1980 both the current dollar value of total non-gold reserves and the dollar unit value of world exports had increased, by 16 and 13 per cent. respectively.

The contrast between global reserve developments in 1980 and 1981 was, therefore, in reality a good deal less than appears from the current dollar figures. Nevertheless, there was some decline in the real value of global reserves last year and, in addition, there was a further substantial increase in the external indebtedness of many countries, particularly in the indebtedness of non-oil developing countries to the international banking system. And here the appreciation of the dollar last year means that debt figures expressed in current dollars understate the deterioration in this aspect of these countries' international liquidity situation. With the dollar unit value of world exports actually declining, increases in external dollar indebtedness, which in earlier years had been largely nominal, were all real increases last year.

Taking reserves and international indebtedness together, therefore, there can be no doubt that the overall international liquidity situation deteriorated last year. The most important single factor behind this development was the high level of interest rates in the United States. In the first place, it contributed substantially to the strength of the US balance of payments last year, by inducing large non-bank capital inflows, so that there were no major net outflows of dollars from the United States to the rest of the world despite continued large-scale foreign lending by US banks. Secondly, high dollar interest rates were an important factor in the strengthening of the dollar in the exchange markets, which had the effect of reducing the dollar value of exchange reserves held in currencies other than the dollar. Thirdly, high dollar interest rates contributed, through their effects on the market price of gold, to the fall in the real value of gold reserves and the decline in the total of ECU reserves created through gold swaps.

Looking at the asset composition of last year's reserve changes, the fall of $180.3 billion in total gold reserves, calculated in current dollars at market prices, was of course concentrated largely on the Group of Ten countries and Switzerland, where the decline came to $140.4 billion. In volume terms, total gold reserves were practically unchanged on balance last year, after a 7.7 million ounce increase in 1980. Gold holdings of non-oil developing countries and of oil-exporting countries, taken together, increased by 2.6 million ounces, while those of developed countries were reduced by 3.2 million ounces.

The $19.3 billion decline in total non-gold reserves in 1981 was concentrated on foreign exchange reserves and ECU reserves, which fell by $12.8 and 13.8 billion respectively, while total IMF reserve positions and countries' total SDR holdings, calculated in current dollars, increased by $3.3 and 4 billion respectively.

As regards exchange reserves, last year's total decline of $12.8 billion was largely accounted for by Group of Ten countries, whose reserves held in this form went down by $11 billion. It may be estimated, however, that nearly four-fifths of last year's total decrease in exchange reserves resulted from the reduction in the exchange value of reserve assets held in currencies other than the dollar which was produced by the appreciation of the dollar. In particular, the $0.2 billion decline in oil-exporting countries' total exchange reserves included a fall of over $3 billion in

the dollar value of their holdings of non-dollar reserve currencies, while the $0.6 billion increase in non-oil developing countries' total exchange reserves included a fall of about $2½ billion in the dollar value of their non-dollar exchange reserves.

The $13.8 billion decline in ECU reserves during 1981 largely reflected a reduction in ECUs created through gold swaps. In addition, some EMS countries' ECU holdings fell in line with reductions in their gross dollar reserves and as a result of repayments of very short-term credits denominated in ECUs.

The $3.3 billion increase in countries' IMF reserve positions amounted, in SDR terms, to SDR 4.5 billion. Increased use of dollars in Fund transactions added SDR 2.1 billion to the reserve position of the United States, while Saudi Arabia's Fund reserve position increased by SDR 1.5 billion, including an SDR 1.1 billion addition to that country's Fund quota. The growth of total Fund reserve positions last year broadly reflected total net new drawings of SDR 5 billion on the Fund during the year, nearly four times the 1980 figure of SDR 1.3 billion. The increased use of the Fund's resources in 1981 stemmed from the policy of "enlarged access" adopted in September 1980. Under this policy, new lending commitments entered into by the Fund increased even more sharply than net new drawings between 1980 and 1981, from SDR 7 to 15.2 billion. The largest new lending commitments entered into last year were those of SDR 5, 1.7 and 1.1 billion respectively with India, Yugoslavia and Rumania. Disbursement of these loans depends on the fulfilment by borrowing countries of economic performance criteria. In the present difficult world economic situation some countries may find it hard to fulfil these criteria and the disbursement of some of these funds may, therefore, be delayed.

The $4 billion increase in countries' SDR holdings during 1981 amounted, in SDR terms, to SDR 4.6 billion. It resulted mainly from the third and final general allocation of SDR 4 billion to Fund members made in accordance with the Board of Governors' Resolution of December 1978. In addition, there were net transfers from the General Resources Account of the Fund to member countries during the year totalling SDR 0.6 billion. It may be added that 1981 saw a substantial increase, from SDR 1.7 to 2.7 billion, in the use of SDRs in transactions between members of the IMF.

Looking at the breakdown of last year's changes in non-gold reserves by groups of countries, the oil-exporting countries' reported reserves registered an increase of $1.8 billion, while the non-gold reserves of the rest of the world fell by $21.1 billion.

The very small increase in the oil-exporting countries' reported non-gold reserves in 1981 bore no relation to these countries' total current payments surplus, estimated at about $60 billion. However, the movement of their reported reserves during the year — an increase of $7.2 billion in the first half and a decline of $5.4 billion in the second half — did reflect, however imperfectly, the progressive decline of their current-account surplus. Moreover, the contraction of the OPEC current payments surplus produced wide differences in the reserve movements of different oil-exporting countries. Saudi Arabia's reported reserves rose by $8.8 billion and those of Venezuela and the United Arab Emirates by $1.6 and 1.2 billion respectively. On the other hand, two countries in this group drew heavily on their

reserves last year: Nigeria, whose external assets fell from $10.2 to 3.9 billion, and Libya, where the decline was from $13.1 to 9 billion.

The decline of non-gold reserves in the rest of the world last year was concentrated on the Group of Ten countries and Switzerland, where they fell by $20 billion. The combined reserves of the European members of the Group of Ten fell by as much as $27.4 billion, or about 17 per cent. Nearly half of this loss reflected a $13.6 billion decline in these countries' ECU holdings, most of which resulted from the fall in the market value of that part of their gold reserves which is swapped against ECUs. In addition, however, the foreign exchange reserves of the European Group of Ten countries decreased by $14.7 billion last year. This decline was concentrated on three countries, the United Kingdom (−$4.6 billion), Germany (−$3.6 billion) and France (−$3.1 billion). The UK reserve loss mainly represented repayments of public-sector foreign indebtedness, including the $2.5 billion Euro-dollar loan taken up by the British Government in 1974. The German and French foreign exchange losses, on the other hand, reflected exchange-market intervention. In the second and third quarters of the year these countries supported their currencies in the exchange market with heavy sales of dollars, part of which they recouped later in the year when the dollar weakened against European currencies.

In the rest of the Group of Ten there were significant increases in the reserves of Japan and the United States. Japan's non-gold reserves increased by $3.6 billion last year, over $3 billion having been added to foreign exchange reserves. Japan's gains stemmed partly from official interventions very early in the year, when the yen was appreciating in the exchange market, and partly from interest earned on the existing stock of exchange reserves.

The non-gold reserves of the United States went up by $3.3 billion in 1981. This was more than accounted for by a $3.7 billion increase in claims on the International Monetary Fund, including SDRs. The foreign exchange reserves of the United States, on the other hand, showed a small decline of $0.4 billion, although the dollar was easily the strongest of the major currencies. $2.4 billion of US Treasury notes denominated in Deutsche Mark and Swiss francs were redeemed during 1981, mostly out of the proceeds of official market purchases of these currencies made in the early part of the year.

The modest $2.2 billion decline in the official non-gold reserves of "other developed countries" was spread over a large number of countries. The situation was somewhat different in the group of non-oil developing countries. In the aggregate, their non-gold reserves showed little change, as they had done in 1980. However, there were fairly large but contrasting movements in the reserves of some individual countries in this group. Two countries — Taiwan and China — recorded substantial reserve gains, of $4.5 and 2.5 billion respectively; on the other hand, Argentina and India lost $3.5 and 1.9 billion respectively. A moderate gain of $0.8 billion was recorded by Brazil, whose reserves had contracted sharply, from $11.8 to 5.8 billion, over the preceding two years. No recent reserve figures are available for Mexico. The overall trend of non-oil developing countries' reserves improved during the course of 1981, from a $4.1 billion decrease in the first quarter to a $5.8 billion gain in the fourth quarter.

In the first quarter of 1982, with US interest rates showing little sign of coming down and the dollar consequently very strong, the international liquidity situation tended to tighten further. The exchange reserves of Group of Ten countries other than the United States declined by about $10 billion, although this figure overstates the real extent of the decline, owing to exchange rate effects and the unwinding of end-year operations with commercial banks. At the same time the persistent weakness of the gold price produced a further reduction of $76 billion in the value of western official gold reserves calculated at market prices. Liabilities to official monetary institutions reported by the United States decreased by $3.3 billion, which would seem to suggest that the exchange reserve losses of the Group of Ten countries were offset to some extent by gains elsewhere.

A salient feature of last year's reserve developments was a significant increase in the share of total exchange reserves identified as being held in the United States, at the expense of reserves held in the international banking market and, in particular, with Euro-banks. At the end of 1980 47.5 per cent. of total exchange reserves shown in the following table had been held in the United States and 40.6 per cent. with banks in those parts of the Euro-currency market (including certain offshore

The pattern of investment of exchange reserves, 1977–81.

Items	End-1977	End-1978	End-1979	End-1980	End-1981
	amounts outstanding, in billions of US dollars				
1. Deposits with banks in European countries,[1] Canada and Japan:					
(a) In national markets	7.6	9.3	8.8	17.6	16.3
Deutsche Mark	2.2	3.1	3.4	4.8	3.3
Swiss francs	1.3	0.6	0.6	1.6	2.7
Yen	0.9	2.7	0.9	4.6	5.4
Pounds sterling	1.6	1.2	1.9	3.0	2.2
Other currencies	1.6	1.7	2.0	3.6	2.7
(b) In Euro-markets	71.0	80.1	115.0	122.4	104.5
Dollars	53.0	52.8	73.3	79.4	70.5
Deutsche Mark	12.0	16.8	24.1	24.5	19.1
Swiss francs	3.2	4.6	6.0	8.0	6.9
Yen	0.9	2.2	4.2	2.2	2.2
Pounds sterling	0.3	0.7	1.5	2.2	1.1
Other currencies	1.6	3.0	5.9	6.1	4.7
2. Deposits with certain offshore branches of US banks[2]	4.4	5.7	6.4	5.6	5.0
Total 1+2	83.0	95.1	130.2	145.6	125.8
of which: in dollars	*57.2*	*58.2*	*79.0*	*84.4*	*75.0*
in non-dollar currencies	*25.8*	*36.9*	*51.2*	*61.2*	*50.8*
3. Exchange reserves identified as being held in the United States (= reported US liabilities to foreign official institutions)	126.0	157.0	143.3	157.1	161.1

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] Austria, Belgium-Luxembourg, Denmark, France, Germany, Ireland, Italy, the Netherlands, Sweden, Switzerland and the United Kingdom. [2] In the Bahamas, the Cayman Islands, Panama, Hong Kong and Singapore.

branches of US banks) for which data are given in the table. During 1981 these official deposits held in the Euro-currency market declined by $18.5 billion, to $109.5 billion, thus reversing the trend observed during the preceding three years. At the same time reserves held in the United States, as measured by reported liabilities of the United States to foreign official institutions, increased by a further $4 billion, to $161.1 billion. Consequently, the identified share of total exchange reserves held in the United States went up to 51 per cent., while that of reserves held in the Euro-currency market declined to 36.2 per cent.

A part of this shift was more apparent than real. Over 50 per cent. of the $9 billion decline, in current dollar terms, of official Euro-currency deposits in currencies other than the dollar may be estimated to have resulted from the dollar's appreciation last year against other international currencies. Nevertheless, after excluding this element, there remains a real decline in non-dollar official Euro-currency deposits last year. More importantly, official Euro-currency deposits held in dollars went down by $9.4 billion during 1981, from $84.4 to 75 billion.

The shift in the relative importance of the US market and the Euro-currency market as reserve centres is even more marked if the exchange reserves of Group of Ten countries (apart from those of the United States), which are mostly held in the US market, are excluded from the calculation. Excluding the United States, the total exchange reserves of Group of Ten countries declined during 1981 by $10.6 billion and, if it is assumed that a very large part of this decline was in dollar reserves held in the United States, then the increase in non-Group of Ten countries' reserve holdings in the United States during 1981, measured on the basis of reported US liabilities to foreign official institutions, may have been of the order of $12–14 billion — comparable to the decline in total official deposits in the Euro-currency market shown in the preceding table, excluding that part of it which is attributable to changes in the dollar value of official deposits held in Euro-currencies other than the dollar.

What were the factors that may have influenced this shift in the relative importance of the US market and the Euro-currency market as reserve centres for countries outside the Group of Ten? In the first place, the geographical distribution of reserve gains and losses may have played a part. It seems likely that those oil-exporting countries which drew down their reserves in 1981 did so to a large extent by reducing their holdings in the Euro-currency market, while Saudi Arabia, which accounted for a substantial part of last year's aggregate OPEC current-account payments surplus, may have invested a significant part of its surplus in the US market. Secondly, the very high interest rates obtainable on longer-term fixed-interest securities in the United States, together with the strength of the dollar in the exchange markets, probably led to a change in some central banks' reserve investment policies, away from both the dollar and non-dollar sectors of the Euro-market towards the US capital market. Such a shift would have enabled central banks to obtain high returns on dollar reserves for longer than if they were invested in time deposits or capital gains as and when US capital-market interest rates declined. Thirdly, some central banks may have perceived last year an increased risk in holding their exchange reserves with the international banking system. Prima facie evidence for this can be seen not only in the fall in official Euro-currency deposits

but also in the fact that, even in the United States itself, foreign official holdings of bank deposits declined a little during 1981, by about $1 billion, while official holdings of US Treasury bonds and notes, together with those of non-Treasury securities, increased by nearly $13 billion.

Finally, it may be said that this relative shift of exchange reserves into the United States had some effect on overall liquidity in the rest of the world. Although the US and the Euro-currency markets are closely connected, arbitrage between the two is not perfect and shifts of official reserves between the two markets will not therefore produce fully offsetting movements of private funds in the opposite direction. Coming as it did after some years in which there had been shifts of reserves from the US market to the Euro-currency market, last year's movement into the US market will have tended to reinforce the other factors which made for a tightening of international liquidity in the rest of the world.

VIII. ACTIVITIES OF THE BANK.

1. Development of co-operation between central banks and international organisations.

During the past year the Bank has continued to play its traditional rôle in fostering international monetary co-operation. In addition to the regular meetings in Basle of the Governors of the central banks of the Group of Ten countries and Switzerland, the Bank has organised periodic meetings of central-bank officials to examine matters such as the development of the gold and foreign exchange markets and the Euro-currency market and to study and exchange information on other economic, monetary, technical and legal questions of interest to central banks. In accordance with the mandate given by the Group of Ten central-bank Governors in April 1980 to the Euro-currency Standing Committee of systematically monitoring international banking developments, the Committee has continued to hold quarterly meetings at which it has reviewed these developments and has assessed their significance for the world economy, for the economies of individual countries and for the soundness of the whole international banking system.

The Bank continued to participate as an observer in the work of the Interim Committee of the Board of Governors of the International Monetary Fund on the International Monetary System. It also participated as an observer at meetings of the Finance Ministers and central-bank Governors of the Group of Ten countries and Switzerland, 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. It also continued to assemble, survey and distribute statistical data on the Euro-currency market and to be associated with other work of the Group of Ten and of the OECD, in particular providing the Secretariat for the Committee on Banking Regulations and Supervisory Practices established by the central-bank Governors of the Group of Ten in December 1974.

The Bank continued to provide the Secretariat for the Committee of Governors of the Central Banks of the Member States of the European Economic Community and for the Board of Governors of the European Monetary Co-operation Fund — EEC bodies which were established in May 1964 and April 1973 respectively — as well as for their sub-committees and groups of experts. The latter 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 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 EEC countries when dealing with the European Monetary System, for example, and at other times extended to include participants from other industrial

countries such as Canada, the United States, Japan, Norway, Sweden and Switzerland); a group commissioned to examine periodically the monetary policies pursued by member states and their Community-wide co-ordination, and also to make ad hoc studies of particular questions — for example, in 1981, the external debt policies of the EEC countries and the financing of public-sector deficits by the EEC central banks; and a group entrusted with the task of promoting the harmonisation of the monetary policy instruments applied by member states (this group is responsible to both the Monetary Committee of the EEC and the Committee of Governors).

As in previous years, these committees and groups held a large number of meetings in 1981–82, mostly in Basle and generally in preparation for discussions among the Governors. On the basis of their work the Committee of Governors itself and the Board of Governors of the European Monetary Co-operation Fund, each within the framework of its competence and functions, which are closely related and complementary, are able to take various decisions relating to the monetary arrangements between central banks or to prepare reports and opinions, on a regular or ad hoc basis, mostly for the Ministers of Finance of the EEC countries or for the Commission of the European Communities.

In the financial year 1981–82 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 European Monetary System (EMS) established on 13th March 1979. The principal tasks were:

- ensuring that the arrangements governing the system were properly applied,
- strengthening the co-ordination of the exchange rate and domestic monetary policies pursued by the EEC central banks as a prerequisite for the smooth operation of the EMS.

The Committee also continued to work on the possible evolution of the EMS. As political and economic conditions were not conducive to the implementation of the definitive institutional phase envisaged in the Resolution of the European Council of 5th December 1978, the aim of this work was essentially to assess the operation of the EMS since its establishment and to examine, in the light of three years' experience, possible technical adjustments to the mechanisms of the system. Lastly, given the repercussions on member states of exchange rate and interest rate developments outside the EEC, the Committee of Governors looked into the possibilities of greater co-ordination of the policies pursued in these spheres by Community and certain non-Community countries.

The Bank continued to provide the Secretariat for the Group of Computer Experts of the central banks of the Group of Ten countries and Switzerland. During the financial year 1981–82 the members of the Group held an exchange of information on data transmission networks in use or under development and on the work being carried out by various bodies, in particular by the International Organization for Standardization (ISO), to facilitate the interconnection of these networks. The Group also commenced a second revision of the book on "Security and reliability in electronic systems for payments", to take into account in particular the specific questions raised by the increase in the number of mini- and micro-

computers and their wider use by the general public. In addition, studies are being undertaken on the likely future consequences for the internal organisation of central banks of the combined use of computer and telecommunications resources in carrying out office work.

Since the summer of 1981 the Bank has provided the Secretariat for a new Group of Payment System Experts from the central banks of the Group of Ten countries and Switzerland. The Group has been meeting quarterly since October 1981 to examine current and prospective changes in domestic and international payment systems resulting from the application of new technology and the possible consequences of these changes for the structure of banking systems and for central banks themselves. The Group will, in particular, be seeking to establish whether the application of new technology to payment systems may have any influence on the conduct of monetary policy.

The BIS data bank was conceived and designed to meet the needs of the central banks of the Group of Ten countries and Switzerland and of the BIS itself. Under the guidance of the central-bank Group of Experts on Monetary and Economic Data-Bank Questions, for which the BIS provides the Secretariat, further progress was made both with reporting procedures and with techniques for using this centralised service. During the year preparations continued with a view to expanding the exchange of macro-economic time series between the central banks and the BIS. Progress was also made with the automation of the reporting and use of Euro-currency statistics.

Following the successful initial year of data-bank operations using the Bank's own computer installation, technical enhancements were made in order to lay the foundation for steady growth towards a fully-fledged service. In addition, telecommunication links were established between most of the central banks and the BIS data centre. In due course this will permit the rapid exchange of information among participants, which is one of the principal aims of the project.

2. Operations of the Bank.

The Balance Sheet of the Bank and the Profit and Loss Account at 31st March 1982, certified by the auditors, are reproduced at the end of this Report; both are expressed in gold francs.*

* * *

At 31st March 1982 the balance-sheet total stood at	F 19,056,758,395
against, on 31st March 1981,	F 19,726,245,562
The decrease thus amounted to	F 669,487,167

* In this chapter the term "francs" (abbreviated to F) signifies *gold* francs unless otherwise specified. 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 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.

Following the considerable fluctuations in the balance-sheet total recorded at the end of the two preceding financial years, last year the net movement was comparatively moderate. But for the fall in the gold franc value of currencies other than the US dollar the change would have been even smaller.

There were, in fact, appreciable differences between the exchange rates of these currencies at the beginning and at the end of the financial year, except in the case of the Swiss franc whose rate remained virtually unchanged. Between those two dates, however, the gold franc value of the Swiss franc, in common with that of the other currencies, fluctuated sharply.

In the course of the financial year the total of the monthly statement of account reached its lowest level, viz. 18,440 million francs, at the end of August 1981 and its highest, viz. 20,214 million francs, at the end of December 1981, a much narrower range of fluctuation than in the financial year 1980–81.

BIS: Development of the balance-sheet total over the past three financial years.

Financial years ended 31st March	Total of Balance Sheet	Movement over the year	
	in millions of francs		*in percentages*
1980	24,409	+ 5,308	+ *28*
1981	19,726	− 4,683	− *19*
1982	19,057	− 669	− *3*

The following are not included in the Balance Sheet:

(i) bills and other securities held in custody for the account of central banks and other depositors;

(ii) assets held by virtue of the functions performed by the Bank (as Depositary or Trustee) in connection with international loans;

(iii) accounting entries arising from the Bank's functions as Agent for the European Monetary Co-operation Fund in connection with Community borrowing and lending and with the European Monetary System;

(iv) gold under earmark held by the Bank for the account of depositors; this item amounted to 1,290 million francs on 31st March 1982, against 1,190 million on 31st March 1981, an increase of 100 million.

LIABILITIES (COMPOSITION OF RESOURCES).

BIS: Development of the composition of resources over the past three 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	Sundry liabilities	Balance-sheet total
	in millions of francs			
1980	887	23,239	283	24,409
1981	937	18,539	250	19,726
1982	987	17,778	292	19,057

A. Capital, reserves and miscellaneous liabilities.

(a) Paid-up capital F 295,703,125

The Bank's authorised capital remained unchanged at 1,500 million francs; there was no change either 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* F 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 1981–82 F 437,152,793

This compares with 417.2 million francs on 31st March 1981; the difference of 20 million represents the amount it is proposed to transfer 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 1981–82 F 21,530,055

The corresponding figure on 31st March 1981 was 19.5 million francs. As at the end of the previous financial year, it is proposed to transfer an amount of 2 million to this Fund from the net profit.

(4) *Free Reserve Fund*

after allocation of the net profit for 1981–82 F 202,730,236

This compares with 174.7 million francs on 31st March 1981, the amount it is proposed to transfer to this Fund from the net profit being 28 million francs.

The total amount of the Bank's reserves, after allocation of the net profit for 1981–82, thus stands at F 691,483,397
against 641.5 million francs at the beginning of the financial year, giving an increase of 50 million, or 7.8 per cent. At the end of the previous financial year an identical amount had been appropriated from the profit for transfer to these reserves.

(c) The item "Miscellaneous" stood at F 274,639,044

against 232.8 million francs on 31st March 1981, a rise of 41.8 million.

(d) Profit and Loss Account, *before* allocation F 66,938,821

This figure represents the net profit for the financial year 1981–82.

Details of the proposed allocation of the net profit, in accordance with the provisions of Article 51 of the Statutes, are given in Section 3 below. In particular, a sum of 16,938,821 francs, compared with 17,004,609 francs in the preceding financial year, is to be set aside in respect of the dividend of 135 Swiss francs per share payable on 1st July 1982. The amount of the dividend in Swiss francs is the same as for the previous financial year.

B. Borrowed funds.

The following tables show the *origin*, *nature* and *term* of the Bank's borrowed resources.

BIS: Borrowed funds, by origin.

Origin	Financial years ended 31st March		Movement
	1981	1982	
	in millions of francs		
Deposits of central banks	18,431	17,396	− 1,035
Deposits of other depositors	108	382	+ 274
Total	18,539	17,778	− 761

As in the previous financial year, "Deposits of central banks" declined, though much less sharply (by 5.6 per cent., against 18 per cent.). This movement was mainly due to withdrawals of deposits in Deutsche Mark, only partly offset by the receipt of new funds in US dollars and Swiss francs. It may be mentioned again here that the decrease in resources in currencies other than the US dollar was magnified by the fall in the gold franc value of those currencies, and in particular by the depreciation of deposit balances in Deutsche Mark. Deposits in gold remained very stable.

"Deposits of other depositors" increased, particularly in relative terms. This movement reflected a rise in deposits in US dollars indexed to the special drawing right (SDR).

As a proportion of total borrowed resources, "Deposits of central banks" decreased somewhat, falling from 99.4 to 97.9 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
	1981	1982		1981	1982		1981	1982	
	in millions of francs								
Sight	4,647	4,662	+ 15	276	362	+ 86	4,923	5,024	+ 101
Not exceeding 3 months	30	29	− 1	11,671	11,122	− 549	11,701	11,151	− 550
Over 3 months	4	−	− 4	1,911	1,603	− 308	1,915	1,603	− 312
Total	4,681	4,691	+ 10	13,858	13,087	− 771	18,539	17,778	− 761

In relation to total borrowed funds, the share of deposits in currencies declined from 74.8 to 73.6 per cent., while that of deposits in gold rose from 25.2 to 26.4 per cent.

Looking at the maturity distribution, the proportion of sight deposits in the total increased from 26.6 to 28.3 per cent., whereas that of time deposits, taken as a whole, decreased from 73.4 to 71.7 per cent.

(a) Deposits in gold F 4,691,028,405

At the beginning of the financial year the balance outstanding came to 4,681 million francs. The slight increase recorded was the result of a small rise in sight accounts, partially offset by a small decrease in time accounts.

(b) Deposits in currencies F 13,086,965,603

This item, which had stood at 13,858 million at the end of the previous financial year, registered a decline of 771 million, or 5.6 per cent. (compared with one of 26.1 per cent. in 1980–81). This decline represents the difference between the rise in sight accounts and the overall reduction in time deposits. It may further be noted that the relative decrease in time deposits at over three months was sharper (−16.1 per cent.) than that of funds received for shorter terms (−4.7 per cent.).

ASSETS (EMPLOYMENT OF RESOURCES).

The table overleaf gives a breakdown of the main items of the assets according to their *nature*.

(a) Gold F 5,478,526,941

This compares with 5,437 million francs at the beginning of the financial year, giving an increase of 42 million, or 0.8 per cent., compared with a rise of 124 million, or 2.3 per cent., during the previous financial year. The difference of 42 million was the result, on the one hand, of the movements on central banks' sight accounts — net deposits of gold — and the repayment of a time deposit and, on the other hand, of the gold received from central banks when new swaps were concluded against various currencies, this gold having been purchased spot. In addition, a number of placements were made on the market (see item (d) below).

BIS: Distribution, by nature, of sight assets and other investments.

Nature	Financial years ended 31st March 1981		1982		Movement	
	in millions of francs					
Sight assets						
Gold	5,437		5,479		+ 42	
Currencies	16	5,453	11	5,490	− 5	+ 37
Treasury bills						
Currencies		226		417		+ 191
Time deposits and advances						
Gold	41		58		+ 17	
Currencies	12,776	12,817	11,561	11,619	− 1,215	− 1,198
Securities at term						
Currencies		1,086		1,471		+ 385
Total						
Gold	5,478		5,537		+ 59	
Currencies	14,104	19,582	13,460	18,997	− 644	− 585

(b) Cash on hand and on sight account with banks F 10,808,523

This compares with a balance of 16 million francs at the end of the previous financial year.

(c) Treasury bills F 417,483,063

This compares with a figure of 226 million francs at the end of the previous financial year, giving an increase of 191 million, or 84.5 per cent. The rise is related to repurchase agreements concluded with a central bank.

(d) Time deposits and advances F 11,619,385,995

This item had stood at 12,817 million at 31st March 1981. It thus recorded a decline of 1,198 million, or 9.3 per cent., chiefly due to a sharp decrease in placements in Deutsche Mark. Withdrawals in that currency were partly offset by new operations in Swiss francs in particular and in various other currencies.

It may further be mentioned that there were certain divergences in the currency composition of the Bank's assets and liabilities, due to the new transactions concluded in US dollars indexed to the SDR; the Bank covered itself by selling part of the US dollars spot against the other currencies making up the SDR "basket" and simultaneously investing the currencies purchased.

The total volume of facilities granted to central banks increased during the period under review; however, those granted in the form of swaps of various currencies (sold spot) against gold declined. As already mentioned, some new investments in gold were made on the market.

(e) Securities at term F 1,470,968,509

This compares with 1,086 million francs at 31st March 1981, giving a rise of 385 million.

This movement was chiefly due to the substantial rise in holdings of certificates of deposit issued by banks located in the United States and the increase in the portfolio of public-sector securities.

The following table gives a breakdown according to residual term to maturity of investments in time deposits and advances and securities at term.

BIS: Time deposits and advances and securities at term, by term to maturity.

Term	Financial years ended 31st March		Movement
	1981	1982	
	in millions of francs		
Not exceeding 3 months	9,914	8,988	− 926
Over 3 months	3,989	4,102	+ 113
Total	13,903	13,090	− 813

There was a decline in the balance of operations with not more than three months to run, following a reduction of placements in currencies, partly offset by purchases of securities.

On the other hand, the total of operations with over three months to run increased, the amount of paper purchased being greater than that of maturing placements.

Thus, it may be noted that the term of current transactions lengthened slightly.

Operations in the first category accounted for 68.7 per cent. of the total and those in the second for 31.3 per cent., compared with 71.3 per cent. and 28.7 per cent. respectively the previous year.

(f) Miscellaneous F 59,585,363

This item, which stood at 144 million at 31st March 1981, recorded a decline of almost 84 million due to book-keeping adjustments.

Forward gold operations.

These operations, the volume of which is indicated in Note 2 to the Balance Sheet, resulted in a negative balance of F 183,551,737 compared with a negative balance of 135 million at the beginning of the financial year.

This difference of 49 million was attributable, in particular, to the increase in the weight of gold involved in current transactions concluded with central banks in the form of swaps of gold (resold forward) — see "Miscellaneous" above.

* * *

While the Bank's balance-sheet total declined marginally, the volume of its operations was not affected and remained at a high level.

3. Net profits and their distribution.

The accounts for the fifty-second financial year ended 31st March 1982 show a net operating surplus of 67,796,486 francs, compared with 68,061,940 francs for the preceding financial year. An increase over the year in the return obtained on the Bank's own funds held in currencies was slightly more than offset by a decrease in the net income from its borrowed resources, the average level of which was appreciably lower than in 1980–81.

The net operating surplus is shown after deduction of 15,751,675 francs in respect of costs of administration, which declined from the previous year's figure of 17,050,122 francs owing to the fall during the year in the gold franc value of the Swiss franc, in which currency most of the Bank's expenditure is incurred; in terms of Swiss francs the total administrative costs actually rose slightly.

The Board of Directors has decided to transfer 857,665 francs to the Provision for Exceptional Costs of Administration. As a result of this transfer the net profit amounts to 66,938,821 francs, against 67,004,609 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 66,938,821 francs be applied by the General Meeting in the following manner:

(i) an amount of 16,938,821 francs in payment of a dividend of 135 Swiss francs per share;

(ii) an amount of 20,000,000 francs to be transferred to the General Reserve Fund;

(iii) an amount of 2,000,000 francs to be transferred to the Special Dividend Reserve Fund; and finally

(iv) an amount of 28,000,000 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 which is in conformity with the Statutes.

If the above proposals are accepted, the dividend will be paid on 1st July 1982 to the shareholders whose names are contained in the Bank's share register on 20th June 1982.

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 1982 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.

4. The Bank as Depositary under the terms of the Act of Pledge concluded with the European Coal and Steel Community, and as Trustee for international government loans.

The following table shows the amounts outstanding at 1st April 1982 on the secured loans issued by the European Coal and Steel Community for which the Bank performs the functions of Depositary in accordance with the provisions of the Act of Pledge concluded between itself and the Community on 28th November 1954.

Secured loans of the European Coal and Steel Community.

Amounts outstanding.

Series of Secured Notes	Dates of issue	Countries of issue	Lenders	Original amounts of loans	Amounts unredeemed on 1st April 1982	Rates of interest %	Year of final maturity or redemption
2nd	1955	Belgium	Caisse Générale d'Epargne et de Retraite, Brussels	B.fr. 200,000,000	12,000,000	3½	1982
4th	1955	Luxembourg	Caisse d'Epargne de l'Etat, Luxembourg	B.fr. 20,000,000	1,200,000	3½	1982
10th	1957	Luxembourg	Etablissement d'Assurance contre la Vieillesse et l'Invalidité, Luxembourg	L.fr. 100,000,000	7,648,011	5⅜	1982
15th	1961	Luxembourg	Etablissement d'Assurance contre la Vieillesse et l'Invalidité, Luxembourg	L.fr. 100,000,000	28,105,456	5¼	1986

During the financial year 1981–82 the amounts received by the Bank for the service of the secured loans came to the equivalent of about 60,000 francs in respect of interest and about 900,000 francs in respect of redemption. By the end of the financial year the total amount outstanding had been reduced to the equivalent of approximately 600,000 francs.

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 Chapter VIII of the 1980 Annual Report of the Bank.

5. The Bank as Agent for the European Monetary Co-operation Fund.

The Bank continued to perform the functions of Agent for the European Monetary Co-operation Fund which it has been executing since 1st June 1973. This Community institution was set up on 6th April 1973 by the member states of the

European Economic Community to administer the Community exchange rate, or "snake", arrangement introduced in April 1972 and the reciprocal credit facilities already in existence or established in connection with the "snake". These activities were extended with the conclusion, in March and April 1976, of the first Community loan operations, the administration of which was entrusted to the Fund, and, in particular, with the introduction of the European Monetary System (EMS) which superseded the "snake" mechanism on 13th March 1979.

As the Fund's Agent, the Bank performs two main sets of functions: on the one hand, those connected with the operation of the European Monetary System; and, on the other, those relating 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.

(1) In the first case, the Bank's rôle consists principally in the following:

(a) It records in European currency units (ECUs) in the Fund's books:

- the debts and claims vis-à-vis the Fund of the EEC central banks participating in the EMS exchange rate mechanism which arise from interventions carried out by those central banks in other member countries' currencies and reported to the Agent;
- the immediate or periodic settlement of these very short-term debts and claims.

(b) The Bank carries out operations associated with the creation, utilisation and remuneration of ECUs, namely:

- concluding, in the name and for the account of the Fund, swap operations with each of the EEC central banks (except that of Greece) involving the transfer of ECUs to the institutions in question against the transfer by them of 20 per cent. of their gold holdings and 20 per cent. of their gross US dollar reserves. These swap operations are renewed every three months, when the necessary adjustments are made, firstly, to ensure that each central bank's contribution to the Fund continues to represent at least 20 per cent. of its gold and US dollar reserve holdings at the end of the month preceding the renewal date and, secondly, in order to take account of changes in the price of gold and in dollar rates vis-à-vis the ECU;
- in the name of the Fund, entrusting the respective central banks with the management of the gold and US dollar assets they have transferred to the Fund;
- effecting transfers of ECUs between the central banks' "ECU reserves" accounts, in particular in respect of the settlement of debts and claims arising from interventions under the EMS exchange rate mechanism and of the payment of interest calculated on the central banks' net positions in ECUs.

(c) The Bank enters in the Fund's books the operations carried out in the context of the short-term monetary support arrangements set up in February 1970. This facility has, however, not been activated since 1974, when it was used by the Bank of Italy.

During the period from 1st April 1981 to 31st March 1982 those interventions carried out by the central banks participating in the exchange rate mechanism that gave rise to book-keeping entries in ECUs in the books of the EMCF amounted to approximately ECU 8.5 billion in all.

At 31st March 1982 the Fund had issued a total of just over ECU 42 billion, equivalent to about the same amount of US dollars at the exchange rate prevailing on that date. These ECUs were created as the counterpart of the contributions of reserve assets by all the EEC central banks with the exception of that of Greece, whose accession to the Community on 1st January 1981 did not involve participation in the EMS. A portion of these ECU assets was used by several EEC central banks mainly to settle, in part or in full, their debts resulting from the interventions mentioned above.

(2) In its function as Agent of the Fund for the administration of borrowing and lending operations concluded by the Community in accordance with the Regulations adopted by the Council of the European Communities in February 1975, the Bank is responsible principally for the following tasks:

- carrying out payments connected with these borrowing and lending operations through the accounts which the Fund has opened in its name at the Bank; the accounts in question are, however, merely transit accounts, as the sums received by the Fund under borrowing arrangements entered into by the Community are transferred on the same value date to the final recipients of the payments;
- recording these financial operations in the Fund's books;
- keeping a check on the due dates laid down in the borrowing and lending contracts for the payment of interest and repayment of the principal;
- informing the Commission of the European Communities of the operations carried out for the account of the EEC.

During the financial year 1981-82 the Bank in its capacity as Agent for the Fund effected the payment of accrued interest and commission and the repayment of the second, US$ 45 million, tranche of a US$ 100 million loan issued in 1977, together with the repayment in full of a further US$ 100 million loan which had been placed by the European Economic Community in 1976. At 31st March 1982 it was administering, after these repayments, a total of five loan operations, amounting to US$ 930 million and DM 500 million, approximately 85 per cent. of the proceeds of which had been lent to Italy and the remainder to Ireland. All the borrowing and corresponding lending contracts carry a fixed rate of interest ranging between 7¼ and 8¼ per cent. according to the term of the loan (initially over five years on average), the currency of issue and the date of conclusion of the contract.

It should be added that a Regulation of the Council of the European Communities of 16th March 1981 simplified the procedures for activating the Community loan facility and raised its ceiling to ECU 6 billion, virtually tripling potential lending under the mechanism. However, since this adjustment, no new operation has been concluded.

6. Changes in the Board of Directors and in the Management.

At the meeting of the Board held on 10th November 1981 the Chairman, Dr. Jelle Zijlstra, announced that following his decision to resign from his office as President of the Netherlands Bank at the end of December 1981 he was tendering his resignation as Chairman of the Board of Directors and President of the Bank for International Settlements as from the same date. Dr. Zijlstra had held these two positions since 1st July 1967. The Vice-Chairman expressed the Board's most sincere gratitude for the outstanding services that Dr. Zijlstra had rendered to the Bank during his fourteen and a half years of office, a record in the history of the Bank.

At the same meeting the Board elected, under Article 38 of the Statutes, Dr. Fritz Leutwiler, Chairman of the Governing Board of the Swiss National Bank, as Chairman of the Board of Directors and President of the BIS for a period of three years as from 1st January 1982.

The mandate of Lord O'Brien of Lothbury as Vice-Chairman of the Board was due to expire on 28th February 1982. At its meeting on 9th February 1982 the Board re-elected him under Article 38 of the Statutes for a further period of three years ending on 28th February 1985.

Other changes in the Board of Directors were as follows (in chronological order):

Baron Ansiaux, whose mandate as a member of the Board was due to expire on 7th August 1981, was re-appointed in July 1981 by M. de Strycker, Governor of the National Bank of Belgium, under Article 27(2) of the Statutes for a further period expiring on 31st January 1982.

In September 1981 Prof. Paolo Baffi, whose mandate as a member of the Board was due to expire on 7th November 1981, was re-appointed under Article 27(2) of the Statutes by Dr. Ciampi, Governor of the Bank of Italy, for a further period of three years ending on 7th November 1984.

Following his resignation as President of the Netherlands Bank at the end of December 1981 Dr. Zijlstra also gave up his seat on the Board of Directors of the BIS. At the meeting of the Board held on 8th December 1981 Dr. W. F. Duisenberg, who had been appointed to succeed Dr. Zijlstra as President of the Netherlands Bank, was elected under Article 27(3) of the Statutes to be a member of the Board for the unexpired period of the latter's term of office, namely until 31st March 1982.

At the same meeting Dr. Johann Schöllhorn, whose mandate as a member of the Board was due to expire on 31st December 1981, was re-appointed under Article 27(2) of the Statutes by Herr Pöhl, President of the Deutsche Bundesbank, for a further period of three years ending on 31st December 1984.

The mandate of Baron Ansiaux being due to expire on 31st January 1982, at the meeting of the Board held on 12th January 1982 the Chairman paid tribute to the eminent services which Baron Ansiaux had rendered both to the Bank and to central-bank co-operation during his exceptionally long period of office, first as an Alternate, then as an ex officio member of the Board and finally as an appointed Director.

The Chairman informed the Board at its meeting held on 9th February 1982 that Dr. Ciampi, Governor of the Bank of Italy, had appointed Dr. Lamberto Dini to act as his Alternate in place of Dr. Mario Sarcinelli. The Chairman expressed the Bank's appreciation of Dr. Sarcinelli's valuable services.

At the end of February 1982 M. Cecil de Strycker resigned as Governor of the National Bank of Belgium and was succeeded on 1st March by M. Jean Godeaux, who thereby became an ex officio member of the Board. At the Board meeting held on 9th March 1982 the Chairman announced that, in accordance with Article 27(2) of the Statutes, M. Godeaux had appointed M. de Strycker as a member of the Board for a period of three years ending on 28th February 1985. The Chairman also expressed the Board's pleasure that M. de Strycker, who had been an ex officio Director since February 1975, would continue to be one of its members.

At the same meeting Dr. W.F. Duisenberg, whose mandate as a member of the Board was due to expire on 31st March 1982, was re-elected under Article 27(3) of the Statutes for a period of three years ending on 31st March 1985.

The Chairman also announced at that meeting that the Bank had decided to promote Mr. R. G. Stevenson to the rank of Deputy Manager as from 1st April 1982.

CONCLUSION.

Following the inflationary impact of the second oil shock the western industrial world embarked on a process of disinflation through the pursuit of firm anti-inflationary policies. These policies are now beginning to bear fruit in a perceptible and rather widespread slackening of inflation. At the same time, their restrictive stance has further depressed an economic growth rate that, under the influence of other factors, had already been unusually slow for almost a decade. The contrast between the undeniable successes of the authorities' counter-inflationary stand and what some regard as its unacceptably high cost has fired a debate which, with varying intensity, has increasingly come to dominate the political scene everywhere.

An inherent handicap to constructive debate stems from the fact that the process of disinflation in which the industrial countries are now engaged is a new experience. True, there are partial analogies with earlier experiences; but, precisely because they are partial, they are just as likely to mislead as to shed light on the issue. This is especially true of the frequent parallels drawn with the Great Depression of 1929–32.

Three distinctive features of the present situation are worth highlighting, since they are important for the formulation of policy recommendations: the main burden of the fight against inflation, particularly in the United States, is being borne by monetary policy; post-war inflation has been very different from earlier inflation — so the process of disinflation is bound to be different, too; lastly, the international setting is now characterised by a very high degree of commercial and financial integration. The first of these features, and its rôle in the persistence of high real interest rates, has been discussed in some detail in the introductory chapter. A few remarks on the other two are called for here.

The inflation of the last thirty years is unlike either the rise in prices characteristic of traditional cyclical fluctuations or the explosions of hyperinflation experienced in some European countries immediately after the two world wars. It is unique both in its persistence and in its accelerating trend: with some exceptions, the golden age of the 1960s was not so golden in terms of price stability. In a number of countries the experience of inflation has coloured the life of a whole generation. Market participants have gradually learned to live with inflation and, until a few years ago, were not living at all badly; indeed, western industrial countries had never before known so rapid and steady a rise in living standards. As a consequence, inflationary expectations have become deeply rooted; and strong resistance has developed, not only among wage-earners but in all socio-economic groups, to any reduction in real and, a fortiori, in nominal incomes. It is only very recently that this resistance has shown signs of weakening.

Against this background the mix of restrictive macro-economic policies adopted in the wake of the second oil shock has created a situation which differs

sharply from earlier periods of recession. Although, in pushing up real interest rates, these policies were bound further to squeeze corporate profits, households' real incomes have on average remained fairly stable. Consequently, overall economic activity has held up relatively well, barely falling in the group of western industrialised countries as a whole. At the same time, the combination of slow growth and the maintenance of real wages at historically high levels has triggered a sharp increase in unemployment and proved incompatible with a revival of investment.

The unavoidable practical conclusion is that, in today's world, the process of eradicating inflation cannot be other than long and painful. There is no miracle cure that is going to erase the memory of the last thirty years. It would be illusory to hope that the mere announcement of anti-inflationary policies can possibly have any decisive impact on the actual formation of prices; on the other hand, given the public's deeply ingrained scepticism about the will and the ability of governments to persevere in the fight for greater price stability, the slightest relaxation of these policies would risk re-stoking inflation.

The international setting in which the process of disinflation is taking place also presents a number of distinctive features which any economic policy recommendations must take into account. All the industrial countries, most of the developing countries and some of the socialist countries are operating with economies that are more open than ever to the outside world. The proportion of GNP directly dependent on international exchanges of goods and services has risen substantially. Capital flows have reached unprecedented dimensions in the wake of the large current payments imbalances. Bank lending has played a key rôle in these flows, and in the process the international exposure of western banks has steadily grown in relation to domestic claims and liabilities. In short, the world has attained an unprecedented degree of economic interdependence.

This strong interdependence is obviously conducive to the rapid transmission of cyclical influences. It also makes every country more vulnerable to the repercussions, be they inflationary or deflationary, of large exchange rate movements, as well as to the increased volatility of the exchange markets. It speeds up the spread of high interest rates across borders. To these fairly obvious remarks others must be added. Growing interdependence has gone hand in hand with a number of structural changes — which can be called external "shocks" when they occur abruptly — and with political events that have likewise brought new elements of instability to the world economy.

Among these shocks the two oil price explosions are the most frequently cited and the most closely analysed. However, there is a risk of forgetting that the recent elimination of the OPEC surplus, which is undoubtedly a very welcome development, also has negative side-effects, if only in radically modifying the absorptive capacity of some of the oil-producing countries and consequently forcing a redirection of trade flows. A less abrupt, but perhaps even more lasting, change has followed, as a corollary, the welcome "take-off" of some of the developing countries, whose industry is now actively competing with broad sectors of the advanced industrial economies. Finally, the international political climate has worsened. East-West relations have progressively cooled. Political dissension and

conflict, often armed, has become more frequent. Co-operation between western countries in the field of international economic policy has gradually ebbed. The contrast between a world that is integrated on the economic and financial level and fragmented in political terms is striking — and disturbing.

Happily, the international scene offers more than just these negative elements. There may be shortcomings in co-operation between countries, but, compared with the inter-war period, the world is now equipped with international organisations which, though they have not escaped the effects of adverse political developments, have withstood the tests of time. Through its sponsorship of in-depth trade negotiation, the GATT has so far managed to preserve the liberal and multilateral essence of international trade from the threats of protectionism. For the industrial countries the OECD has provided a useful forum for the discussion of all aspects of economic and financial policy. The European Economic Community functions as a genuine common market for the majority of the western European countries. The World Bank has continued its valuable activity in financing the development process. Last but not least, the IMF has resumed an active rôle in conditional lending and, through this, in helping to promote the international adjustment process.

In this situation, dominated by disinflation and international uncertainties, economic policy-makers are confronted with three interdependent series of questions. Should counter-inflationary policy be pursued further, and if so, how? What measures should be taken to ensure that the process of disinflation does not undermine future growth potential but instead prepares the ground for a lasting recovery? And, pending recovery, what precautionary policies are needed to prevent the near-stagnation of the industrial economies, which is the temporary but inevitable corollary of disinflation, from triggering a real slump in the world economy?

Governments in the industrial countries simply have no other choice than to persevere with their counter-inflationary policies. Given that inflationary expectations have not yet been defused, to relax these policies would very quickly revive price inflation and rapidly result in the worst of all possible worlds: the sacrifices accepted in the fight against inflation would have been in vain and, after a brief respite, the industrial countries would have to face the selfsame problems again, but in more acute form.

But how can anti-inflationary policy be taken further, to the point when inflation is firmly under control? Two suggestions follow on from the analysis set out in this Report. Both concern the policy mix. Firstly, the broadly restrictive macro-economic policies should be accompanied by selective efforts designed directly or indirectly to curb the rise in incomes and, in particular, wages — with the twofold objective of checking the increase in unemployment and restoring corporate profitability. Secondly, the burden borne by monetary policy in the control of aggregate demand should be substantially eased — so as to take the pressure off real interest rates.

Certainly, the growth of nominal GNP has to be restrained, since this is the only way of creating conditions of excess supply in the market for goods and services, which itself is the sine qua non for the success of any stabilisation policy.

Failing this, it is difficult to see how inflationary expectations could be lastingly defused. But the slowness with which nominal — or even real — wages respond to a restrictive macro-economic policy involves high costs in terms of the output and job losses that it entails.

Such a policy therefore needs to be supplemented by measures designed to slow down the rise in nominal wages other than by creating unemployment and more rapidly than an excess supply of labour can accomplish alone. The means would not be the same throughout the western world. On the contrary, they should be tailored to national circumstances and could therefore take very varied forms.

Rapid and effective action to keep the growth of wages within bounds seems essential not only to check the rise in unemployment but also to lay the basis for a lasting recovery. The excessive rise of real wages in most western countries, especially in Europe until very recently, bears much of the blame for the erosion of corporate profit margins and hence for the decline in investment. As long as this trend is not reversed, fixed capital formation will not recover and the little investment that does take place will be mostly labour-saving.

Within an overall policy of controlling the growth of nominal GNP there would also be room for a marked change in the respective rôles of monetary and fiscal policies. This observation applies to virtually all the industrial countries but concerns the United States somewhat more than the others, given the particularly high level of real US interest rates. A more restrictive fiscal stance is necessary in the United States mainly for two reasons. Firstly, because the conflict between the two policies is most marked in that country. Secondly, because it is there that, under the influence of financial innovation and of the expectations of market participants, the choices open to the monetary authorities are the most constrained.

The objective must be to put an end to a situation in which excessive real interest rates go hand in hand with the continuous rise of nominal wages or, in some cases, of real wages, since this combination inevitably ends up by depressing the level of both employment and investment. However, it must be acknowledged that, while the guidelines sketched above may help to check the growth of unemployment and prepare the ground for a recovery of investment, they are not likely to revive economic expansion in the short term. Almost by definition, a steadfast anti-inflationary policy implies temporarily slower growth, perhaps even near-stagnation, in the industrial economies. It therefore calls for complementary measures to keep the process of disinflation under control so as to prevent depressive forces from spreading through the highly integrated world economy. These measures should be implemented first and foremost in three fields, viz. the exchange market, international trade and the balance-of-payments adjustment process.

By fostering a climate of uncertainty, the short-term volatility of exchange rates inhibits investment decisions and international trade and places a needless further constraint on world economic growth. Opinions differ about the importance of this influence, which defies quantitative measurement. More patently harmful, however, are exchange rate cycles which result in exaggerated movements of real effective exchange rates. The net effect of these movements can be globally depressive. The undervaluation of a major currency introduces two disequilibrating

factors into the world economy. For the country concerned it makes it more difficult to combat inflation and thus encourages it to maintain macro-economic policies which are excessively restrictive in relation to the requirements of domestic balance. In the rest of the world, it engenders protectionist reactions. Conversely, a country whose currency is overvalued admittedly receives useful assistance in its fight against inflation, but its loss of competitiveness directly impinges upon its level of activity.

Better mastery of these cycles would require renewed efforts towards co-operation between the main countries concerned. Intervention on the exchange market, preferably based on an agreement between the countries involved, is desirable. But such intervention cannot be genuinely effective as long as wide interest rate differentials generate exchange rate levels or trends which are incompatible with the evolution of relative competitive positions. This is an additional reason why a readjustment of the policy mix in the United States is of crucial importance for the equilibrium of the world economy.

The near-stagnation of the industrial economies creates a particularly fertile climate for protectionist tendencies, further reinforced by the undervaluation of certain currencies. Continuing resistance to these tendencies must remain one of the first duties of the industrial countries. The spread of protectionism in a world which is highly open to external trade would be the surest and fastest way of propagating depressive influences.

The third field in which efforts towards international co-operation should be concentrated is the international adjustment process and the financing of external imbalances. Despite the elimination of the OPEC surplus, a large number of developing countries, quite a few of the weaker industrial countries and some socialist countries continue to record substantial current-account deficits, with the counterpart surpluses being located in some of the larger industrial countries. At the same time the banks, which have hitherto contributed the lion's share to financing these deficits, are showing greater reluctance to increase their international exposure. It would be regrettable, however understandable, if the banks' growing caution, often inspired by current political tensions, were to extend too widely and too indiscriminately to whole groups of countries. In the absence of active international co-operation, this could well impel too many borrowing countries to adjust too fast, with a cumulatively depressive impact on the world economy. It would be ironical if this were to happen just when the world has weathered for the second time the major disequilibria born of the successive oil shocks.

This Report is in no way suggesting that all the present deficits deserve to be financed. A number of them are due to manifest errors of management which it is primarily the deficit countries' own responsibility to remedy. But corrective measures take time to implement. Moreover, there are deficits on current payments which, even more clearly, seem to warrant financing, at least on a temporary basis: where, for instance, a country has just demonstrated its determination and ability to adjust by achieving a major improvement in its trade balance, but where the effects of this are partly or wholly offset by increases in interest charges on external debt. Finally, even where the country's current account is in balance, attempts on the part

of some banks to reduce their international exposure are likely to make straightforward refinancing of an external debt difficult. In many cases, external reserves are insufficient to meet the repayment of maturing external debts.

This situation underlines the fact that we are still far from having found a reasonable balance between adjustment and financing of external disequilibria or, on the financing side, a reasonable division of labour between private bank credits and official flows of funds. In an ideal world deficit countries would undertake corrective measures in a timely fashion, while international capital flows would promote investment in the capital-importing countries or help orderly domestic adjustment whenever an unsustainable external imbalance arose. They would reward rational policies rather than facilitate economic mismanagement. Gradual conditionality in the early stages of an emerging imbalance would clearly be preferable to over-generous lending initially, followed later by a sudden drying-up of external finance.

But the world is not an ideal place, and more nearly ideal adjustment policies and lending procedures will take years of learning by the policy-makers of the borrowing countries, by the lending banks and by the official institutions. At the present stage of this learning process — and bearing in mind that, given the counter-inflationary slow growth scenario in the industrial countries, drastic global adjustment elsewhere in the world would have to take the form of cutting imports — international co-operation should aim at strengthening the rôle of official financing. Selective intervention by official institutions, most of all by the IMF, constitutes at this juncture the best way of channelling adjustment efforts in the right direction and at the same time of restoring, with necessary caution, market confidence. This is a task which is perfectly within the power of international co-operation — even in a cold political climate.

GÜNTHER SCHLEIMINGER
General Manager

BALANCE SHEET AND PROFIT AND LOSS ACCOUNT

AT 31st MARCH 1982

BALANCE SHEET

ASSETS (Before and after

		Gold francs
Gold		5,478,526,941
Cash on hand and on sight account with banks		10,808,523
Treasury bills		417,483,063
Time deposits and advances		
Gold		
Not exceeding 3 months	51,250,994	
Over 3 months	6,903,620	
Currencies		
Not exceeding 3 months	8,260,555,382	
Over 3 months	3,300,675,999	
		11,619,385,995
Securities at term		
Not exceeding 3 months	676,467,626	
Over 3 months	794,500,883	
		1,470,968,509
Miscellaneous		59,585,363
Land, buildings and equipment		1
		19,056,758,395

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 1982, gold payable against currencies on forward contracts amounted to 183,551,737 gold francs.

AT 31st MARCH 1982

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	417,152,793		*437,152,793*
Special Dividend Reserve Fund	19,530,055		*21,530,055*
Free Reserve Fund	174,730,236		*202,730,236*
		641,483,397	*691,483,397*
Deposits (gold)			
Central banks			
Sight	4,628,890,436		
Not exceeding 3 months	29,055,284		
Other depositors			
Sight	33,082,685		
		4,691,028,405	*4,691,028,405*
Deposits (currencies)			
Central banks			
Sight	350,710,683		
Not exceeding 3 months	10,796,208,190		
Over 3 months	1,591,421,635		
Other depositors			
Sight	11,521,785		
Not exceeding 3 months	325,640,663		
Over 3 months	11,462,647		
		13,086,965,603	*13,086,965,603*
Miscellaneous		274,639,044	*274,639,044*
Profit and Loss Account		66,938,821	—
Dividend payable on 1st July 1982		—	*16,938,821*
		19,056,758,395	*19,056,758,395*

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 1982 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, 26th April 1982

PRICE WATERHOUSE & CO.

PROFIT AND LOSS ACCOUNT
for the financial year ended 31st March 1982

		Gold francs
Net interest and other income		83,548,161
Less: Costs of administration:		
Board of Directors	168,711	
Management and Staff	11,392,732	
Office and other expenses	4,190,232	15,751,675
Net operating surplus		67,796,486
Less: Amount transferred to Provision for Exceptional Costs of Administration		857,665
Net Profit for the financial year ended 31st March 1982		66,938,821

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: 135 Swiss francs per share on 473,125 shares	16,938,821	
		50,000,000
Transfer to General Reserve Fund	20,000,000	
		30,000,000
Transfer to Special Dividend Reserve Fund	2,000,000	
		28,000,000
Transfer to Free Reserve Fund	28,000,000	
		—

MOVEMENTS IN THE BANK'S RESERVES
during the financial year ended 31st March 1982

in gold francs

I. Development of the Reserve Funds resulting from allocations for the financial year 1981–82

	Legal *Reserve Fund*	General *Reserve Fund*	Special Dividend *Reserve Fund*	Free *Reserve Fund*
Balances at 1st April 1981, after allocation of Net Profit for the financial year 1980–81	30,070,313	417,152,793	19,530,055	174,730,236
Add: Allocations for the financial year 1981–82 ...	—	20,000,000	2,000,000	28,000,000
Balances at 31st March 1982 as per Balance Sheet	30,070,313	437,152,793	21,530,055	202,730,236

II. Paid-up Capital and Reserve Funds at 31st March 1982 (after allocation) were represented by:

	Paid-up Capital	Reserves	Total
Net assets in			
Gold	295,703,125	366,398,288	662,101,413
Currencies	—	325,085,109	325,085,109
	295,703,125	691,483,397	987,186,522

BOARD OF DIRECTORS

Dr. Fritz Leutwiler, Zurich	Chairman of the Board of Directors, President of the Bank
The Rt. Hon. Lord O'Brien of Lothbury, London	Vice-Chairman

Prof. Paolo Baffi, Rome
Dr. Carlo Azeglio Ciampi, Rome
Bernard Clappier, Paris
Dr. W.F. Duisenberg, Amsterdam
Jean Godeaux, Brussels
Renaud de la Genière, Paris
Karl Otto Pöhl, Frankfurt a/M.
The Rt. Hon. Gordon Richardson, London
Dr. Johann Schöllhorn, Kiel
Cecil de Strycker, Brussels
Lars Wohlin, Stockholm

Alternates

Dr. Lamberto Dini, Rome, or
Dr. Giovanni Magnifico, Rome
Dr. Leonhard Gleske, Frankfurt a/M.
Georges Janson, Brussels
Gabriel Lefort, Paris, or
Jacques Waitzenegger, Paris
A.D. Loehnis, London, or
M.J. Balfour, London

MANAGEMENT

Dr. Günther Schleiminger	General Manager
Prof. Alexandre Lamfalussy	Assistant General Manager, Economic Adviser
R.T.P. Hall	Head of the Banking Department
Dr. Giampietro Morelli	Secretary General, Head of Department
Maurice Toussaint	Manager
Prof. Dr. F.-E. Klein	Legal Adviser, Manager
Dr. Warren D. McClam	Manager
M.G. Dealtry	Manager
Rémi Gros	Manager

Robert Chaptinel	Deputy Manager
R.G. Stevenson	Deputy Manager
André Bascoul	Assistant Manager
Paul A. Hauser	Assistant Manager
Joachim Mix	Assistant Manager
Dr. H.W. Mayer	Assistant Manager
Jean Vallet	Assistant Manager
Kevin J. Kearney	Assistant Manager
Dr. Kurt Spinnler	Assistant Manager